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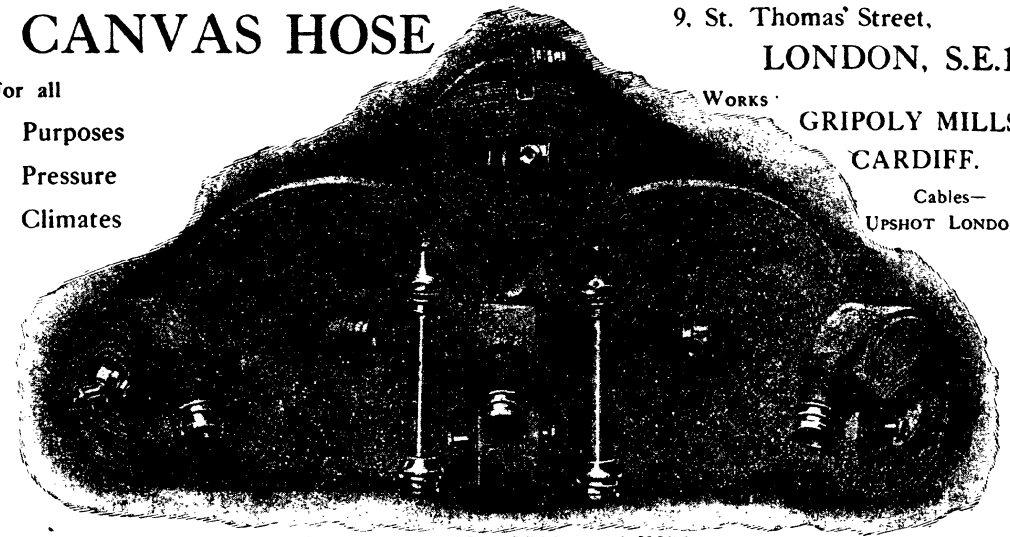

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Robey & Co., Ltd. xxvi

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Joseph Sankey & Sons, Ltd. xxv

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PRINCIPAL TOPICS
OF THE DAY

EDITED BY

SIR STANLEY REED, K.B.E., M.P.

ELEVENTH YEAR OF ISSUE

PUBLISHED BY
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"THE TIMES OF INDIA" OFFICES, BOMBAY AND CALCUTTA.
LONDON: 187, FLEET STREET, E.C.

CALENDAR FOR 1924.

January.

S.	...	6	13	20	27	...
M.	...	7	14	21	28	...
Tu.	1	8	15	22	29	...
W.	2	9	16	23	30	...
Th.	3	10	17	24	31	...
F.	4	11	18	25	...	...
S.	5	12	19	26	.	...

February.

S.	...	3	10	17	24	...
M.	...	4	11	18	25	...
Tu.	...	5	12	19	26	...
W.	...	6	13	20	27	...
Th.	...	7	14	21	28	...
F.	1	8	15	22	29	...
S.	2	9	16	23	...	...

March.

S.	...	2	9	16	23	30
M.	...	3	10	17	24	31
Tu.	...	4	11	18	25	...
W.	...	5	12	19	26	...
Th.	..	6	13	20	27	...
F	...	7	14	21	28	...
S.	1	8	15	22	29	...

April.

S.	..	6	13	20	27	...
M.	...	7	14	21	28	...
Tu.	1	8	15	22	29	...
W.	2	9	16	23	30	...
Th.	3	10	17	24	...	...
F.	4	11	18	25	...	..
S.	5	12	19	26	...	...

May.

S.	...	4	11	18	25	...
M.	...	5	12	19	26	...
Tu.	...	6	13	20	27	...
W.	...	7	14	21	28	...
Th.	1	8	15	22	29	...
F.	2	9	16	23	30	...
S.	3	10	17	24	31	...

June.

S.	1	8	15	22	29	.
M.	2	9	16	23	30	...
Tu.	3	10	17	24	...	
W.	4	11	18	25	...	...
Th.	5	12	19	26	...	...
F.	6	13	20	27	...	...
S.	7	14	21	28	...	

July.

S.	...	6	13	20	27	...
M.	...	7	14	21	28	...
Tu.	1	8	15	22	29	...
W.	2	9	16	23	30	...
Th.	3	10	17	24	31	...
F.	4	11	18	25	...	...
S.	5	12	19	26	...	...

August.

S.	...	3	10	17	24	31
M.	...	4	11	18	25	...
Tu.	...	5	12	19	26	...
W.	...	6	13	20	27	...
Th.	...	7	14	21	28	...
F.	1	8	15	22	29	...
S.	2	9	16	23	30	...

September.

S.	...	7	14	21	28	..
M.	1	8	15	22	29	...
Tu.	2	9	16	23	30	...
W.	3	10	17	24	...	...
Th.	4	11	18	25	...	...
F.	5	12	19	26	.	...
S.	6	13	20	27	...	...

October.

S.	...	5	12	19	26	.
M.	...	6	13	20	27	..
Tu.	...	7	14	21	28	...
W.	1	8	15	22	29	.
Th	2	9	16	23	30	..
F.	3	10	17	24	31	...
S.	4	11	18	25	...	..

November.

S.	...	2	9	16	23	30
M.	...	3	10	17	24	...
Tu.	...	4	11	18	25	...
W.	...	5	12	19	26	...
Th.	...	6	13	20	27	...
F.	...	7	14	21	28	...
S.	1	8	15	22	29	...

December.

S.	..	7	14	21	28	...
M.	1	8	15	22	29	...
Tu.	2	9	16	23	30	...
W.	3	10	17	24	31	...
Th	4	11	18	25	.	...
F.	5	12	19	26	...	...
S.	6	13	20	27	...	...

Phases of the Moon—JANUARY 31 Days.

● New Moon .... 6th, 6h. 17·7m. P.M. | ○ Full Moon.....22nd, 6h 26·7m. A.M.

☽ First Quarter ..14th, 4h. 14·5m. A.M. | ☾ Last Quarter.....29th, 11h. 22·9m. A.M.

Day of the Week.	Day of the Month.	Day of the Year.	Mean Time in the latitude of Bombay. Sunrise. A.M.		Sunset. P.M.		True Noon.		Moon's Age at Noon.	Sun's Declination at Mean Noon.
			H.	M.	H.	M.	H. P.M.	M.	D.	° S. ′
Tuesday ..	1	1	7	12	6	12	0	42	24·24	23 6
Wednesday ..	2	2	7	12	6	13	0	42	25·24	23 1
Thursday ..	3	3	7	13	6	13	0	43	26·24	22 56
Friday ..	4	4	7	13	6	14	0	43	27·24	22 51
Saturday ..	5	5	7	13	6	15	0	44	28·24	22 45
Sunday ..	6	6	7	13	6	15	0	44	29·24	22 38
Monday ..	7	7	7	14	6	16	0	45	0·77	22 31
Tuesday ..	8	8	7	14	6	17	0	45	1·77	22 24
Wednesday ..	9	9	7	14	6	17	0	46	2·77	22 16
Thursday ..	10	10	7	14	6	18	0	46	3·77	22 8
Friday ..	11	11	7	14	6	18	0	46	4·77	21 59
Saturday ..	12	12	7	15	6	19	0	46	5·77	21 50
Sunday ..	13	13	7	15	6	20	0	47	6·77	21 40
Monday ..	14	14	7	15	6	21	0	47	7·77	21 30
Tuesday ..	15	15	7	15	6	22	0	48	8·77	21 20
Wednesday ..	16	16	7	15	6	22	0	48	9·77	21 9
Thursday ..	17	17	7	15	6	23	0	48	10·77	20 58
Friday ..	18	18	7	15	6	24	0	49	11·77	20 47
Saturday ..	19	19	7	15	6	25	0	49	12·77	20 35
Sunday ..	20	20	7	15	6	25	0	49	13·77	20 22
Monday ..	21	21	7	15	6	26	0	50	14·77	20 10
Tuesday ..	22	22	7	15	6	27	0	50	15·77	19 56
Wednesday ..	23	23	7	15	6	27	0	50	16·77	19 43
Thursday ..	24	24	7	15	6	28	0	50	17·77	19 29
Friday ..	25	25	7	15	6	29	0	51	18·77	19 15
Saturday ..	26	26	7	15	6	29	0	51	19·77	19 0
Sunday ..	27	27	7	14	6	29	0	51	20·77	18 45
Monday ..	28	28	7	14	6	30	0	51	21·77	18 30
Tuesday ..	29	29	7	14	6	30	0	52	22·77	18 15
Wednesday ..	30	30	7	14	6	31	0	52	23·77	17 59
Thursday ..	31	31	7	14	6	31	0	52	24·77	17 42

Phases of the Moon—FEBRUARY 29 Days.

● New Moon ..... 5th, 7h. 8·2m. A.M. | ○ Full Moon..... 20th, 9h. 37·2m. P.M.

☽ First Quarter.....13th, 1h. 39·0m. A.M. | ☾ Last Quarter ....27th, 6h. 45·2m. P.M.

Day of the Week.	Day of the Month.	Day of the Year.	Mean Time in the latitude of Bombay. Sunrise. A.M.		Sunset. P.M.		True Noon.		Moon's Age at Noon.	Sun's Declination at Mean Noon.	
			H.	M.	H	M.	H. P.M.	M.	D.	°	S. ′
Friday ..	1	32	7	13	6	31	0	52	25·77	17	16
Saturday ..	2	33	7	13	6	32	0	53	26·77	17	9
Sunday ..	3	34	7	13	6	32	0	53	27·77	16	52
Monday ..	4	35	7	12	6	33	0	53	28·77	16	34
Tuesday ..	5	36	7	12	6	34	0	53	0·23	16	16
Wednesday ..	6	37	7	12	6	34	0	53	1·23	15	48
Thursday ..	7	38	7	11	6	35	0	53	2·23	15	40
Friday ..	8	39	7	11	6	35	0	53	3·23	1	22
Saturday ..	9	40	7	10	6	36	0	53	4·23	15	3
Sunday ..	10	41	7	10	6	36	0	53	5·23	14	44
Monday ..	11	42	7	10	6	37	0	53	6·23	14	24
Tuesday ..	12	43	7	9	6	37	0	53	7·23	14	5
Wednesday ..	13	44	7	9	6	38	0	53	8·23	13	45
Thursday ..	14	45	7	8	6	38	0	53	9·23	13	25
Friday ..	15	46	7	7	6	39	0	53	10·23	13	5
Saturday ..	16	47	7	7	6	39	0	53	11·23	12	44
Sunday ..	17	48	7	6	6	40	0	53	12·23	12	23
Monday ..	18	49	7	5	6	40	0	53	13·23	12	3
Tuesday ..	19	50	7	5	6	40	0	53	14·23	11	42
Wednesday ..	20	51	7	4	6	41	0	53	15·23	11	20
Thursday ..	21	52	7	4	6	41	0	53	16·23	10	59
Friday ..	22	53	7	3	6	41	0	53	17·23	10	37
Saturday ..	23	54	7	2	6	42	0	52	18·23	10	16
Sunday ..	24	55	7	2	6	42	0	52	19·23	9	44
Monday ..	25	56	7	1	6	42	0	52	20·23	9	32
Tuesday ..	26	57	7	1	6	43	0	51	21·23	9	9
Wednesday ..	27	58	7	0	6	43	0	51	22·23	8	47
Thursday .	28	59	7	0	6	43	0	51	23·23	8	25
Friday ..	29	60	7	0	6	43	0	51	24·23	8	2

Phases of the Moon—MARCH 31 Days.

● New Moon ..... 5th, 9h. 27·7m. P.M.
☽ First Quarter .... 13th, 10h. 20·4m. P.M.
○ Full Moon ..... 21st, 10h. 0·1m. A.M.
☾ Last Quarter .... 28th, 1h. 54·3m. P.M.

Day of the Week.	Day of the Month.	Day of the Year.	Mean Time in the latitude of Bombay. Sunrise. A.M.		Sunset. P.M.		True Noon.		Moon's Age at Noon.	Sun's Declination at Mean Noon.
			H.	M.	H.	M.	H. P.M.	M.	D.	° S. ′
Saturday ..	1	61	6	59	6	44	0	51	25·23	7 39
Sunday ..	2	62	6	58	6	45	0	51	26·23	7 16
Monday ..	3	63	6	57	6	45	0	51	27·22	6 53
Tuesday ..	4	64	6	56	6	45	0	51	28·23	6 30
Wednesday ..	5	65	6	56	6	46	0	51	29·23	6 7
Thursday ..	6	66	6	55	6	46	0	50	0·64	5 44
Friday ..	7	67	6	54	6	47	0	50	1·64	5 21
Saturday ..	8	68	6	53	6	47	0	50	2·64	4 57
Sunday ..	9	69	6	53	6	47	0	50	3·64	4 34
Monday ..	10	70	6	52	6	48	0	49	4·64	4 11
Tuesday ..	11	71	6	51	6	48	0	49	5·64	3 47
Wednesday ..	12	72	6	50	6	48	0	49	6·64	3 23
Thursday ..	13	73	6	49	6	48	0	49	7·64	3 0
Friday ..	14	74	6	49	6	49	0	48	8·64	2 36
Saturday ..	15	75	6	48	6	49	0	48	9·64	2 12
Sunday ..	16	76	6	47	6	49	0	48	10·64	1 49
Monday ..	17	77	6	46	6	49	0	48	11·64	1 25
Tuesday ..	18	78	6	45	6	49	0	48	12·64	1 1
Wednesday ..	19	79	6	44	6	50	0	47	13·64	0 38
Thursday ..	20	80	6	43	6	50	0	47	14·64	0 14
Friday ..	21	81	6	42	6	50	0	47	15·64	N. 0 10
Saturday ..	22	82	6	41	6	50	0	46	16·64	0 33
Sunday ..	23	83	6	40	6	51	0	46	17·64	0 57
Monday ..	24	84	6	39	6	51	0	46	18·64	1 21
Tuesday ..	25	85	6	39	6	51	0	45	19·64	1 44
Wednesday ..	26	86	6	39	6	51	0	45	20·64	2 8
Thursday ..	27	87	6	38	6	51	0	45	21·64	2 11
Friday ..	28	88	6	37	6	52	0	45	22·64	2 55
Saturday ..	29	89	6	36	6	52	0	44	23·64	3 18
Sunday ..	30	90	6	35	6	52	0	44	24·64	3 42
Monday ..	31	91	6	34	6	52	0	44	25·64	4 9

Phases of the Moon—APRIL 30 Days.

● New Moon ..... 4th, 0h. 47·3m. P.M. | ○ Full Moon..... 19th, 7h. 40·7m. P.M.

☽ First Quarter .... 12th, 4h. 42·1m. P.M. | ☾ Last Quarter ....26th, 9h. 58·1m. A.M.

Day of the Week.	Day of the Month.	Day of the Year.	Mean Time in the latitude of Bombay. Sunrise. A.M.		Sunset. P.M.		True Noon.		Moon's Age at Noon.	Sun's Declination at Mean Noon
			H.	M.	H.	M.	H. P.M.	M.	D.	° N. ′
Tuesday ..	1	92	6	33	6	53	0	43	26·64	4 28
Wednesday ..	2	93	6	33	6	53	0	43	27·64	4 51
Thursday ..	3	94	6	32	6	53	0	42	28·64	5 14
Friday ..	4	95	6	31	6	53	0	42	0·00	5 37
Saturday ..	5	96	6	30	6	54	0	42	1·00	6 0
Sunday ..	6	97	6	29	6	54	0	43	2·00	6 23
Monday ..	7	98	6	28	6	54	0	41	3·00	6 46
Tuesday ..	8	99	6	28	6	54	0	41	4·00	7 8
Wednesday ..	9	100	6	27	6	54	0	41	5·00	7 30
Thursday ..	10	101	6	26	6	55	0	40	6·00	7 53
Friday ..	11	102	6	25	6	55	0	40	7·00	8 15
Saturday ..	12	103	6	24	6	55	0	40	8·00	8 37
Sunday ..	13	104	6	24	6	56	0	40	9·00	8 59
Monday ..	14	105	6	23	6	56	0	39	10·00	9 20
Tuesday ..	15	106	6	22	6	56	0	39	11·00	9 42
Wednesday ..	16	107	6	21	6	56	0	39	12·00	10 3
Thursday ..	17	108	6	21	6	57	0	38	13·00	10 24
Friday ..	18	109	6	20	6	57	0	38	14·00	10 45
Saturday ..	19	110	6	19	6	57	0	38	15·00	11 6
Sunday ..	20	111	6	19	6	57	0	38	16·00	11 27
Monday ..	21	112	6	18	6	57	0	38	17·00	11 47
Tuesday ..	22	113	6	17	6	58	0	37	18·00	12 8
Wednesday ..	23	114	6	16	6	58	0	37	19·00	12 28
Thursday ..	24	115	6	15	6	58	0	37	20·00	12 48
Friday ..	25	116	6	14	6	59	0	37	21·00	13 7
Saturday ..	26	117	6	14	6	59	0	37	22·00	13 27
Sunday ..	27	118	6	13	6	59	0	36	23·00	13 46
Monday ..	28	119	6	13	7	0	0	36	24·00	14 5
Tuesday ..	29	120	6	13	7	0	0	36	25·00	14 24
Wednesday ..	30	121	6	12	7	0	0	36	26·00	14 43

Phases of the Moon—MAY 31 Days.

● New Moon..... 4th, 4h. 30·0m. A.M | ○ Full Moon..... 19th, 3h. 22·5m. A.M

☽ First Quarter .... 12th, 7h. 43·7m. A.M. | ☾ Last Quarter.... 25th, 7h. 46·3m. P.M.

Day of the Week.	Day of the Month.	Day of the Year.	Mean Time in the latitude of Bombay. Sunrise. A.M.		Sunset. P.M.		True Noon.		Moon's Age at Noon.	Sun's Declination at Mean Noon.	
			H.	M.	H.	M.	H. P.M.	M.	D.	°	′ N.
Thursday ..	1	122	6	11	7	1	0	36	27·00	15	1
Friday ..	2	123	6	11	7	1	0	36	28·00	15	19
Saturday ..	3	124	6	10	7	1	0	36	29·00	15	37
Sunday ..	4	125	6	10	7	2	0	35	0·34	15	54
Monday ..	5	126	6	9	7	2	0	35	1·34	16	12
Tuesday ..	6	127	6	9	7	2	0	35	2·34	16	29
Wednesday ..	7	128	6	8	7	3	0	35	3·34	16	45
Thursday ..	8	129	6	8	7	3	0	35	4·34	17	2
Friday ..	9	130	6	7	7	3	0	35	5·34	17	18
Saturday ..	10	131	6	7	7	4	0	35	6·34	17	34
Sunday ..	11	132	6	6	7	4	0	35	7·34	17	50
Monday ..	12	133	6	6	7	4	0	35	8·34	18	5
Tuesday ..	13	134	6	5	7	5	0	35	9·34	18	20
Wednesday ..	14	135	6	5	7	5	0	35	10·34	18	34
Thursday ..	15	136	6	5	7	6	0	35	11·34	18	49
Friday ..	16	137	6	4	7	6	0	35	12·34	19	3
Saturday ..	17	138	6	4	7	6	0	35	13·34	19	17
Sunday ..	18	139	6	4	7	7	0	35	14·34	19	30
Monday ..	19	140	6	3	7	7	0	35	15·34	19	43
Tuesday ..	20	141	6	3	7	7	0	35	16·34	19	56
Wednesday ..	21	142	6	3	7	8	0	35	17·34	20	9
Thursday ..	22	143	6	2	7	8	0	35	18·34	20	21
Friday ..	23	144	6	2	7	9	0	35	19·34	20	32
Saturday ..	24	145	6	2	7	9	0	35	20·34	20	44
Sunday ..	25	146	6	2	7	9	0	36	21·34	20	55
Monday ..	26	147	6	2	7	10	0	36	22·34	21	5
Tuesday ..	27	148	6	2	7	10	0	36	23·34	21	16
Wednesday ..	28	149	6	1	7	11	0	36	24 34	21	26
Thursday ..	29	150	6	1	7	11	0	36	25·34	21	35
Friday ..	30	151	6	1	7	11	0	36	26·34	21	44
Saturday ..	31	152	6	1	7	12	0	36	27·34	21	53

Phases of the Moon—JUNE 30 Days.

● New Moon ..... 2nd, 8h. 3·9m. P.M. | ○ Full Moon .....17th, 10h. 11·4m. A.M.

☽ First Quarter .... 10th, 7h. 6·9m. P.M. | ☾ Last Quarter ....24th, 7h. 46·0m. A.M.

Day of the Week.	Day of the Month.	Day of the Year.	Mean Time in the latitude of Bombay. Sunrise. A.M.		Sunset. P.M.		True Noon.		Moon's Age at Noon.	Sun's Declination at Mean Noon.	
			H.	M.	H.	M.	H. P.M.	M.	D.	°	N.
Sunday ..	1	153	6	1	7	12	0	36	28·34	22	2
Monday ..	2	154	6	1	7	12	0	36	29·34	22	10
Tuesday ..	3	155	6	1	7	13	0	37	0·69	22	17
Wednesday ..	4	156	6	1	7	13	0	37	1·69	22	25
Thursday ..	5	157	6	1	7	14	0	37	2·69	22	32
Friday ..	6	158	6	1	7	14	0	37	3·69	22	38
Saturday ..	7	159	6	1	7	14	0	37	4·69	22	44
Sunday ..	8	160	6	1	7	15	0	37	5·69	22	50
Monday ..	9	161	6	1	7	15	0	38	6·69	22	55
Tuesday ..	10	162	6	1	7	15	0	38	7·69	23	0
Wednesday ..	11	163	6	1	7	16	0	38	8·69	23	4
Thursday ..	12	164	6	1	7	16	0	38	9·69	23	9
Friday ..	13	165	6	1	7	16	0	38	10·69	23	12
Saturday ..	14	166	6	1	7	17	0	39	11·69	23	15
Sunday ..	15	167	6	1	7	17	0	39	12·69	23	18
Monday ..	16	168	6	1	7	17	0	39	13·69	23	21
Tuesday ..	17	169	6	1	7	17	0	39	14·69	23	23
Wednesday ..	18	170	6	2	7	18	0	39	15·69	23	24
Thursday ..	19	171	6	2	7	18	0	40	16·38	23	26
Friday ..	20	172	6	2	7	18	0	40	17·69	23	26
Saturday ..	21	173	6	2	7	18	0	40	18·69	23	27
Sunday ..	22	174	6	3	7	19	0	40	19·69	23	27
Monday ..	23	175	6	3	7	19	0	40	20·69	23	26
Tuesday ..	24	176	6	3	7	19	0	41	21·69	23	25
Wednesday .	25	177	6	3	7	19	0	41	22·69	23	24
Thursday ..	26	178	6	3	7	19	0	41	23·69	23	22
Friday ..	27	179	6	4	7	19	0	41	24·69	23	20
Saturday ..	28	180	6	4	7	20	0	42	25·69	23	18
Sunday ..	29	181	6	4	7	20	0	42	26·69	23	15
Monday ..	30	182	6	5	7	20	0	42	27·69	23	12

Phases of the Moon—JULY 31 Days.

● New Moon .....2nd, 11h. 5·0m. A.M. | ○ Full Moon .....16th, 5h. 19·0m. P.M.

☽ First Quarter ....10th, 3h. 16·0m. A.M. | ☾ Last Quarter .... 23rd, 10h. 5·8m. P.M.

Day of the Week.	Day of the Month.	Day of the Year.	Mean Time in the latitude of Bombay. Sunrise. A.M.		Sunset. P.M.		True Noon.		Moon's Age at Noon.	Sun's Declination at Mean Noon.
			H.	M.	H.	M.	H. P.M.	M.	D.	° N. ′
Tuesday ..	1	183	6	5	7	20	0	42	28·69	23 8
Wednesday ..	2	184	6	5	7	20	0	42	0·06	23 4
Thursday ..	3	185	6	6	7	20	0	43	1·06	22 59
Friday ..	4	186	6	6	7	20	0	43	2·06	22 54
Saturday ..	5	187	6	6	7	20	0	43	3·06	22 49
Sunday ..	6	188	6	7	7	20	0	43	4·06	22 43
Monday ..	7	189	6	7	7	20	0	43	5·06	22 37
Tuesday ..	8	190	6	7	7	20	0	43	6·06	22 30
Wednesday ..	9	191	6	8	7	20	0	44	7·06	22 23
Thursday ..	10	192	6	8	7	20	0	44	8·06	22 16
Friday ..	11	193	6	8	7	20	0	44	9·06	22 9
Saturday ..	12	194	6	8	7	20	0	44	10·06	22 1
Sunday ..	13	195	6	8	7	20	0	44	11·06	21 52
Monday ..	14	196	6	9	7	20	0	44	12·06	21 43
Tuesday ..	15	197	6	9	7	19	0	44	13·06	21 34
Wednesday ..	16	198	6	9	7	19	0	44	14·06	21 25
Thursday ..	17	199	6	10	7	19	0	45	15·06	21 15
Friday ..	18	200	6	10	7	19	0	45	16·06	21 4
Saturday ..	19	201	6	10	7	19	0	45	17·06	20 54
Sunday ..	20	202	6	11	7	18	0	45	18·06	20 43
Monday ..	21	203	6	11	7	18	0	45	19·06	20 31
Tuesday ..	22	204	6	12	7	18	0	45	20·06	20 20
Wednesday ..	23	205	6	12	7	18	0	45	21·06	20 8
Thursday ..	24	206	6	12	7	17	0	45	22·06	19 55
Friday ..	25	207	6	13	7	17	0	45	23·06	19 43
Saturday ..	26	208	6	13	7	17	0	45	24·06	19 30
Sunday ..	27	209	6	13	7	17	0	45	25·06	19 16
Monday ..	28	210	6	14	7	16	0	45	26·06	19 3
Tuesday ..	29	211	6	14	7	16	0	45	27·06	18 49
Wednesday ..	30	212	6	14	7	16	0	45	28·06	18 34
Thursday ..	31	213	6	15	7	15	0	45	29·06	18 20

Phases of the Moon—AUGUST 31 Days.

● New Moon .....1st, 1h. 11·9m. A.M.
☽ First Quarter .... 8th, 9h. 11·3m. A.M.
○ Full Moon .....15th, 1h. 39·0m. A.M.
☾ Last Quarter.....22nd, 2h. 40·4m. P.M.
● New Moon .....30th, 2h. 6·8m. P.M.

Day of the Week.	Day of the Month.	Day of the Year.	Mean Time in the latitude of Bombay. Sunrise. A.M.		Sunset. P.M.		True Noon.		Moon's Age at Noon.	Sun's Declination at Mean Noon.	
			H.	M.	H.	M.	H. P.M.	M	D.	°	′ N.
Friday ..	1	214	6	15	7	15	0	45	0·48	18	5
Saturday ..	2	215	6	15	7	14	0	45	1·48	17	50
Sunday ..	3	216	6	16	7	14	0	45	2·48	17	34
Monday ..	4	217	6	16	7	13	0	45	3·48	17	19
Tuesday ..	5	218	6	16	7	13	0	45	4·48	17	2
Wednesday ..	6	219	6	17	7	12	0	45	5·48	16	46
Thursday ..	7	220	6	17	7	12	0	44	6·48	16	30
Friday ..	8	221	6	17	7	11	0	44	7·48	16	18
Saturday ..	9	222	6	18	7	11	0	44	8·48	15	56
Sunday ..	10	223	6	18	7	10	0	44	9·48	15	38
Monday ..	11	224	6	18	7	9	0	44	10·48	15	21
Tuesday ..	12	225	6	19	7	9	0	44	11·48	15	3
Wednesday ..	13	226	6	19	7	8	0	44	12·48	14	45
Thursday ..	14	227	6	19	7	8	0	43	13·48	14	26
Friday ..	15	228	6	20	7	7	0	43	14·48	14	3
Saturday ..	16	229	6	20	7	6	0	43	15·48	13	49
Sunday ..	17	230	6	20	7	6	0	43	16·48	13	30
Monday ..	18	231	6	20	7	5	0	43	17·48	13	11
Tuesday ..	19	232	6	21	7	4	0	42	18·48	12	51
Wednesday ..	20	233	6	21	7	4	0	42	19·48	12	32
Thursday ..	21	234	6	21	7	3	0	42	20·48	12	12
Friday ..	22	235	6	21	7	2	0	42	21·48	11	52
Saturday ..	23	236	6	21	7	1	0	42	22·48	11	32
Sunday ..	24	237	6	22	7	1	0	41	23·48	11	11
Monday ..	25	238	6	22	7	0	0	41	24·48	10	51
Tuesday ..	26	239	6	22	6	59	0	40	25·48	10	29
Wednesday ..	27	240	6	22	6	59	0	40	26·48	10	9
Thursday ..	28	241	6	23	6	58	0	40	27·48	9	43
Friday ..	29	242	6	23	6	57	0	40	28·48	9	27
Saturday ..	30	243	6	23	6	56	0	39	29·48	9	5
Sunday ..	31	244	6	23	6	55	0	39	0 4	8	44

Phases of the Moon—SEPTEMBER 30 Days.

☽ First Quarter .... 6th, 2h. 15·5m. P.M. | ☾ Last Quarter.....21st, 9h. 5 3m. A.M.

○ Full Moon.....13th, 0h. 30·0m. P.M. | ● New Moon .....29th, 1h. 45·9m. A.M.

Day of the Week.	Day of the Month.	Day of the Year.	Mean Time in the latitude of Bombay. Sunrise. A.M.	Sunset P.M.	True Noon.	Moon's Age at Noon.	Sun's Declination at Mean Noon.
			H. M.	H. M.	H. M. P.M.	D.	° ′ N.
Monday ..	1	245	6 23	6 55	0 39	1·94	8 22
Tuesday ..	2	246	6 24	6 54	0 39	2·94	8 0
Wednesday ..	3	247	6 24	6 53	0 38	3·94	7 38
Thursday ..	4	248	6 24	6 52	0 38	4·94	7 16
Friday ..	5	249	6 24	6 51	0 38	5·94	6 54
Saturday ..	6	250	6 24	6 50	0 37	6·94	6 32
Sunday ..	7	251	6 25	6 50	0 37	7·94	6 9
Monday ..	8	252	6 25	6 49	0 37	8·94	5 47
Tuesday ..	9	253	6 25	6 48	0 36	9·94	5 24
Wednesday ..	10	254	6 25	6 47	0 36	10·94	5 1
Thursday ..	11	255	6 25	6 46	0 36	11·04	4 39
Friday ..	12	256	6 25	6 45	0 35	12·94	4 16
Saturday ..	13	257	6 26	6 44	0 35	13·94	3 53
Sunday ..	14	258	6 26	6 43	0 35	14·94	3 30
Monday ..	15	259	6 26	6 43	0 34	15·94	3 7
Tuesday ..	16	260	6 26	6 42	0 34	16·94	2 44
Wednesday ..	17	261	6 26	6 41	0 33	17·94	2 21
Thursday ..	18	262	6 27	6 40	0 33	18·94	1 57
Friday ..	19	263	6 27	6 39	0 33	19·94	1 34
Saturday ..	20	264	6 27	6 38	0 32	20·94	1 11
Sunday ..	21	265	6 27	6 37	0 32	21·95	0 48
Monday ..	22	266	6 27	6 36	0 32	22·94	0 24
Tuesday ..	23	267	6 27	6 36	0 31	23·94	0 S. 9
Wednesday ..	24	268	6 28	6 35	0 31	24·94	0 23
Thursday ..	25	269	6 28	6 34	0 31	25·94	0 46
Friday ..	26	270	6 28	6 33	0 30	26·94	1 9
Saturday ..	*27*	*271*	*6 28*	*6 32*	*0 30*	*27·94*	*1 33*
Sunday ..	28	272	6 28	6 31	0 30	28·94	1 50
Monday ..	29	273	6 29	6 30	0 29	0·46	2 20
Tuesday ..	30	274	6 29	6 29	0 29	1·46	2 48

Phases of the Moon—OCTOBER 31 Days.

☽ First Quarter.... 5th, 8h. 0·0m. P.M. | ☾ Last Quarter.... 21st, 4h. 24·4m. A.M.

○ Full Moon.....13th, 1h. 51·2m. A.M. | ● New Moon ..... 28th, 0h. 27·0m. P.M.

Day of the Week.	Day of the Month.	Day of the Year.	Mean Time in the latitude of Bombay. Sunrise. A.M.		Sunset. P.M.		True Noon.		Moon's Age at Noon.	Sun's Declination at Mean Noon.
			H.	M.	H.	M.	H. P.M.	M.	D.	° S. ′
Wednesday ..	1	275	6	29	6	29	0	28	2·46	3 6
Thursday ..	2	276	6	29	6	28	0	28	3·46	3 30
Friday ..	3	277	6	29	6	27	0	28	4·46	3 53
Saturday ..	4	278	6	30	6	26	0	28	5·46	4 16
Sunday ..	5	279	6	30	6	25	0	27	6·46	4 39
Monday ..	6	280	6	30	6	24	0	27	7·46	5 2
Tuesday ..	7	281	6	30	6	24	0	27	8·46	5 25
Wednesday ..	8	282	6	30	6	23	0	27	9·46	5 48
Thursday ..	9	283	6	31	6	22	0	26	10·46	6 11
Friday ..	10	284	6	31	6	21	0	26	11·46	6 34
Saturday ..	11	285	6	31	6	20	0	26	12·46	6 57
Sunday ..	12	286	6	31	6	19	0	25	13·46	7 19
Monday ..	13	287	6	32	6	19	0	25	14·46	7 42
Tuesday ..	14	288	6	32	6	18	0	25	15·46	8 4
Wednesday ..	15	289	6	33	6	17	0	25	16·46	8 26
Thursday ..	16	290	6	33	6	16	0	25	17·46	8 49
Friday ..	17	291	6	33	6	16	0	24	18·46	9 11
Saturday ..	18	292	6	34	6	15	0	24	19·46	9 33
Sunday ..	19	293	6	34	6	14	0	24	20·46	9 54
Monday ..	20	294	6	34	6	14	0	24	21·46	10 16
Tuesday ..	21	295	6	34	6	13	0	24	22·46	10 38
Wednesday ..	22	296	6	35	6	12	0	23	23·46	10 59
Thursday ..	23	297	6	35	6	12	0	23	24·46	11 20
Friday ..	24	298	6	36	6	11	0	23	25·46	11 41
Saturday ..	25	299	6	36	6	10	0	23	26·46	12 2
Sunday ..	26	300	6	36	6	10	0	23	27·46	12 23
Monday ..	27	301	6	37	6	9	0	23	28·46	12 43
Tuesday ..	28	302	6	37	6	9	0	23	0·01	13 3
Wednesday ..	29	303	6	37	6	8	0	23	1·01	13 23
Thursday ..	30	304	6	37	6	7	0	23	2·01	13 43
Friday ..	31	305	6	38	6	7	0	22	3·01	14 3

Phases of the Moon—NOVEMBER 30 Days.

☽ First Quarter..... 4th, 8h. 48·5m. A.M. | ☾ Last Quarter .... 19th, 11h. 8·5m. P.M.

○ Full Moon .....11th, 6h. 0·7m. P.M. | ● New Moon .....26th, 10h. 45·5m. P.M.

Day of the Week.	Day of the Month.	Day of the Year.	Mean Time in the latitude of Bombay. Sunrise. A.M.		Sunset. P.M.		True Noon.		Moon's Age at Noon.	Sun's Declination at Mean Noon.
			H.	M.	H.	M.	H. P.M.	M.	D.	° S.,
Saturday ..	1	306	6	38	6	6	0	22	4·01	14 22
Sunday ..	2	307	6	39	6	6	0	22	5·01	14 41
Monday ..	3	308	6	39	6	5	0	22	6·01	15 0
Tuesday ..	4	309	6	40	6	5	0	22	7·01	15 19
Wednesday ..	5	310	6	40	6	4	0	22	8·01	15 37
Thursday ..	6	311	6	41	6	4	0	22	9·01	15 56
Friday ..	7	312	6	41	6	4	0	22	10·01	16 14
Saturday ..	8	313	6	42	6	4	0	22	11·01	16 31
Sunday ..	9	314	6	42	6	4	0	23	12·01	16 49
Monday ..	10	315	6	43	6	3	0	23	13 01	17 6
Tuesday ..	11	316	6	43	6	3	0	23	14·01	17 22
Wednesday ..	12	317	6	44	6	3	0	23	15·01	17 39
Thursday ..	13	318	6	44	6	2	0	23	16·01	17 55
Friday ..	14	319	6	45	6	2	0	23	17·01	18 11
Saturday ..	15	320	6	45	6	1	0	23	18·01	18 26
Sunday ..	16	321	6	46	6	1	0	23	19·01	18 42
Monday ..	17	322	6	46	6	1	0	23	20·01	18 57
Tuesday ..	18	323	6	47	6	1	0	23	21·01	19 11
Wednesday ..	19	324	6	48	6	0	0	24	22·01	19 25
Thursday ..	20	325	6	48	6	0	0	24	23·01	19 39
Friday ..	21	326	6	49	6	0	0	24	24·01	19 53
Saturday ..	22	327	6	49	6	0	0	24	25·01	20 6
Sunday ..	23	328	6	50	6	0	0	25	26·01	20 19
Monday ..	24	329	6	51	6	0	0	25	27·01	20 31
Tuesday ..	25	330	6	51	6	0	0	25	28·01	20 43
Wednesday ..	26	331	6	52	6	0	0	25	29·01	20 55
Thursday ..	27	332	6	52	6	0	0	26	0·58	21 6
Friday ..	28	333	6	53	6	0	0	26	1·58	21 17
Saturday ..	29	334	6	54	6	0	0	26	2·58	21 27
Sunday ..	30	335	6	54	6	0	0	27	3·58	21 37

Phases of the Moon—DECEMBER 31 Days.

☽ First Quarter 3rd, 2h. 40·3m. P.M. | ☾ Last Quarter..... 19th, 8h. 41·4m. P.M.

○ Full Moon..... 11th, 0h. 56·4m. P.M. | ● New Moon..... 26th, 9h. 15·8m. A.M.

Day of the Week.	Day of the Month.	Day of the Year.	Mean Time in the latitude of Bombay. Sunrise. A.M.		Sunset. P.M.		True Noon.		Moon's Age at Noon.	Sun's Declination at Mean Noon.
			H.	M.	H.	M.	H. P.M.	M.	D.	S. ° ′
Monday ..	1	336	6	55	6	0	0	28	4·58	21 47
Tuesday ..	2	337	6	55	6	0	0	28	5·58	21 56
Wednesday ..	3	338	6	56	6	0	0	28	6·58	22 5
Thursday ..	4	339	6	57	6	0	0	29	7·58	22 13
Friday ..	5	340	6	57	6	0	0	29	8·58	22 21
Saturday ..	6	341	6	58	6	1	0	30	9·58	22 29
Sunday ..	7	342	6	59	6	1	0	30	10·58	22 36
Monday ..	8	343	6	59	6	1	0	30	11·58	22 42
Tuesday ..	9	344	7	0	6	1	0	31	12·58	22 48
Wednesday ..	10	345	7	0	6	2	0	31	13·58	22 54
Thursday ..	11	346	7	1	6	2	0	32	14·58	22 59
Friday ..	12	347	7	2	6	2	0	32	15·58	23 4
Saturday ..	13	348	7	2	6	3	0	33	16·58	23 9
Sunday ..	14	349	7	3	6	3	0	33	17·58	23 12
Monday ..	15	350	7	3	6	3	0	34	18·58	23 13
Tuesday ..	16	351	7	4	6	4	0	35	19·58	23 19
Wednesday ..	17	352	7	4	6	4	0	35	20·58	23 21
Thursday ..	18	353	7	5	6	5	0	36	21·58	23 23
Friday ..	19	354	7	5	6	5	0	36	22·58	23 25
Saturday ..	20	355	7	6	6	6	0	37	23·58	23 26
Sunday ..	21	356	7	7	6	6	0	37	24·58	23 27
Monday ..	22	357	7	7	6	6	0	38	25·58	23 27
Tuesday ..	23	358	7	8	6	7	0	38	26·58	23 26
Wednesday ..	24	359	7	8	6	7	0	39	27·58	23 26
Thursday ..	25	360	7	9	6	8	0	39	28·58	23 24
Friday ..	26	361	7	9	6	9	0	40	0·14	23 23
Saturday ..	27	362	7	10	6	9	0	40	1·14	23 20
Sunday ..	28	363	7	10	6	10	0	41	2·14	23 18
Monday ..	29	364	7	11	6	10	0	41	3·14	23 15
Tuesday ..	30	365	7	11	6	11	0	41	4·14	23 11
Wednesday ..	31	366	7	11	6	11	0	42	5·14	23 7

CALENDAR FOR 1925.

January.

S.	...	4	11	18	25	...
M.	...	5	12	19	26	...
Tu.	...	6	13	20	27	...
W.	...	7	14	21	28	...
Th.	1	8	15	22	29	...
F.	2	9	16	23	30	...
S.	3	10	17	24	31	...

February.

S	1	8	15	22	...	...
M.	2	9	16	23	.	...
Tu.	3	10	17	24	...	...
W.	4	11	18	25	...	...
Th.	5	12	19	26	...	
F.	6	13	20	27	..	...
S.	7	14	21	28	...	...

March.

S.	1	8	15	22	29	...
M.	2	9	16	23	30	...
Tu.	3	10	17	24	31	...
W.	4	11	18	25	...	...
Th.	5	12	19	26	...	...
F.	6	13	20	27	..	...
S.	7	14	21	28	.	...

April.

S.	...	5	12	19	26	...
M.	...	6	13	20	27	...
Tu.	...	7	14	21	28	...
W.	1	8	15	22	29	...
Th.	2	9	16	23	30	...
F.	3	10	17	24	.	...
S.	4	11	18	25	...	...

May.

S	...	3	10	17	24	31
M	...	4	11	18	25	...
Tu.	...	5	12	19	26	...
W.	...	6	13	20	27	...
Th.	...	7	14	21	28	..
F.	1	8	15	22	29	...
S.	2	9	16	23	30	..

June.

S.	...	7	14	21	28	...
M.	1	8	15	22	29	...
Tu.	2	9	16	23	30	...
W.	3	10	17	24	...	...
Th	4	11	18	25	...	...
F.	5	12	19	26	..	..
S	6	13	20	27		...

July.

S	..	5	12	19	26	
M	...	6	13	20	27	...
Tu.	...	7	14	21	28	...
W.	1	8	15	22	29	...
Th.	2	9	16	23	30	...
F.	3	10	17	24	31	...
S.	4	11	18	25	...	...

August.

S.	.	2	9	16	23	30
M.	...	3	10	17	24	31
Tu.	...	4	11	18	25	...
W.	...	5	12	19	26	...
Th.	...	6	13	20	27	...
F.		7	14	21	28	...
S.	1	8	15	22	29	...

September.

S.	...	6	13	20	27	...
M.	...	7	14	21	28	...
Tu.	1	8	15	22	29	...
W.	2	9	16	23	30	..
Th.	3	10	17	24	...	...
F.	4	11	18	25	...	...
S.	5	12	19	26	...	

October.

S.	...	4	11	18	25	...
M.	...	5	12	19	26	...
Tu.	...	6	13	20	27	...
W.	...	7	14	21	28	...
Th.	1	8	15	22	29	...
F.	2	9	16	23	30	...
S.	3	10	17	24	31	...

November.

S.	1	8	15	22	29	...
M.	2	9	16	23	30	...
Tu.	3	10	17	24	...	...
W.	4	11	18	25	...	...
Th.	5	12	19	26	...	...
F.	6	13	20	27	...	...
S.	7	14	21	28	...	..

December.

S.	...	6	13	20	27	...
M.	...	7	14	21	28	...
Tu.	1	8	15	22	29	...
W.	2	9	16	23	30	...
Th.	3	10	17	24	31	...
F.	4	11	18	25	...	..
S.	5	12	19	26	...	...

Preface to the XI Annual Volume

OF THE

INDIAN YEAR BOOK, 1924.

THE Editor has to thank many correspondents who during the past year have sent him suggestions for the improvement of this book. The Indian Year Book is intended above all to be a book of reference, and its completeness and convenience of arrangement must necessarily depend to a great extent on the part taken in its editing by the members of the public who most use it.

A good many changes in and additions to this volume have been made. Unfortunately the Report on the Census of India, 1921, was not issued in time to permit of the revision of that considerable section which deals with the peoples of India, although revised statistics are included in it. The belated appearance year after year of the Trade Report and of the Railway Administration Report inevitably delays the publication of this Year Book, and will continue so to do until the Government of India can be brought to realise that official statistics do not improve, but rather lose their value, in proportion as they are delayed. When the Government of India has succeeded in hustling its officials it will be possible to produce this work earlier in the year and so to make it of greater general service.

Suggestions for the improvement or correction of the Year Book may be sent to the Editor at any time, but those which reach him before October have a better chance of being adopted than later suggestions which only reach him after the work of revision has been partly completed.

The Times of India, Bombay,
February 1924.

The History of India in Outline.

No history of India can be proportionate, and the briefest summary must suffer from the same defect. Even a wholesale acceptance as history of mythology, tradition, and folklore will not make good, though it makes picturesque, the many gaps that exist in the early history of India: and, though the labours of modern geographers and archæologists have been amazingly fruitful, it cannot be expected that these gaps will ever be filled to any appreciable extent. Approximate accuracy in chronology and an outline of dynastic facts are all that the student can look for up to the time of Alexander, though the briefest excursion into the by-ways of history will reveal to him many alluring and mysterious fields for speculation. There are, for example, to this day castes that believe they sprang originally from the loins of a being who landed "from an impossible boat on the shores of a highly improbable sea"; and the great epic poems contain plentiful statements equally difficult of reconciliation with modern notions of history as a science. But from the Jataka stories and the Puranas, much valuable information is to be obtained, and, for the benefit of those unable to go to these and other original sources, it has been distilled by a number of writers.

The orthodox Hindu begins the political history of India more than 3,000 years before Christ, with the war waged on the banks of the Jumna between the sons of Kuru and the sons of Pandu; but the modern critic prefers to omit several of those remote centuries and to take 600 B. C., or thereabouts, as his starting point. At that time much of the country was covered with forest, but the Aryan races, who had entered India from the north, had established in parts a form of civilization far superior to that of the aboriginal savages, and to this day there survive cities, like Benares founded by those invaders. In like manner the Dravidian invaders from an unknown land, who overran the Deccan and the Southern part of the Peninsula, crushed the aborigines, and at a much later period, were themselves subdued by the Aryans. Of these two civilizing forces, the Aryan is the better known, and of the Aryan kingdoms the first of which there is authentic record is that of Magadha, or Bihar, on the Ganges. It was in, or near, this powerful kingdom that Jainism and Buddhism had their origin, and the fifth King of Magadha, Bimbisara by name, was the friend and patron of Gautama Buddha. The King mentioned was a contemporary of Darius, autocrat of Persia (521 to 485 B. C.) who annexed the Indus valley and formed from his conquest an Indian satrapy which paid as tribute the equivalent of about one million sterling. Detailed history, however, does not become possible until the invasion of Alexander in 326 B.C.

Alexander the Great.

That great soldier had crossed the Hindu Kush in the previous year and had captured Aornos, on the Upper Indus. In the spring of 326 he crossed the river at Ohind, received the submission of the King of Taxila, and marched against Porus who ruled the fertile country between the rivers Hydaspes (Jhelum) and Akesines (Chenab). The Macedonian carried all before him, defeating Porus at the battle of the Hydaspes, and crossing the Chenab and Ravi. But at the River Hyphasis (Bias) his weary troops mutinied, and Alexander was forced to turn back and retire to the Jhelum where a fleet to sail down the rivers to the sea was nearly ready. The wonderful story of Alexander's march through Mekran and Persia to Babylon, and of the voyage of Nearchus up the Persian Gulf is the climax to the narrative of the invasion but is not part of the history of India. Alexander had stayed nineteen months in India and left behind him officers to carry on the Government of the kingdoms he had conquered: but his death at Babylon, in 323, destroyed the fruits of what has to be regarded as nothing but a brilliant raid, and within two years his successors were obliged to leave the Indian provinces, heavily scarred by war but not hellenized.

The leader of the revolt against Alexander's generals was a young Hindu, Chandragupta, who was an illegitimate member of the Royal Family of Magadha. He dethroned the ruler of that kingdom, and became so powerful that he is said to have been able to place 600,000 troops in the field against Seleucus, to whom Babylon had passed on the death of Alexander. This was too formidable an opposition to be faced, and a treaty of peace was concluded between the Syrian and Indian monarchs which left the latter the first paramount Sovereign of India (321 B. C.) with his capital at Pataliputra, the modern Patna and Bankipore. Of Chandragupta's court and administration a very full account is preserved in the fragments that remain of the history compiled by Megasthenes, the ambassador sent to India by Seleucus. His memorable reign ended in 297 B. C. when he was succeeded by his son Bindusara, who in his turn was succeeded by Asoka (269—231 B. C.) who recorded the events of his reign in numerous inscriptions. This king, in an unusually bloody war, added to his dominions the kingdom of Kalinga (the Northern Circars) and then becoming a convert to Buddhism, resolved for the future to abstain from conquest by force of arms. The consequences of the conversion of Asoka were amazing. He was not intolerant of other religions, and did not endeavour to force his creed on his "children". But he initiated measures for the propagation of his doctrine with the result that "Buddhism, which had hitherto been a merely local sect in the valley of the Ganges, was transformed into one of the greatest religions of the world—the greatest, probably, if measured by the number of adherents. This is Asoka's claim to be remembered; this it is which makes his reign an epoch, not only in the history of India, but in that of the world." The wording of his edicts reveal him as a great king as well as a great missionary, and it is to be hoped that the excavations now being carried on in the ruins of his palace may throw yet more light on his character and times. On his death the Maurya kingdom fell to pieces. Even during his reign there had been signs of new forces at work on the borderland of India, where the Inde-

pendent kingdoms of Bactria and Parthia had been formed, and subsequent to it there were frequent Greek raids into India. The Greeks in Bactria, however, could not withstand the overwhelming force of the westward migration of the Yueh-chi horde, which, in the first century A. D., also ousted the Indo-Parthian kings from Afghanistan and North-Western India.

The first of these Yueh-chi kings to annex a part of India was Kadphises II (A. D. 85—125), who had been defeated in a war with China, but crossed the Indus and consolidated his power eastward as far as Benares. His son Kanishka (whose date is much disputed) left a name which to Buddhists stands second only to that of Asoka. He greatly extended the boundaries of his empire in the North, and made Peshawar his capital. Under him the power of the Kushan clan of the Yueh-chi reached its zenith and did not begin to decay until the end of the second century, concurrently with the rise in middle India of the Andhra dynasty which constructed the Amaravati stupa, "one of the most elaborate and precious monuments of piety ever raised by man."

The Gupta Dynasty.

Early in the fourth century there arose, at Pataliputra, the Gupta dynasty which proved of great importance. Its founder was a local chief, his son Samudragupta, who ruled for some fifty years from A.D. 326, was a king of the greatest distinction. His aim of subduing all India was not indeed fulfilled but he was able to exact tribute from the kingdoms of the South and even from Ceylon, and, in addition to being a warrior, he was a patron of the arts and of Sanskrit literature. The rule of his son, Chandragupta, was equally distinguished and is commemorated in an inscription on the famous iron pillar near Delhi, as well as in the writings of the Chinese pilgrim Fa-hien who pays a great tribute to the equitable administration of the country. It was not until the middle of the fifth century that the fortunes of the Gupta dynasty began to wane—in face of the onset of the White Huns from Central Asia—and by 480 the dynasty had disappeared. The following century all over India was one of great confusion, apparently marked only by the rise and fall of petty kingdoms, until a monarch arose, in A.D. 606, capable of consolidating an Empire. This was the Emperor Harsha who, from Thanasar near Ambala, conquered Northern India and extended his territory South to the Nerbudda. Imitating Asoka in many ways, this Emperor yet "felt no embarrassment in paying adoration in turn to Siva, the Sun, and Buddha at a great public ceremonial." Of his times a graphic picture has been handed down in the work of a Chinese "Master of the Law," Hiuen Tsiang by name. Harsha was the last native paramount sovereign of Northern India; on his death in 648 his throne was usurped by a Minister, whose treacherous conduct towards an embassy from China was quickly aven[illegible] and the kingdom so laboriously establis[illegible] lapsed into a state of internecine strife which lasted for a century and a half.

The Andhras and Rajputs.

In the meantime in Southern India the Andhras had attained to great prosperity and carried on a considerable trade with Greece, Egypt and Rome, as well as with the East. Their domination ended in the fifth century A.D. and a number of new dynasties, of which the Pallavas were the most important, began to appear. The Pallavas made way in turn for the Chalukyas, who for two centuries remained the most important Deccan dynasty, one branch uniting with the Cholas. But the fortunes of the Southern dynasties are so involved, and in many cases so little known, that to recount them briefly is impossible. Few names of note stand out from the record except those of Vikramaditya (11th century) and a few of the later Hindu rulers who made a stand against the growing power of Islam; of the rise of which an account is given below. In fact the history of mediæval India is singularly devoid of unity. Northern India was in a state of chaos from about 650 to 950 A.D. not unlike that which prevailed in Europe of that time, and materials for the history of these centuries are very scanty. In the absence of any powerful rulers the jungle began to gain back what had been wrested from it: ancient capitals fell into ruins from which in some cases they have not even yet been disturbed, and the aborigines and various foreign tribes began to assert themselves so successfully that the Aryan element was chiefly confined to the Doab and the Eastern Punjab. It is not therefore so much for the political as for the religious and social history of this anarchical period that one must look. And the greatest event—if a slow process may be called an event—of the middle ages was the transition from tribe to caste, the final disappearance of the old four-fold division of Brahmans; Kshattriyas, Vaisyas, and Sudras, and the formation of the new division of pure and impure largely resting upon a classification of occupations. But this social change was only a part of the development of the Hindu religion into a form which would include in its embrace the many barbarians and foreigners in the country who were outside it. The great political event of the period was the rise of the Rajputs as warriors in the place of the Kshattriyas. Their origin is obscure but they appeared in the 8th century and spread, from their two original homes in Rajputana and Oudh, into the Punjab, Kashmir, and the Central Himalayas, assimilating a number of fighting clans and binding them together with a common code. At this time Kashmir was a small kingdom which exercised an influence on India wholly disproportionate to its size. The only other kingdom of importance was that of Kanauj—in the Doab and Southern Oudh—which still retained some of the power to which it had reached in the days of Harsha, and of which the renown extended to China and Arabia.

With the end of the period of anarchy, the political history of India centres round the Rajputs. One clan founded the kingdom of Gujarat, another held Malwa, another (the Chauhans) founded a kingdom of which Ajmer was the capital, and so on. Kanauj fell into the hands of the Rathors (circ 1040 A.D.) and the dynasty then founded by that branch of the Gaharwars of Benares became one of the most famous in India. Later in the same century the Chauhans were united; and by

1163 one of them could boast that he had conquered all the country from the Vindhyas to the Himalayas, including Delhi already a fortress a hundred years old. The son of this conqueror was Prithwi Raj, the champion of the Hindus against the Mahomedans. With his death in battle (1192) ends the golden age of the new civilization that had been evolved out of chaos; and of the greatness of that age there is a splendid memorial in the temples and forts of the Rajput states and in the two great philosophical systems of Sankaracharya (ninth century) and Ramanuja (twelfth century). The triumph of Hinduism had been achieved, it must be added, at the expense of Buddhism, which survived only in Magadha at the time of the Mahomedan conquest and speedily disappeared there before the new faith.

Mahomedan India.

The wave of Mahomedan invaders that eventually swept over the country first touched India, in Sind, less than a hundred years after the death of the Prophet in 632. But the first real contact was in the tenth century when a Turkish slave of a Persian ruler founded a kingdom at Ghazni, between Kabul and Kandahar. A descendant of his, Mahmud (967-1030) made repeated raids into the heart of India, capturing places so far apart as Multan, Kanauj, Gwalior, and Somnath in Kathiawar, but permanently occupying only a part of the Punjab. Enduring Mahomedan rule was not established until the end of the twelfth century, by which time, from the little territory of Ghor, there had arisen one Mahomed Ghori capable of carving out a kingdom stretching from Peshawar to the Bay of Bengal. Prithwi Raj, the Chauhan ruler of Delhi and Ajmer, made a brave stand against, and once defeated, one of the armies of this ruler, but was himself defeated in the following year. Mahomed Ghori was murdered at Lahore (1206) and his vast kingdom, which had been governed by satraps, was split up into what were practically independent sovereignties. Of these satraps, Qutb-ud-din, the slave ruler of Delhi and Lahore, was the most famous, and is remembered by the great mosque he built near the modern Delhi. Between his rule and that of the Mughals, which began in 1526, only a few of the many Kings who governed and fought and built beautiful buildings, stand out with distinction. One of these was Ala-ud-din (1296-1313), whose many expeditions to the south much weakened the Hindu Kings, and who proved himself to be a capable administrator. Another was Firoz Shah, of the house of Tughlaq, whose administration was in many respects admirable, but which ended, on his abdication, in confusion. In the reign of his successor, Mahmud (1398-1413), the kingdom of Delhi went to pieces and India was for seven months at the mercy of the Turkish conqueror Taimur. It was the end of the fifteenth century before the kingdom, under Sikandar Lodi, began to recover. His son, Ibrahim, still further extended the kingdom that had been recreated, but was defeated by Babar, King of Kabul, at Panipat, near Delhi, in 1526, and there was then established in India the Mughal dynasty.

The Mahomedan dynasties that had ruled in capital other then Delhi up to this date were of comparative unimportance, though some great men appeared among them. In Gujarat, for example, Ahmad Shah, the founder of Ahmedabad, showed himself a good ruler and builder as well as a good soldier, though his grandson, Mahmud Shah Begara, was a greater ruler—acquiring fame at sea as well as on land. In the South various kings of the Bahmani dynasty made names for themselves, especially in the long wars they waged on the new Hindu kingdom that had arisen which had its capital at Vijayanagar. Of importance also was Adil Khan, a Turk, who founded (1490) the Bijapur dynasty of Adil Shahis. It was one of his successors who crushed the Vijayanagar dynasty, and built the great mosque for which Bijapur is famous.

The Mughal Empire.

As one draws near to modern times it becomes impossible to present anything like a coherent and consecutive account of the growth of India as a whole. Detached threads in the story have to be picked up one by one and followed to their ending, and although the sixteenth century saw the first European settlements in India, it will be convenient here to continue the narrative of Mahomedan India almost to the end of the Mughal Empire. How Babar gained Delhi has already been told. His son, Humayun, greatly extended his kingdom, but was eventually defeated (1540) and driven into exile by Sher Khan, an Afghan of great capabilities, whose short reign ended in 1545. The Sur dynasty thus founded by Sher Khan lasted another ten years when Humayun having snatched Kabul from one of his brothers, was strong enough to win back part of his old kingdom. When Humayun died (1556) his eldest son, Akbar, was only 13 years old and was confronted by many rivals. Nor was Akbar well served, but his career of conquest was almost uninterrupted and by 1594 the whole of India North of the Nerbudda had bowed to his authority, and he subsequently entered the Deccan and captured Ahmednagar. This great ruler, who was as remarkable for his religious tolerance as for his military prowess, died in 1605, leaving behind him a record that has been surpassed by few. His son, Jehangir, who married the Persian lady Nur Jahan, ruled until 1627, bequeathing to an admiring posterity some notable buildings—the tomb of his father at Sikandra, part of the palace at Agra, and the palace and fortress of Lahore. His son, Shahjahan, was for many years occupied with wars in the Deccan, but found time to make his court of incredible magnificence and to build the most famous and beautiful of all tombs, the Taj Mahal, as well as the fort, palace and Juma Masjid at Delhi. The quarrels of his sons led to the deposition of Shahjahan by one of them, Aurangzeb, in 1658. This Emperor's rule was one of constant intrigue and fighting in every direction, the most important of his wars being a twenty-five years' struggle against the Marathas of the Deccan who, under the leadership of Sivaji, became a very powerful faction in Indian politics. His bigoted attitude towards Hinduism made Aurangzeb all the more anxious to establish his Empire on a firm basis in the south, but he was unable to hold his many conquests, and on his death (1707) the

Empire, for which his three sons were fighting, could not be held together. Internal disorder and Maratha encroachments continued during the reigns of his successors, and in 1739 a fresh danger appeared in the person of Nadir Shah, the Persian conqueror, who carried all before him. On his withdrawal, leaving Mahomed Shah on the throne, the old intrigues recommenced and the Marathas began to make the most of the opportunity offered to them by puppet rulers at Delhi and by almost universal discord throughout what had been the Mughal Empire. There is little to add to the history of Mahomedan India. Emperors continued to reign in name at Delhi up to the middle of the 19th century, but their territory and power had long since disappeared, being swallowed up either by the Marathas or by the British.

European Settlements.

The voyage of Vasco da Gama to India in 1498 was what turned the thoughts of the Portuguese to the formation of a great Empire in the East. That idea was soon realized, for, from 1500 onwards, constant expeditions were sent to India and the first two Viceroys in India—Almeida and Albuquerque—laid the foundations of a great Empire and of a great trade monopoly. Goa, taken in 1510, became the capital of Portuguese India and remains to this day in the hands of its captors, and the countless ruins of churches and forts on the shores of Western India, as also farther East at Malacca, testify to the zeal with which the Portuguese endeavoured to propagate their religion and to the care they took to defend their settlements. There were great soldiers and great missionaries among them—Albuquerque, da Cunha, da Castro in the former class, St. Francis Xavier in the latter. But the glory of Empire loses something of its lustre when it has to be paid for, and the constant drain of men and money from Portugal, necessitated by the attacks made on their possessions in India and Malaya, was found almost intolerable. The junction of Portugal with Spain, which lasted from 1580 to 1640, also tended to the downfall of the Eastern Empire and when Portugal became independent again, it was unequal to the task of competing in the East with the Dutch and English. The Dutch had little difficulty in wresting the greater part of their territory from the Portuguese, but the seventeenth century naval wars with England forced them to relax their hold upon the coast of India, and during the French wars between 1795 and 1811 England took all Holland's Eastern possessions, and the Dutch have left in India but few traces of their civilisation and of the once powerful East India Company of the Netherlands.

The first English attempts to reach India date from 1496 when Cabot tried to find the North-West passage, and these attempts were repeated all through the sixteenth century. The first Englishman to land in India is said to have been one Thomas Stephens (1579) who was followed by a number of merchant adventurers, but trade between the two countries really dates from 1600 when Elizabeth incorporated the East India Company which had been formed in London. Factories in India were founded only after Portuguese and Dutch opposition had been overcome, notably in the sea fight off Swally (Suvali) in 1612. The first factory, at Surat, was for many years the most important English foothold in the East. Its establishment was followed by others, including Fort St. George, Madras, (1640) and Hughli (1651). In the history of these early years of British enterprise in India the cession of Bombay (1661) as part of the dower of Catherine of Braganza stands out as a land-mark; it also illustrates the weakness of the Portuguese at that date, since in return the King of England undertook to protect the Portuguese in India against their foes—the Marathas and the Dutch. Cromwell, by his treaty of 1654, had already obtained from the Portuguese an acknowledgment of England's right to trade in the East; and that right was now threatened, not by the Portuguese, but by Sivaji and by the general disorder prevalent in India. Accordingly, in 1686, the Company turned its attention to acquiring territorial power, and announced its intention to establish such a policy of civil and military power, and create and secure such a large revenue.....as may be the foundation of a large, well-grounded, sure English dominion in India for all time to come. Not much came of this announcement for some time, and no stand could be made in Bengal against the depredations of Aurangzeb. The foundations of Calcutta (1690) could not be laid by Job Charnock until after a humiliating peace had been concluded with that Emperor, and, owing to the difficulties in which the Company found itself in England, there was little chance of any immediate change for the better. The union of the old East India Company with the new one which had been formed in rivalry to it took place in 1708, and for some years peaceful development followed; though Bombay was always exposed by sea to attacks from the pirates, who had many strongholds within easy reach of that port, and on land to attacks from the Marathas. The latter danger was felt also in Calcutta. Internal dangers were numerous and still more to be feared. More than one mutiny took place among the troops sent out from England, and rebellions like that led by Keigwin in Bombay threatened to stifle the infant settlements. The public health was bad and the rate of mortality was at times appalling. To cope with such conditions strong men were needed, and the Company was in this respect peculiarly fortunate; the long list of its servants, from Oxenden and Aungier to Hastings and Raffles, contains many names of men who proved themselves good rulers and far-sighted statesmen, the finest Empire-builders the world has known.

Attempts to compete with the English were made of course. But the schemes of the Emperor Charles VI to secure a share of the Indian trade were not much more successful than those made by Scotland, Denmark, Sweden, and Russia. By the French, who founded Pondicherry and Chandernagore towards the end of the 17th century, much more was achieved, as will be seen from the following outline of the development of British rule.

The French Wars.

When war broke out between England and France in 1744, the French had acquired a

strong position in Southern India, which had become independent of Delhi and was divided into three large States—Hyderabad, Tanjore, and Mysore—and a number of petty states under local chieftains. In the affairs of these States Dupleix, when Governor of Pondicherry, had intervened with success, and when Madras was captured by a French squadron, under La Bourdonnais (1746) Dupleix wished to hand it over to the Nawab of Arcot—a deputy of the Nizam's who ruled in the Carnatic. The French, however, kept Madras, repelling an attack by the disappointed Nawab as well as the British attempts to recapture it. The treaty of Aix-la-Chapelle restored Madras to the English. The fighting had shown the Indian powers the value of European troops, and this was again shown in the next French war (1750-54) when Clive achieved enduring fame by his capture and subsequent defence of Arcot. This war arose from Dupleix supporting candidates for the disputed successions at Arcot and Hyderabad while the English at Madras put forward their own nominees. One of Dupleix's officers, the Marquis de Bussy, persuaded the Nizam to take into his pay the army which had established his power, and in return the Northern Circars, between Orissa and Madras, was granted to the French. This territory, however, was captured by the English in the seven years' war (1756-63). Dupleix had by then been recalled to France. Lally, who had been sent to drive the English out of India, captured Fort St. David and invested Madras. But the victory which Colonel (Sir Eyre) Coote won at Wandiwash (1760) and the surrender of Pondicherry and Gingee put an end to the French ambitions of Empire in Southern India. Pondicherry passed more than once from the one nation to the other before settling down to its present existence as a French colony in miniature.

Battle of Plassey.

While the English were fighting the third French war in the South they became involved in grave difficulties in Bengal, where Siraj-ud Daula had acceded to power. The headquarters of the English at Calcutta were threatened by that ruler who demanded they should surrender a refugee and should cease building fortifications. They refused and he marched against them with a large army. Some of the English took to their ships and made off down the river, the rest surrendered and were cast into the jail known as the "Black Hole." From this small and stifling room 23 persons, out of 146, came out alive the next day. Clive who was at Madras, immediately sailed for Calcutta with Admiral Watson's squadron, recaptured the town (1757), and, as war with the French had been proclaimed, proceeded to take Chandernagore. The Nawab Siraj-ud-Daula then took the side of the French, and Clive, putting forward Mir Jafar as candidate for the Nawab's throne, marched out with an army consisting of 900 Europeans, 2,000 sepoys and 8 pieces of artillery against the Nawab's host of over 50,000. The result was the historic battle of Plassey (June 23) in which Clive, after hesitating on the course to be pursued, routed the Nawab. Mir Jafar was put on the throne at Murshidabad, and the price of this honour was put at £2,340,000 in addition to the grant to the Company of the land round Calcutta now known as the District of the twenty-four Parganas. In the year after Plassey, Clive was appointed Governor of Bengal and in that capacity sent troops against the French in Madras and in person led a force against the Oudh army that was threatening Mir Jafar, in each case with success. From 1760 to 1765 Clive was in England. During his absence the Council at Calcutta deposed Mir Jafar and, for a price, put Mir Kasim in his place. This ruler moved his capital to Monghyr, organized an army, and began to intrigue with the Nawab Wazir of Oudh. He soon found, in a dispute over customs dues, an opportunity of quarrelling with the English and the first shots fired by his followers were the signal for a general rising in Bengal. About 200 Englishmen and a number of sepoys were massacred, but his trained regiments were defeated at Gheria and Oodeynullah, and Mir Kasim sought protection from the Nawab of Oudh. But in 1764, after quelling a sepoy mutiny in his own camp by blowing 24 ringleaders from the guns, Major (Sir Hector) Munro defeated the joint forces of Shah Alam, the Mughal Emperor, and the Nawab of Oudh in the battle of Buxar. In 1765 Clive (now Baron Clive of Plassey) returned as Governor. "Two landmarks stand out in his policy. First, he sought the substance, although not the name, of territorial power, under the fiction of a grant from the Mughal Emperor. Second, he desired to purify the Company's service, by prohibiting illicit gains, and by guaranteeing a reasonable pay from honest sources. In neither respect were his plans carried out by his immediate successors. But our efforts towards a sound administration date from this second Governorship of Clive, as our military supremacy dates from his victory at Plassey." Before Clive left India, in 1767, he had readjusted the divisions of Northern India and had set up a system of Government in Bengal by which the English received the revenues and maintained the army while the criminal jurisdiction was vested in the Nawab. The performance of his second task, the purification of the Company's service, was hotly opposed but carried out. He died in 1774 by his own hand, the House of Commons having in the previous year censured him, though admitting that he did render "great and meritorious services to his country."

Warren Hastings.

The dual system of government that Clive had set up proved a failure and Warren Hastings was appointed Governor, in 1772, to carry out the reforms settled by the Court of Directors which were to give them the entire care and administration of the revenues. Thus Hastings had to undertake the administrative organization of India, and, in spite of the factious attitude of Philip Francis, with whom he fought a duel and of other members of his Council, he reorganized the civil service, reformed the system of revenue collection, greatly improved the financial position of the Company, and created courts of justice and some semblance of a police force. From 1772 to 1774 he was Governor of Bengal, and from 1774 to 1775

he was the first Governor-General, nominated under an Act of Parliament passed in the previous year. His financial reforms, and the forced contributions he enacted from the rebellious Chet Singh and the Begam of Oudh, were interpreted in England as acts of oppression and formed, together with his action in the trial of Nuncomar for forgery, the basis of his seven years' trial before the House of Lords which ended in a verdict of not guilty on all the charges. But there is much more for which his administration is justly famous. The recovery of the Marathas from their defeat at Panipat was the cardinal factor that influenced his policy towards the native states. One frontier was closed against Maratha invasion by the loan of a British brigade to the Nawab Wazir of Oudh, for his war against the Rohillas, who were intriguing with the Marathas. In Western India he found himself committed to the two Maratha wars (1775-82) owing to the ambition of the Bombay Government to place its own nominee on the throne of the Peshwa at Poona, and the Bengal troops that he sent over made amends, by the conquest of Gujrat and the capture of Gwalior, for the disgrace of Wadgaon where the Marathas overpowered a Bombay army. In the South—where interference from Madras had already led (1769) to what is known as the first Mysore war, a disastrous campaign against Hyder Ali and the Nizam—he found the Madras Government again in conflict with those two potentates. The Nizam he won over by diplomacy, but against Hyder Ali he had to despatch a Bengal army under Sir Eyre Coote. Hyder Ali died in 1782 and two years later a treaty was made with his son Tipu. It was in these acts of intervention in distant provinces that Hastings showed to best advantage as a great and courageous man, cautious, but swift in action when required. He was succeeded, after an interregnum, by Lord Cornwallis (1786-93) who built on the foundations of civil administration laid by Hastings, by entrusting criminal jurisdiction to Europeans and establishing an Appellate Court of Criminal Judicature at Calcutta. In the Civil Service he separated the functions of the District Collector and Judge and organized the "writers" and "merchants" of the Company into an administrative Civil Service. This system was subsequently extended to Madras and Bombay. Lord Cornwallis is better known for his introduction, on orders from England, of the Permanent Settlement in Bengal. (See article on Land Revenue). A third Mysore war was waged during his tenure of office which ended in the submission of Tipu Sultan. Sir John Shore (Lord Teignmouth), an experienced Civil Servant, succeeded Lord Cornwallis, and, in 1798, was followed by Lord Wellesley, the friend of Pitt, whose projects were to change the map of India.

Lord Wellesley's Policy.

The French in general, and "the Corsican" in particular, were the enemy most to be dreaded for a few years before Lord Wellesley took up his duties in India, and he formed the scheme of definitively ending French schemes in Asia by placing himself at the head of a great Indian confederacy. He started by obtaining from the Nawab of Oudh the cession of large tracts of territory in lieu of payments overdue as subsidies for British troops, he then won over the Nizam to the British side, and, after exposing the intrigues of Tipu Sultan with the French, embarked on the fourth Mysore war which ended (1799) in the fall of Seringapatam and the gallant death of Tipu. Part of Mysore, the Carnatic, and Tanjore roughly constituting the Madras Presidency of to-day then passed to British rule. The five Maratha powers—the Peshwa of Poona, the Gaekwar of Baroda, Sindhia of Gwalior, Holkar of Indore and the Raja of Nagpur—had still to be brought into the British net. The Peshwa, after being defeated by Holkar, fled to British territory and signed the Treaty of Bassein which led to the third Maratha war (1802-04) as it was regarded by Sindhia and the Raja of Nagpur at a betrayal of Maratha independence. In this the most successful of British campaigns in India, Sir Arthur Wellesley (the Duke of Wellington) and General (Lord) Lake carries all before them, the one by his victories of Assaye and Argaum and the other at Aligad, and Laswari. Later operations, such as Colonel Monson's retreat through Central India were less fortunate. The great acquisitions of territory made under Lord Wellesley proved so expensive that the Court of Directors, becoming impatient, sent out Lord Cornwallis a second time to make peace at any price. He, however, died soon after his arrival in India, and Sir George Barlow carried on the government (1805-7) until the arrival of a stronger ruler, Lord Minto. He managed to keep the peace in India for six years, and to add to British dominions by the conquest of Java and Mauritius. His foreign policy was marked by another new departure, inasmuch as he opened relations with the Punjab, Persia, and Afghanistan, and concluded a treaty with Ranjit Singh, at Lahore, which made that Sikh ruler the loyal ally of the British for life.

The successor of Lord Minto was Lord Moira; who found himself obliged almost at once to declare war on the Gurkhas of Nepal, who had been encroaching on British territory. After initial reverses, the English, under General Ochterlony, were successful and the Treaty of Sagauli (1816) was drawn up which defines British relations with Nepal to the present day. For this success Lord Moira was made Marquis of Hastings. In the same year he made preparations for the last Maratha war (1817-18) which was made necessary by the lawless conduct of the Pindaris, gangs of Pathan or Rohilla origin, whose chief patrons were the rulers of Native States. The large number of 120,000 that he collected for this purpose destroyed the Pindaris, annexed the dominions of the rebellious Peshwa of Poona, protected the Rajput States, made Sindhia enter upon a new treaty, and compelled Holkar to give up part of his territory. Thus Lord Hastings established the British power more firmly than ever, and when he resigned, in 1823, all the Native States outside the Punjab had become parts of the political system and British interests were permanently secured from the Persian Gulf to Singapore. Lord Amherst followed Lord Hastings, and his five years' rule (1823-28) are memorable for the first Burmese war and the capture of Bharatpur. The former opera-

tion was undertaken owing to the insolent demands and raids of the Burmese, and resulted in the Burmese ceding Assam, Aracan, and the coast of Martaban and their claims to the lower provinces. The capture of Bharatpur by Lord Combermere (1826) wiped out the repulse which General Lake had received there twenty years earlier. A disputed succession on this occasion led to the British intervention.

Social Reform.

A former Governor of Madras, Lord William Bentinck, was the next Governor-General. His epitaph by Macaulay, says: "He abolished cruel rites; he effaced humiliating distinctions; he gave liberty to the expression of public opinion; his constant study was to elevate the intellectual and moral character of the nations committed to his charge."

Some of his financial reforms, forced on him from England, and his widening of the gates by which educated Indians could enter the service of the Company, were most unpopular at the time, but were eclipsed by the acts he took for the abolition of *Sati*, or widow-burning, and the suppression—with the help of Captain Sleeman—of the professional hereditary assassins known as *Thags*. In 1832 he annexed Cachar, and, two years later, Coorg. The incompetence of the ruler of Mysore forced him to take that State also under British administration—where it remained until 1881. His rule was marked in other ways by the despatch of the first steamship that made the passage from Bombay to Suez, and by his settlement of the long educational controversy in favour of the advocates of instruction in English and the vernaculars. Lord William Bentinck left India (1835) with his programme of reforms unfinished. The new Charter Act of 1833 had brought to a close the commercial business of the Company and emphasized their position as rulers of an Indian Empire in trust for the Crown. By it the whole administration, as well as the legislation of the country, was placed in the hands of the Governor-General in Council, and authority was given to create a Presidency of Agra. Before his retirement Bentinck assumed the statutory title of Governor-General of India (1834), thus marking the progress of consolidation since Warren Hastings in 1774 became the first Governor-General of Fort William. Sir Charles Metcalfe, being senior member of Council, succeeded Lord William Bentinck, and during his short tenure of office carried into execution his predecessor's measures for giving entire liberty to the press.

Afghan Wars.

With the appointment of Lord Auckland as Governor-General (1836-42) there began a new era of war and conquest. Before leaving London he announced that he looked with exultation to the prospect of "promoting education and knowledge, and of extending the blessings of good Government and happiness to millions in India;" but his administration was almost exclusively comprised in a fatal expedition to Afghanistan, which dragged in its train the annexation of Sind, the Sikh wars, and the inclusion of Baluchistan in the protectorate of India. The first Afghan war was undertaken partly to counter the Russian advance in Central Asia and partly to place on the throne at Kabul the dethroned ruler Shah Shuja in place of Dost Mahomed. The latter object was easily attained (1839) and for two years Afghanistan remained in the military occupation of the British. In 1841 Sir Alexander Burnes was assassinated in Kabul and Sir William Macnaghten suffered the same fate in an interview with the son of Dost Mahomed. The British Commander in Kabul, Gen. Elphinstone, was old and feeble, and after two months' delay he led his army of 4,500 and 12,000 camp followers back towards India in the depth of winter. Between Kabul and Jallalabad the whole force perished, either at the hands of the Afghans or from cold, and Dr. Brydon was the only survivor who reached the latter city. Lord Ellenborough succeeded Lord Auckland and was persuaded to send an army of retribution to relieve Jallalabad. One force under Gen. Pollock relieved Jallalabad and marched on Kabul, while Gen. Nott, advancing from Kandahar, captured Ghazni and joined Pollock at Kabul (1842). The bazaar at Kabul was blown up, the prisoners rescued, and the army returned to India leaving Dost Mahomed to take undisputed possession of his throne. The drama ended with a bombastic proclamation from Lord Ellenborough and the parade through the Punjab of the (spurious) gates of Somnath taken from the tomb of Mahmud of Ghazni.

Sikh Wars.

Lord Ellenborough's other wars—the conquest of Sind by Sir Charles Napier and the suppression of an outbreak in Gwalior—were followed by his recall, and the appointment of Sir Henry (1st Lord) Hardinge to be Governor-General. A soldier Governor-General was not unacceptable, for it was felt that a trial of strength was imminent between the British and the remaining Hindu power in India, the Sikhs. Ranjit Singh, the founder of the Sikh Kingdom, had died in 1839, loyal to the end to the treaty he had made with Metcalfe thirty years earlier. He left no son capable of ruling, and the *khalsa*, or central council of the Sikh army, was burning to measure its strength with the British sepoys. The intrigues of two men, Lal Singh and Fej Singh, to obtain the supreme power led to their crossing the Sutlej and invading British territory. Sir Hugh Gough, the Commander-in-Chief, and the Governor-General hurried to the frontier, and within three weeks four pitched battles were fought—at Mudki, Ferozeshah, Aliwal and Sobraon. The Sikhs were driven across the Sutlej and Lahore surrendered to the British, but the province was not annexed. By the terms of peace the infant Dhuleep Singh was recognized as Rajah; Major Henry Lawrence was appointed Resident, to assist the Sikh Council of Regency, at Lahore; the Jullundur Doab was added to British territory; the Sikh army was limited; and a British force was sent to garrison the Punjab on behalf of the child Rajah. Lord Hardinge returned to England (1848) and was succeeded by Lord Dalhousie, the greatest of Indian proconsuls.

Dalhousie had only been in India a few months when the second Sikh war broke out. In the attack on the Sikh position at Chillianwala the British lost 2,400 officers and men

besides four guns and the colours of three regiments: but before reinforcements could arrive from England, bringing Sir Charles Napier as Commander-in-Chief, Lord Gough had restored his reputation by the victory of Gujrat which absolutely destroyed the Sikh army. As a consequence the Punjab was annexed and became a British province (1849), its pacification being so well carried out, under the two Lawrences that on the outbreak of the Mutiny eight years later it remained not only quiet but loyal. In 1852 Lord Dalhousie had again to embark on war, this time in Burma, owing to the ill-treatment of British merchants in Rangoon. The lower valley of the Irawaddy was occupied from Rangoon to Prome and annexed, under the name of Pegu, to those provinces that had been acquired in the first Burmese war. British territories were enlarged in many other directions during Lord Dalhousie's tenure of office. His "doctrine of lapse" by which British rule was substituted for Indian in States where continued misrule on the failure of a dynasty made this change possible, came into practice in the cases of Satara, Jhansi, and Nagpur (which last-named State became the Central Provinces) where the rulers died without leaving male heirs. Oudh was annexed on account of its misrule. Dalhousie left many other marks on India. He reformed the administration from top to bottom, founded the Public Works Department, initiated the railways, telegraphs and postal system, and completed the great Ganges canal. He also detached the Government of Bengal from the charge of the Governor-General, and summoned representatives of the local Governments to the deliberations of the Government of India. Finally, in education he laid down the lines of a department of public instruction and initiated more practical measures than those devised by his predecessors. It was his misfortune that the mutiny, which so swiftly followed his resignation, was by many critics in England attributed to his passion for change.

The Sepoy Mutiny.

Dalhousie was succeeded by Lord Canning in 1856, and in the following year the sepoys of the Bengal army mutinied and all the valley of the Ganges from Delhi to Patna rose in rebellion. The causes of this convulsion are difficult to estimate, but are probably to be found in the unrest which followed the progress of English civilisation; in the spreading of false rumours that the whole of India was to be subdued; in the confidence the sepoy troops had acquired in themselves under British leadership; and in the ambition of the educated classes to take a greater share in the government of the country. Added to this, there was in the deposed King of Delhi, Bahadur Shah, a centre of growing disaffection. Finally there was the story—not devoid of truth—that the cartridges for the new Enfield rifle were greased with fat that rendered them unclean for both Hindus and Mahomedans. And when the mutiny did break out it found the Army without many of its best officers who were employed in civil work, and the British troops reduced, in spite of Lord Dalhousie's warnings, below the number he considered essential for safety. On May 10 the sepoys at Meerut rose in mutiny, cut down a few Europeans, and, unchecked by the large European garrison, went off to Delhi where next morning the Mahomedans rose. From that centre the mutiny spread through the North-Western Provinces and Oudh into Lower Bengal. Risings in the Punjab were put down by Sir John Lawrence and his subordinates, who armed the Sikhs, and with their help reduced the sepoys, and Lawrence was subsequently able to send a strong body of Sikhs to aid in the siege of Delhi. The native armies of Madras and Bombay remained for the most part true to their colours. In Central India the contingents of some of the great chiefs joined the rebels, but Hyderabad was kept loyal by the influence of its minister, Sir Salar Jung.

The interest of the war centres round Delhi, Cawnpore and Lucknow, though in other places massacres and fighting occurred. The siege of Delhi began on June 8 when Sir Henry Barnard occupied the Ridge outside the town. Barnard died of cholera early in July, and Thomas Reed, who took his place, was obliged through illness to hand over the command to Archdale Wilson. In August Nicholson arrived with a reinforcement from the Punjab. In the meantime the rebel force in Delhi was constantly added to by the arrival of new bodies of mutineers; attacks were frequent and the losses heavy: cholera and sunstroke carried off many victims on the Ridge: and when the final assault was made in September the Delhi army could only parade 4,720 infantry, of whom 1,960 were Europeans. The arrival of siege guns made it possible to advance the batteries on September 8, and by the 13th a breach was made. On the following day three columns were led to the assault, a fourth being held in reserve. Over the ruins of the Kashmir Gate, blown in by Home and Salkeld, Col. Campbell led his men and Nicholson formed up his troops within the walls. By nightfall the British, with a loss of nearly 1,200 killed and wounded, had only secured a foothold in the city. Six days' street fighting followed and Delhi was won; but the gallant Nicholson was killed at the head of a storming party. Bahadur Shah was taken prisoner, and his two sons were shot by Captain Hudson.

Massacre at Cawnpore.

At Cawnpore the sepoys mutinied on June 27 and found in Nana Sahib, the heir of the last Peshwa, a willing leader in spite of his former professions of loyalty. There a European force of 240 with six guns had to protect 870 non-combatants, and held out for 22 days, surrendering only on the guarantee of the Nana that they should have a safe conduct as far as Allahabad. They were embarking on the boats on the Ganges when fire was opened on them, the men being shot or hacked to pieces before the eyes of their wives and children and the women being mutilated and murdered in Cawnpore to which place they were taken back. Their bodies were thrown down a well just before Havelock, having defeated the Nana's forces, arrived to the relief. In Lucknow a small garrison held out in the Residency from July 2 to September 25 against tremendous odds and enduring the most fearful hardships. The relieving force, under Havelock and Outram, was itself invested, and the garrison was

not finally delivered until Sir Colin Campbell arrived in November. Fighting continued for 18 months in Oudh, which Sir Colin Campbell finally reduced, and in Central India, where Sir Hugh Rose waged a brilliant campaign against the disinherited Rani of Jhansi—who died at the head of her troops—and Tantia Topi.

Transfer to the Crown.

With the end of the mutiny there began a new era in India, strikingly marked at the outset by the Act for the Better Government of India (1858) which transferred the entire administration from the Company to the Crown. By that Act India was to be governed by, and in the name of, the Sovereign through a Secretary of State, assisted by a Council of fifteen members. At the same time the Governor-General received the title of Viceroy. The European troops of the Company, numbering about 24,000 officers and men were—greatly resenting the transfer—amalgamated with the Royal service, and the Indian Navy was abolished. On November 1, 1858, the Viceroy announced in Durbar at Allahabad that Queen Victoria had assumed the Government of India, and proclaimed a policy of justice and religious toleration. A principle already enunciated in the Charter Act of 1833 was reinforced, and all, of every race or creed, were to be admitted as far as possible to those offices in the Queen's service for which they might be qualified. The aim of the Government was to be the benefit of all her subjects in India—"In their prosperity will be our strength, in their contentment our security, and in their gratitude our best reward." Peace was proclaimed in July 1859, and in the cold weather Lord Canning went on tour in the northern provinces, to receive the homage of loyal chiefs and to assure them that the "policy of lapse" was at an end. A number of other important reforms marked the closing years of Canning's Viceroyalty. The India Councils Act (1861) augmented the Governor-General's Council, and the Councils of Madras and Bombay by adding non-official members, European and Indian, for legislative purposes only. By another Act of the same year High Courts of Judicature were constituted. To deal with the increased debt of India, Mr. James Wilson was sent from England to be Financial Member of Council, and to him are due the customs system, income tax, license duty, and State paper currency. The cares of office had broken down the Viceroy's health. Lady Canning died in 1862 and this hastened his departure for England where he died in June of that year. His successor, Lord Elgin, lived only a few months after his arrival in India, and was succeeded by Sir John (afterwards Lord) Lawrence, the "saviour of the Punjab."

Sir John Lawrence.

The chief task that fell to Sir John Lawrence was that of reorganising the Indian military system, and of reconstructing the Indian army. The latter task was carried out on the principle that in the Bengal army the proportion of Europeans to Indians in the infantry and cavalry should be one to two, and in the Madras and Bombay armies one to three: the artillery was to be almost wholly European. The re-organisation was carried out in spite of financial difficulties and the saddling of Indian revenues with the cost of a war in Abyssinia with which India had no direct concern; but operations in Bhutan were all the drain made on the army in India while the re-organising process was being carried on. Two severe famines—in Orissa (1866) and Bundelkhand and Upper Hindustan (1868-9)—occurred, while Sir John Lawrence was Viceroy, and he laid down the principle for the first time in Indian history, that the officers of the Government would be held personally responsible for taking every possible means to avert death by starvation. He also created the Irrigation Department under Col. (Sir Richard) Strachey. Two commercial crises of the time have to be noted. One seriously threatened the tea industry in Bengal. The other was the consequence of the wild gambling in shares of every description that took place in Bombay during the years of prosperity for the Indian cotton industry caused by the American Civil War. The "Share Mania," however, did no permanent harm to the trade of Bombay, but was, on the other hand, largely responsible for the series of splendid buildings begun in that city during the Governorship of Sir Bartle Frere. Sir John Lawrence retired in 1869, having passed through every grade of the service, from an Assistant Magistracy to the Viceroyalty. Lord Mayo, who succeeded him, created an Agricultural Department and introduced the system of Provincial Finance, thus fostering the impulse to local self-government. He also laid the foundation for the reform of the salt duties, thereby enabling his successors to abolish the inter-provincial customs lines. Unhappily his vast schemes for the development of the country by extending communication of every kind were not carried out to the full by him, for he was murdered in the convict settlement of the Andaman Islands, in 1872. Lord Northbrook (Viceroy 1872-6) had to exercise his abilities chiefly in the province of finance. A severe famine which threatened Lower Bengal in 1874 was successfully warded off by the organization of State relief and the importation of rice from Burma. The following year was notable for the deposition of the Gaikwar of Baroda for misgovernment, and for the tour through India of the Prince of Wales (the late King Edward VII). The visit of the Duke of Edinburgh to India when Lord Mayo was Viceroy had given great pleasure to those with whom he had come in touch, and had established a kind of personal link between India and the Crown. The Prince of Wales' tour aroused unprecedented enthusiasm for and loyalty to the British Raj, and further encouragement was given to the growth of this spirit when, in a durbar of great magnificence held on January 1st, 1877, on the famous Ridge at Delhi, Queen Victoria was proclaimed Empress of India. The Viceroy of that time, Lord Lytton, had, however, to deal with a situation of unusual difficulty. Two successive years of drought produced, in 1877-78, the worst famine India had known. The most strenuous exertions were made to mitigate its effects, and eight crores of rupees were spent in importing grain; but the loss of life was estimated at 5½ millions. At this time also Afghan affairs once more became prominent.

Second Afghan War.

The Amir, Sher Ali, was found to be intriguing with Russia and that fact, coupled with his repulse of a British mission led to the second Afghan War. The British forces advanced by three routes—the Khyber, the Kurram, and the Bolan—and gained all the important vantage points of Eastern Afghanistan. Sher Ali fled and a treaty was made with his son Yakub Khan, which was promptly broken by the murder of Sir Louis Cavagnari, who had been sent as English envoy to Kabul. Further operations were thus necessary, and Sir F. (now Lord) Roberts advanced on the capital and defeated the Afghans at Charasia. A rising of the tribes followed, in spite of Sir D. Stewart's victory at Ahmed Kheyl and his advance from Kabul to Kandahar. A pretender, Sirdar Ayub Khan, from Herat prevented the establishment of peace, defeated Gen. Burrows' brigade at Maiwand, and invested Kandahar. He was routed in turn by Sir F. Roberts who made a brilliant march from Kabul to Kandahar. After the British withdrawal fighting continued between Ayub Khan and Abdur Rahman, but the latter was left undisputed Amir of Afghanistan until his death in 1901.

In the meantime Lord Lytton had resigned (1880) and Lord Ripon was appointed Viceroy by the new Liberal Government. Lord Ripon's administration is memorable for the freedom given to the Press by the repeal of the Vernacular Press Act, for his scheme of local self-government which developed municipal institutions, and for the attempt to extend the jurisdiction of the criminal courts in the Districts over European British subjects, independently of the race or nationality of the presiding judge. This attempt, which created a feeling among Europeans in India of great hostility to the Viceroy, ended in a compromise in 1884. Other reforms were the re-establishment of the Department of Revenue and Agriculture, the appointment of an Education Commission with a view to the spread of popular instruction on a broader basis, and the abolition by the Finance Minister (Sir Evelyn Baring, now Lord Cromer) of a number of customs duties. Lord Dufferin, who succeeded Lord Ripon in 1884, had to give his attention more to external than internal affairs: one of his first acts was to hold a durbar at Rawalpindi for the reception of the Amir of Afghanistan which resulted in the strengthening of British relations with that ruler. In 1885 a third Burmese war became necessary owing to the truculent attitude of King Thibaw and his intrigues with foreign Powers. The expedition, under General Prendergast, occupied Mandalay without difficulty and King Thibaw was exiled to Ratnagiri, where he died on 16th December 1916. His dominions of Upper Burma were annexed to British India on the 1st of January, 1886.

The Russian Menace.

Of greater importance at the time were the measures taken to meet a possible, and as it then appeared a probable, attack on India by Russia. These preparations, which cost over two million sterling, were hurried on because of a collision which occurred between Russian and Afghan troops at Penjdeh, during the delimitation of the Afghan frontier towards Central Asia, and which seemed likely to lead to a declaration of war by Great Britain. War was averted, but the Penjdeh incident had called attention to a menace that was to be felt for nearly a generation more; it had also served to elicit from the Princes of India an unanimous offer of troops and money in case of need. That offer bore fruit under the next Viceroy, Lord Lansdowne, when the present system of Imperial Service Troops was organised. Under Lord Lansdowne's rule also the defences of the North-Western Frontier were strengthened, on the advice of Sir Frederick (now Earl) Roberts, who was then Commander-in-Chief in India. Another form of precautionary measure against the continued aggression of Russia was taken by raising the annual subsidy paid by the Indian Government to the Amir from eight to twelve lakhs.

On the North-Eastern Frontier there occurred (1891) in the small State of Manipur a revolution against the Raja that necessitated an inquiry on the spot by Mr. Quinton, the Chief Commissioner of Assam. Mr. Quinton, the commander of his escort, and others, were treacherously murdered in a conference and the escort ignominiously retreated. This disgrace to British arms led to several attacks on frontier outposts which were brilliantly defeated. Manipur was occupied by British troops and the government of the State was reorganised under a Political Agent. Lord Lansdowne's term of office was distinguished by several other events, such as the passing of the Parliamentary Act (Lord Cross's Act, 1892), which increased the size of the Legislative Councils as well as the number of non-officials in them: legislation aimed at social and domestic reform among the Hindus: and the closing of the Indian Mints to the free coinage of silver (1893). In Burma great progress was made, under Sir Alexander Mackenzie, as Chief Commissioner: comparative order was established, and large schemes for the construction of railways, roads, and irrigation works were put in hand. (The Province was made a Lieutenant-Governorship in 1897).

Frontier Campaigns.

Lord Elgin, who succeeded Lord Lansdowne in 1894, was confronted at the outset with a deficit of Rs. 2½ crores, due to the fall in exchange. (In 1895 the rupee fell as low as 1s. 1d.) To meet this the old five per cent. import duties were reimposed on a number of commodities, but not on cotton goods: and within the year the duty was extended to piece-goods, but not to yarn. The reorganisation of the Army, which involved the abolition of the old system of Presidency Armies, had hardly been carried out when a number of risings occurred along the North-West Frontier. In 1895 the British Agent in Chitral—which had come under British influence two years previously when Sir H. M. Durand had demarcated the southern and eastern boundaries of Afghanistan—was besieged and had to be rescued by an expeditionary force. Two years later the Wazirs, Swatis, and Mohmands attacked the British positions in Malakand, and the Afridis closed the Khyber Pass. Peace was only established after a prolonged campaign (the Tirah campaign) in which 40,000 troops were employed, and over 1,000 officers

and men had been lost. This was in itself a heavy burden on the finances of India, which was increased by the serious and widespread famine of 1896-97 and by the appearance in India of bubonic plague. The methods taken to prevent the spread of that disease led, in Bombay, to rioting, and elsewhere to the appearance in the vernacular press of seditious articles which made it necessary to make more stringent the law dealing with such writings.

Lord Curzon's Viceroyalty.

With famine and plague Lord Curzon also, who succeeded Lord Elgin in 1899, had to deal. In 1901 the cycle of bad harvests came to an end; but plague increased, and in 1904 deaths from it were returned at over one million. Of the many problems to which Lord Curzon directed his attention, only a few can be mentioned here: some indeed claim that his greatest work in India was not to be found in any one department but was in fact the general gearing up of the administration which he achieved by his unceasing energy and personal example of strenuous work. He had at once to turn his attention to the North-West Frontier. The British garrisons beyond our boundary were gradually withdrawn and replaced by tribal levies, and British forces were concentrated in British territory behind them as a support. An attempt was made to check the arms traffic and work on strategic railways was pushed forward. The fact that in seven years he only spent a quarter of a million upon repressive measures and only found it necessary to institute one blockade (against the Mahsud Waziris) is the justification of this policy of compromise between the Lawrence and Forward schools of thought. In 1901 the trans-Indus districts of the Punjab were separated from that Province, and together with the political charges of the Malakand, the Khyber, Kurram, Tochi and Wana were formed into the new North-West Frontier Province, under a Chief Commissioner directly responsible to the Government of India. That year also witnessed the death of Abdur Rahman, the Amir of Afghanistan, and the establishment of an understanding with his successor Habibullah. In 1904 the attitude of the Dalai Lama of Tibet being pro-Russian and anti-British, it became necessary to send an expedition to Lhasa under Colonel (Sir Francis) Younghusband. The Dalai Lama abdicated and a treaty was concluded with his successor.

In his first year of office Lord Curzon passed the Act which, in accordance with the recommendations of the Fowler Commission, practically fixed the value of the rupee at *1s. 4d.*, and in 1900 a Gold Reserve fund was created. The educational reforms that marked this Viceroyalty are dealt with elsewhere: chief among them was the Act of 1904 reorganising the governing bodies of Indian Universities. Under the head of agrarian reform must be mentioned the Punjab Land Alienation Act, designed to free the cultivators of the soil from the clutches of money-lenders, and the institution of Agricultural banks. The efficiency of the Army was increased (Lord Kitchener was Commander-in-Chief) by the re-armament of the Indian Army, the strengthening of the artillery, and the reorganisation of the transport service. In his relations with the Feudatory Chiefs, Lord Curzon emphasized their position as partners in administration, and he founded the Imperial Cadet Corps to give a military education to the sons of ruling and aristocratic families. In 1902 the British Government obtained from the Nizam a perpetual lease of the Assigned Districts of Berar in return for an annual payment of 25 lakhs. The accession of King Edward VII was proclaimed in a splendid Durbar on January 1, 1903. In 1904 Lord Curzon returned to England for a few months but was re-appointed to a second term of office, Lord Ampthill, Governor of Madras, having acted as Viceroy during his absence. The chief act of this second term was the partition of Bengal and the creation of a new Province of Eastern Bengal and Assam—a reform, designed to remove the systematic neglect of the trans-Gangetic areas of Bengal, which evoked bitter and prolonged criticism. In 1905 Lord Curzon resigned, being unable to accept the proposals of Lord Kitchener for the re-adjustment of relations between the Army headquarters and the Military Department of the Government, and being unable to obtain the support of the Home Government. Lord Curzon was succeeded by **Lord Minto**, the grandson of a former Governor-General. It was a stormy heritage to which Lord Minto succeeded, for the unrest which had long been noticed developed in one direction into open sedition. The occasion of the outburst in Bengal was the partition of that province. The causes of the flood of seditious writings and speeches, of the many attempts at assassination, and of the boycott of British goods are less easily definable. The mainspring of the unrest was "a deep-rooted antagonism to all the principles upon which Western society, especially in a democratic country like England, has been built up."

Outside Bengal attempts to quell the disaffection by the ordinary law were fairly successful. But scarcely any province was free from disorder of some kind and, though recourse was had to the deportation of persons without reason assigned under an Act of 1818, special Acts had to be passed to meet the situation, *viz*:—an Explosives Act, a Prevention of Seditious Meetings Act, and a Criminal Law Amendment Act which provides for a magisterial inquiry in private and a trial before three judges of the High Court without a jury. Concurrently with these legislative measures steps were taken to extend representative institutions. In 1907 a Hindu and a Mahomedan were appointed to the Secretary of State's Council, and in 1909 a Hindu was appointed for the first time to the Viceroy's Council. The Indian Councils Act of 1909 carried this policy farther by reconstituting the legislative councils and conferring upon them wider powers of discussion. The executive councils of Madras and Bombay were enlarged by the addition of an Indian member.

As regards foreign policy, Lord Minto's Viceroyalty was distinguished by the conclusion (1907) between Great Britain and Russia of an agreement on questions likely to disturb the friendly relations of the two countries in Asia generally, and in Persia, Afghanistan and Tibet in particular. Two expeditions had to be undertaken on the North-West frontier, against the Zakka Khels and the Mohmands;

and ships of the East Indies Squadron were frequently engaged off Maskat and in the Persian Gulf in operations designed to check the traffic in arms through Persia and Mekran to the frontier of India.

Visit of the King and Queen.

Sir Charles (Lord) Hardinge was appointed to succeed Lord Minto in 1910. His first year in India was marked by the visit to India of the King Emperor and the Queen, who arrived at Bombay on December 2, 1911. From there they proceeded to Delhi where, in the most magnificent durbar ever held in India, the coronation was proclaimed and various boons, including an annual grant of 50 lakhs for popular education, were announced. At the same ceremony His Majesty announced the transfer of the capital of India from Calcutta to Delhi; the reunion of the two Bengals under a Governor-in-Council; the formation of a new Lieutenant Governorship for Behar, Chota Nagpur and Orissa and the restoration of Assam to the charge of a Chief Commissioner.

In August, 1913, the demolition of a lavatory attached to a mosque in Cawnpore was made the occasion of an agitation among Indian Mahomedans and a riot in Cawnpore led to heavy loss of life. Of those present at the riot, 106 were put on trial but subsequently released by the Viceroy before the case reached the Sessions, and His Excellency was able to settle the mosque difficulty by a compromise that was acceptable to the local and other Mahomedans.

Still more serious trouble occurred in September, 1914, when a riot at Budge-Budge among a number of Sikh emigrants returned from Canada gave a foretaste of the revolutionary plans entertained by those men. The sequel, revealed in two conspiracy trials at Lahore, showed that the "Ghadr" conspiracy was widespread and had been consistently encouraged by Germany.

Lord Chelmsford as Viceroy.

Lord Hardinge, whose great services had been rewarded with the Knighthood of the Garter, left India in 1916 and was succeeded by Lord Chelmsford, whose tenure of office was destined to be one of the most eventful in the modern history of India. The part played by India in the war was developed in every possible way. Not only was the Indian Army increased but the resources of the country were developed with the help of the Munitions Board and India assumed responsibility for 100 millions of the war debt. The share of India in the Imperial burden of the war was emphasised in another and very significant way by her representation in the Imperial War Cabinet in London by His Highness the Maharaja of Bikaner and Sir S. P. (Lord) Sinha. On the Frontier, where there had been numerous though comparatively slight disturbances in 1914-15, a punitive expedition had to be undertaken against the Mahsuds.

In 1917 **Mr. Montagu,** who had succeeded Mr. Chamberlain as Secretary of State, carried out the latter's intention of visiting India. The result of the visit was shown in the following year when a report was issued containing what is known as the joint scheme of reform evolved by the Secretary of State and the Viceroy. Shortly after this report there was issued a report by the Special Committee of Inquiry, over which Mr. Justice Rowlatt presided, into seditious crime in India. That report and the legislation which followed in consequence of it, together with the anouncement of the proposed reform scheme, led to a renewal of political discussion and agitation which had to a great extent been in abeyance during the early years of the war.

Early in 1919 prolonged strikes in Bombay and elsewhere showed that India, though comparatively little affected by the economic results of the war, was confronted by industrial and economic problems which were none the less grave. The gravity of those problems was increased by the ravages of influenza which is supposed to have caused 6,000,000 deaths during the winter months of 1917-18. Disturbances broke out in April as a sequel to the passive resistance movement against the Rowlatt Act (the Satyagraha Movement) which produced a situation to which there has been no parallel since the Mutiny. It is sufficient here to state that in Ahmedabad, Viramgam, Delhi, Lahore, Amritsar, Gujranwalla and other places the crowd, by attacking life and property and by train wrecking and tearing up railway lines and telegraph wires, provoked a situation which could only be met by the proclamation of martial law and the enforcement of military measures for the protection of law abiding subjects and for the suppression of disorder.

Exaggerated reports of those riots and of the effect of the Rowlatt Act may be presumed to have had some influence on the Amir of Afghanistan when he declared war and invaded British territory. Amir Habibullah Khan, who had been loyal to his treaty obligations throughout the war, was murdered in February and, after a brief occupation of the throne by his brother Nasrulla Khan, his son Amanulla had been declared Amir. A sequel to this war was the renewal of trouble along a great part of the North Western frontier where the tribesmen, who had at first appeared to be impressed by the British successes, took the offensive against our advance posts especially in southern Waziristan. The operations which necessarily followed and the severity of the fighting were on a scale never previously reached in frontier war, and made the campaign of unusual length.

The Government of India Bill, embodying Mr. Montagu's proposals for the popularisation of the system of Government was passed in December.

The next year, 1920, more than any which preceded it, was distinguished by political agitation. The cause of this was in part the indignation created by the facts disclosed in the report of the Hunter Commission on the outbreaks of 1919 in the Punjab and elsewhere, and the stimulus given to the Khilafat agitation by the terms of the Peace treaty with Turkey.

Lord Reading's Viceroyalty.

The fruits of agitation were reaped in plenty in 1921, the first year of Lord Reading's term of office. Murderous outbreaks at Malegaon, Dharwar and elsewhere were followed by a rebellion of the Moplahs in Malabar which assumed the most serious proportions and necessitated prolonged military operations.

It had been arranged that H. R. H. the Prince of Wales should visit India at the end of 1920 and should open the new Councils in 1921, but, for reasons of health, that visit had to be postponed; and H. R. H. the Duke of Connaught came to India early in 1921 in order to open the new Councils. The Prince's visit took place in 1921-22 and was essentially non-political.

The enthusiasm with which the Prince was greeted during his tour was very marked. But simultaneously with the loyal display riots broke out in more than one of the cities which he visited. But after the imprisonment of some of the leading agitators in the early part of 1922 the country enjoyed comparative quiet, except in the Punjab where the Akali movement among the Sikhs, which had started as a puritan religious movement, developed into a political movement attended by constant and widespread disorder. The enhanced position of India in the Empire and the position of India as a nation entering actively into the work of the League of Nations, were emphasised during the year by the tour of the Dominions undertaken by the Hon. S. Sastri.

Events in 1923.

Politically the year 1923 represented a ding-dong battle between disruptive forces and those which were working for the constitutional progress of the country. More than one cause combined to excite strong feeling; but, in spite of serious setbacks, by the end of the year the position of Lord Reading's administration was obviously firmer than it had been at any time since the beginning of the Gandhi movement. Early in the year a great deal of criticism was excited by Lord Reading's certification of the doubling of the salt tax, under the powers conferred by the Reformed constitution, in opposition to the clearly expressed will of the Legislative Assembly. Objection was taken to this step, not so much because an increase in the salt tax had always been looked upon as a measure to which resort should be made only in grave emergencies, as because the financial powers of the elected chambers, much emphasised in the Montagu-Chelmsford Report were thus shown to be capable of restriction.

The doubling of the salt tax was resented principally by the upper classes. An event which appealed far more to the masses and did a great deal to cement a temporary unity in the rank and file of non-co-operation was an externally organized display, at Nagpur, where, in consequence of an order by the district magistrate forbidding the carrying of a so-called national flag in areas where it would be likely to be offensive to the majority of the inhabitants, daily processions of volunteers, in Gandhi cloth and provided with flags and all the emblems of peaceful revolution, tried for months to make a way beyond the limits fixed by the authorities. During the long trial of will nearly a thousand men from different parts of India were jailed; but in the end official patience won, the processions ceased and the prisoners were sent home.

Break up of non-co-operation.

This was the last occasion during the year when the disaffected elements were able to confront the authorities with a sensational popular movement of any great scope. From this point two causes made mass movements of the kind impossible. The first was the split in the Congress, the second the rise of communal feeling between Hindus and Mahomedans. The Congress split was brought about by Mr. C. R. Das, who, realising no doubt that Mr. Gandhi had failed and it was unlikely that any other man would have greater success by a rigid adherence to his methods, declared in favour of standing for the Councils. This policy was bitterly opposed by the orthodox Congress Party, partly from respect for the wisdom of Mr. Gandhi and partly because it was felt that some Congress men, once they had entered the Councils, might be expected to fall from grace and might even end by accepting office if it were offered them. Mr. Das asserted that he wished to enter the Councils for the purpose of wrecking them, but the plea was heard with scepticism. In spite of this he managed to carry the abler section of the Congress with him, with the result that his party, the Swarajists, brought off some sensational victories at the polls. Many well known Liberals were defeated, one of the best known of whom was Sir Surendranath Banerjea, the Bengal Minister of Local Self-Government and Public Health, who at one period of his life was known as "the uncrowned king of Bengal."

Hindu Mahomedan Riots.

The other cause of the wane of non-co-operation was the disappearance of the surface unity between Hindus and Mahomedans which Mr. Gandhi, helped by strong feeling among Mahomedans on the Turkish question, had temporarily contrived. The Lausanne Treaty almost completely satisfied the wishes of Indian Mahomedans on this point and in certain quarters there was a deep feeling of gratitude to the Viceroy for the part he was known to have taken in bringing about the popular settlement. Mahomedans ceased to need Congress help. This was itself enough to make them objects of suspicion to extremist Hindus, and the feeling of uneasiness was heightened by the rejoicings over the Treaty in which Mahomedans indulged throughout India. There was also among Hindus the memory of the atrocities committed by the Moplahs in Malabar, and a movement started by the Mahomedan Minister of Education in the Punjab, with the object of ensuring that the Punjab Mahomedans, as the largest community in the Province, should have the greatest voice in its control, added to Hindu alarm and resentment. In the United Provinces Hindus were thunderstruck to find from the census returns that in comparison with the Mahomedans they were declining in numbers. Consequently two pan-Hindu movements were started: the Shuddhi movement, announced by Swami Shradhanand, which aimed at the re-conversion to Hinduism of the Malkhana Rajputs and other low class occupants of the fringe of Islam, and the Sangathan movement, of which Pandit Malaviya was the sponsor, and which aimed at teaching Hindus physical exercises and sword play, so that they might be the better able to protect themselves. These two movements greatly irritated the Mahomedans, and during the year there were between fifteen and twenty serious Hindu-Mahomedan riots, occurring in all parts of India. In consequence, when the Ali brothers were released from jail they were unable to take any clear

line: they did not wish to take the popular course and abuse the Hindus, and on the other hand they would have had few followers if they had begun another bitter campaign against the Government.

Kenya and the Imperial Conference.

Considerable feeling all over India was aroused by the terms of the Kenya settlement, which did not confer on Indians complete equality with the white settlers. The points particularly resented were the reservation of the highlands for Europeans, the restriction of the franchise and the rules concerning immigration, which it was thought might be used so as to operate unfairly against Indians. After the Imperial Conference, at which India was represented by H. H. the Maharaja of Alwar and Sir Tej Bahadur Sapru, feeling on this point improved slightly; for though no very great gains were made at the Conference, the fullest possible statement of the Indian case was given to the entire world, and the general attitude of the various premiers at the Conference was friendly.

Violent Movements.

In the Punjab the Akali movement showed an increasing tendency to forget the teachings of Mr. Gandhi. The Babar Akalis murdered several of their co-religionists whose political views they did not approve, and the Akali Dal became a more definitely military organisation, acting directly under the orders of the Shrines Committee. After a career of misgovernment and intrigue against the neighbouring state of Patiala, the Maharaja of Nabha voluntarily abdicated. Somewhat ludicrously the Akalis turned him into a martyr, and the movement became sufficiently formidable for both the Akali Dal and the Shrines Committee to be declared illegal associations. Many arrests were made; but, owing to the lack of unity in the extremist camp, an attempt of the Congress to secure all India support for the Akalis had a meagre result.

During the year there were an unusual number of frontier outrages. Several officers were shot, and worldwide attention was attracted by the kidnapping of Molly Ellis, after the murder of her mother, and by her heroic rescue by Mrs. Starr. Coupled with the slow rate of progress of the operations in Waziristan, these continued incidents provoked some comment.

There was also a sensational revival of the pre-war anarchical societies in Bengal, but the range of their achievements was small.

Inquiries.

Protection of Indian industries continued to be demanded, and there was a special movement to secure protection of Bengal coal against Natal competition. This was opposed by many coal consumers. The question of protecting steel was considered by the Tariff Board at Calcutta and elsewhere, the evidence showing a great division of opinion.

Another important event was the arrival of the Royal Commission, presided over by Lord Lee of Fareham, to inquire into the conditions in which Government servants in India work and the steps to be taken to ensure adequate recruitment. The bulk of the evidence was in favour of increasing the financial attractions of the Services in some respects, and at the same time of proceeding cautiously with the tasks of Indianisation and Provincialisation.

The Government of India.

The impulse which drove the British to India was not conquest but trade. The Government of India represents the slow evolution from conditions established to meet trading requirements. On September 24, 1599, a few years before the deaths of Queen Elizabeth and Akbar, the merchants of London formed an association for the purpose of establishing direct trade with the East and were granted a charter of incorporation. The Government of this Company in England was vested in a Governor with a General Court of Proprietors and a Court of Directors. The factories and affairs of the Company on the East and West Coast of India, and in Bengal, were administered at each of the principal settlements of Madras (Fort St. George), Bombay and Calcutta (Fort William), by a President or Governor and a Council consisting of the senior servants of the Company. The three "Presidencies" were independent of each other and subordinate only to the Directors in England.

Territorial Responsibility Assumed.

The collapse of government in India consequent on the decay of Moghul power and the intrigues of the French on the East Coast forced the officers of the Company to assume territorial responsibility in spite of their own desires and the insistent orders of the Directors. Step by step the Company became first the dominant, then the paramount power in India. In these changed circumstances the system of government by mutually independent and unwieldly councils of the merchants at the Presidency towns gave rise to grave abuses. Parliament intervened, and under the Regulating Act of 1773, a Governor-General and four councillors were appointed to administer the Presidency of Fort William (Bengal), and the supremacy of that Presidency over Madras and Bombay was for the first time established. The subordinate Presidencies were forbidden to wage war or make treaties without the previous consent of the Governor-General of Bengal in Council, except in cases of imminent necessity. Pitt's Act of 1784, which established the Board of Control in England, vested the administration of each of the three Presidencies in a Governor and three councillors, including the Commander-in-Chief of the Presidency Army. The control of the Governor-General-in-Council was somewhat extended, as it was again by the Charter Act of 1793. Under the Charter Act of 1833 the Company was compelled to close its commercial business, and it became a political and administrative body holding its territories in trust for the Crown. The same Act vested the direction of the entire civil and military administration and sole power of legislation in the Governor-General-in-Council, and defined more clearly the nature and extent of the control to be extended over the subordinate governments. After the Mutiny, there was passed, in 1858, an Act transferring the Government of India from the Company to the Crown. This Act made no important change in the administration in India, but the Governor-General, as representing the Crown, became known as the Viceroy. The Governor-General is the sole representative of the Crown in India; he is assisted by a Council, composed of high officials; each of whom is responsible for a special department of the administration.

Functions of Government.

The functions of the Government in India are perhaps the most extensive of any great administration in the world. It claims a share in the produce of the land and in the Punjab and Bombay it has restricted the alienation of land from agriculturists to non-agriculturists. It undertakes the management of landed estates where the proprietor is disqualified. In times of famine it undertakes relief work and other remedial measures on a great scale. It manages a vast forest property and is the principal manufacturer of salt and opium. It owns the bulk of the railways of the country, and directly manages a considerable portion of them; it has constructed and maintains most of the important irrigation works; it owns and manages the post and telegraph systems; it has the monopoly of the Note issue, and it alone can set the mints in motion. It lends money to municipalities, rural boards, and agriculturists and occasionally to owners of historic estates. It controls the sale of liquor and intoxicating drugs and has direct responsibilities in respect to police, education; medical and sanitary operations and ordinary public works of the most intimate character. The Government has also close relations with the Indian States which collectively cover more than one-third of the whole area of India and comprise more than one-fifth of its population. The distribution of these great functions between the Government of India and the provincial administrations has fluctuated and was definitely regulated by the Reform Act of 1919.

THE REFORMS OF 1919.

Great changes were made in the system of government in British India by the Government of India Act, 1919, which, together with the rules framed under it—almost as important in their provisions as the Act itself—came into general operation in January 1921. The Act was the outcome of an inquiry conducted in India in the winter of 1917-18 by the Secretary of State (Mr. Montagu) and the Viceroy (Lord Chelmsford), the results of which were embodied in their Report on Indian Constitutional Reform issued in the spring of 1918. The recommendations in this report were supplemented by those of two Committees which toured India in the winter of 1918-19, and which issued their Reports in the spring of 1919. A third Committee was appointed during the latter year to make recommendations for the modification of the system of administration of Indian affairs in the United Kingdom, and issued their Report while the Government of India Bill was under examination by a Joint

Select Committee of both Houses of Parliament. The Joint Select Committee in their turn issued an exhaustive Report on the Bill, which was passed in a form practically identical with that recommended by the Joint Committee, and received the Royal Assent on the 23rd December 1919.

The Divisions.—British India for administrative purposes is divided into 15 provinces, each with its separate Local Government or administration. In nine of the provinces—the three Presidencies of Madras, Bombay and Bengal, the United Provinces of Agra and Oudh, the Punjab, Bihar and Orissa, the Central Provinces, Burma, and Assam—the Local Government consists of a Governor, an Executive Council of not more than four members, and two or more Ministers. In 1922 Burma, which was excluded from the original scheme, was brought into line with it. An Act of Parliament was passed, constituting Burma a Governor's Province, with a Governor, an Executive Council and Ministers, and a Legislative Council elected on a very democratic franchise, which gave the vote to women. The remaining six provinces are directly administered by Chief Commissioners, who are technically mere agents of the Central Government of India. No change has been made by the Act of 1919 in the system of administration in these six minor provinces.

Dyarchy.—In these nine provinces the executive Government is a dual organism which owes its unity to the Governor. One half of the organism consists of the Governor and his executive Council, all of whom are appointed by the King. This body is responsible for the administration of those subjects which are "reserved." The other half of the executive organism is the Governor acting with the advice of Ministers who are appointed by him, hold office during his pleasure, and must be elected members of the Provincial Legislative Council. To the Governor acting with Ministers is entrusted the administration of "transferred" subjects.

The Object.—The framers of the Act of 1919 had a twofold object in view. Their primary object was to devise a plan which would render possible the introduction by successive stages of a system of responsible government in British India in modification of the previous system under which the Governments in India, both central and provincial, received their mandates from the British Parliament acting through the Secretary of State for India, the Cabinet Minister responsible to Parliament for the administration of Indian affairs. Earlier statutes thus enshrined a purely official hierarchy, consisting of the Secretary of State in Council at the apex, the Governor-General in Council (commonly known as "the Government of India") in supreme control in India, and the various Local Governments in their own provincial areas. The law enjoined upon the Local Governments implicit obedience to any instructions they might receive from the Government of India, vested in the Secretary of State in Council unlimited power to "superintend, a direct and control all acts, operations and concerns which relate to the government and revenues of India," and similarly vested superintendence, direction and control over all government affairs civil and military, in India in the Government of India, subject to any instructions or directions it might receive from the Secretary of State in Council. The whole fabric was thus inextricably interwoven. The various Local Governments were primarily responsible for the preservation of law and order, and for the administration of domestic affairs in their own areas, and the Government of India was primarily responsible for the administration of those matters which affected the whole of India, and for the maintenance of good relations between province and province, though it was also responsible for the general oversight and direction of administration throughout British India. Tradition and practice, based chiefly on convenience, had therefore, to a considerable extent operated to demarcate "spheres of influence" for the Local Governments and for the Government of India respectively. But the demarcation was not clear cut, and was in no sense legally recognised. Constitutional theory, as founded upon the law in force up to the Act of 1919, made the Secretary of State responsible to Parliament for every phase of governmental activity in India and for the raising and expenditure of every rupee of Indian revenues; and, although the extent to which the exercise of this responsibility in the detailed superintendence of the formulation of policy and of the day-to-day administration in the provinces and at the centre varied from time to time with the varying personality of individual Secretaries of State and the varying interest displayed by Members of Parliament in Indian affairs, the fact that responsibility did lie to Parliament for every detail of Indian administration rendered inevitable a close and detailed supervision from Whitehall. This in its turn necessitated a similar relationship between the Government of India and the provinces. With the increasing complexity of Government activities, it was inevitable that the Local Governments, at all events of the major provinces, should gradually acquire considerable freedom in the management of their domestic affairs; but the Government of India, in virtue of its statutory right of control and intervention and its concurrent powers of legislation for the provinces, was always able, and frequently bound, to exercise powers, both executive and legislative, which at times tended to excessive centralisation and to the subordination of the best interests of one part of British India to what was conceived to be the uniform advantage of the provinces as a whole.

The Provinces.—Starting from the premise that it was in the provinces that the first substantial steps must be taken towards the development of a system of responsible government, the framers of the Act of 1919 provided for a statutory demarcation of the functions to be exercised by the Government of India and the Provincial Governments respectively, in their administrative capacity. No attempt was made in this connection to limit the field open to the Indian Legislature, which still retains a concurrent (though not an overriding) power of legislation for the affairs of the

provinces in general and of individual provinces; but the rules under the Act provide specifically for the exercise of this right in certain specified provincial matters, and the theory upon which the Act proceeds assumes that a convention will be established and rigorously observed which will confine intervention by the Indian Legislature in provincial affairs to matters so specified.

Finance.—The "revenues of India"—or, rather, their sources—are definitely divided between the Central and Provincial Governments; the Provincial Governments have now almost complete control over the administration of their "allocated" revenues, they have power to supplement them by raising loans on the security of these revenues, and their right, subject in certain cases to the Governor-General's sanction, to initiate new taxation measures is formally recognised.

It was found impossible to devise any scheme of allocation of revenues between the Central and Provincial Governments which did not leave the former with a deficit. This deficit is to be met in part by an annual contribution from seven of the eight Governors' provinces, the province of Bihar and Orissa, owing to the comparative exiguousness and inelasticity of its own revenues, having been exempted from this contribution. The aggregate sum thus due from the provinces to the Government of India at the outset is Rs. 983 lakhs, of which Madras contributes Rs. 348 lakhs, the United Provinces Rs. 240 lakhs, the Punjab Rs. 175 lakhs, and the other four provinces sums ranging from Rs. 15 lakhs to Rs. 64 lakhs. The annual contribution is in no case to be subject to increase in the future, and if reduction of the aggregate is found possible by the Government of India, reductions are to be made in fixed proportions from the quota of the several provinces.

Responsibility.—The first steps towards responsibility were to transform the Provincial Legislative Council into a body of sufficient size and with a sufficiently large elected majority (which the Act fixes at 70 per cent. as a minimum) to represent adequately public opinion in the province, and to create an electorate. The first franchise rules have given the vote to about 5,000,000 of the adult male population, and have enabled the Legislative Council of any "Governor's province" to extend the franchise to women. The following table shows the strength and composition of each of the Provincial Councils:—

Province.	Elected.	Nominated and *ex-officio*.		Total.
		Officials.	Non-officials.	
Madras	98	23	6	127
Bombay	86	20	5	111
Bengal	113	20	6	139
United Provinces	100	18	5	123
Punjab	71	16	6	93
Bihar and Orissa	76	18	9	103
Central Provinces	53	10	5	68
Assam	39	9	5	53
Burma	78	15	8	101

The figures for officials in this table are maxima in every case, and where less than the maximum number of officials is nominated to any Council, the number of nominated non-officials must be increased in proportion; *e.g.*, if there are only 16 officials (nominated and *ex-officio*) on the United Provinces Council, there must be seven nominated non-officials. The official members who have seats *ex-officio* are the members of the Executive Council, who are at present four in number (the statutory maximum in Madras, Bombay, and Bengal, three in Bihar and Orissa, and two in each of the remaining provinces. These Executive Councils contain an equal number of Indian and British members except in Bihar and Orissa (which has an Indian Governor), where two of the three members are British officials.

Electorates.—The electorates in each province are arranged for the most part on a basis which is designed to give separate representation to the various races, communities, and

special interests into which the diverse elements of the Indian population naturally range themselves. Although there are minor variations from province to province, a table showing their character in one province (Bengal) will give a sufficiently clear idea of the general position.

Class of Electorate.	No. of Electorates of this Class.	No. of Members returnable by Electorates of this Class.
Non-Muhammadan	42	46
Muhammadan	34	39
European	3	5
Anglo-Indian (in the technical sense of persons of mixed European and Asiatic descent).	1	2
Landholders	5	5
University	1	1
Commerce and Industry	8	15
Total	94	113

Of the 94 constituencies in Bengal, all but nine (those representing the University and Commerce and Industry) are arranged on a territorial basis, *i.e.*, each constituency consists of a group of electors, having the prescribed qualifications which entitle them to a vote in a constituency of that class, who inhabit a particular area. The normal area for a "Muhammadan" or "non-Muhammadan" constituency is a district (or where districts are large and populous, half a district) in the case of rural constituencies, and, in the case of urban constituencies, a group of adjacent municipal towns. Some large towns form urban constituencies by themselves, and the City of Calcutta provides eight separate constituencies, six "non-Muhamadan" and two "Muhammadan" the latter, of course, being coterminous with the former.

Throughout the electoral rules there runs a general classification of the various kinds of constituencies into two broad categories, those which are designed to represent special interests, such as Landholders, Universities, Planters or Commerce being described as "special" constituencies, and those which are based on a racial distinction—Muhammadan, European, Sikh, etc.—being known as "general" constituencies.

Voters' Qualifications.—The qualifications for electors (and consequently for candidates) vary in detail from province to province, chiefly on account of variations in the laws and regulations which form the basis of assessment of income or property values. Generally speaking, both in rural and urban areas the franchise is based on a property qualification as measured by the payment of a prescribed minimum of land revenue or of its equivalent, or of income tax, or of municipal taxes, but in all provinces retired, pensioned or discharged officers and men of the regular army are entitled to the vote, irrespective of the amount of their income or property. The actual number of voters registered in each province on the first rolls prepared under the new Act are shown in the following table, but owing to the short time available for the preparation of these rolls it is not unlikely that the revision due before the next elections will result in a general increase :—

TABLE SHOWING TOTAL NUMBER OF VOTERS REGISTERED IN EACH PROVINCE ON THE ROLLS PREPARED FOR THE ELECTIONS OF 1920.

Madras ..	1,258,156	Punjab ..	505,361
Bombay ..	548,419	Bihar and Orissa ..	327,564
Bengal ..	1,021,418	Central Provinces.	144,737
United Provinces	1,347,278	Asam ..	203,191
		Burma	1,766,386

POWERS OF PROVINCIAL LEGISLATIVE COUNCILS.

In origin the legislative authority in British India was a meeting of the Governor-General (or, in the case of the Presidencies of Madras and Bombay, of the Governor) with his Executive Council, "for the purpose of legislation." When met for this purpose there were added to the Executive Council certain "additional members," at first very few in number, and those few all nominated by the Governor-General or the Governor, as the case might be. A Council so constituted had originally no powers or duties beyond those immediately arising out of the discussion of the particular legislative measure which at the time was engaging its attention, and its functions were confined strictly to the discussion and enactment of legislative measures. In course of time the number of "additional" members, and the proportion of these who were non-official Indians, were steadily increased, the principle of election was gradually substituted for nomination as the means of selecting non-official members, and the functions of the Councils were extended so as to include the right of interpellation, of the discussion of matters of general public interest, and of criticising and discussing the budget proposals of the Executive Government. This extension of the powers of the Councils was in the main the result of the "Morley-Minto Act" of 1909. The Indian Councils

Act of 1892 had given power to discuss the budget but not to divide the Council upon it Lord Morley's Act went further and provided that, notwithstanding the terms of the Indian Councils Act of 1861 which had restricted the powers of all Councils to the discussion of legislative measures, the Local Government might make rules authorising the discussion of the annual financial statement, of any matter of general public interest, and the asking of questions under such conditions and restrictions as might be imposed by the rules, and these rules recognised the right of the Councils to vote on motions thus submitted for their discussion. The other results of the Act of 1909 were definitely to recognise the principle of election as the means of selecting non-official members of all Councils (although the method adopted was mainly that of indirect election), a considerable increase in the number of both non-official and official members, and the setting up in every province of a non-official (though not, save in one province, an elected) majority. A further important, though indirect, result of the Morley-Minto Act was the appointment of an Indian member to the Executive Council of the Governor-General, and to such Provincial Executive Councils as were then in existence and subsequently created.

Old System.—But although the Legislative Councils (which, originally created in two provinces only in addition to the Governor-General's Legislative Council, existed in 1919 in nine provinces) had steadily acquired a more and more representative character and a large share of the normal functions of a legislative assembly as generally understood, they still remained in theory up to the passing of the Act of 1919 mere accretions to the Executive Government of the provinces for the purpose of advising on, and enacting, legislation. It is true that the non-official element in the Provincial Councils as constituted by Lord Morley's Act of 1909 had acquired a considerable measure of control over legislation, in view of the fact that in most provinces that Act and the rules framed under it placed the non-official members in a slight majority over their official colleagues; but for various reasons this control, even in the sphere of legislation, can hardly be described as definite popular control, and over matters outside the legislative sphere the Councils had no controlling voice at all.

The Changes.—The most important changes made by the Act of 1919 in the powers of the Provincial Councils were—

(*i*) the power to vote (and consequently to withhold) supplies;

(*ii*) a greatly enhanced freedom of initiation in the matter of legislation; and

(*iii*) power to frame their own rules of procedure in matters of detail, subject to the Governor's concurrence.

A further right which the Councils will acquire after four years from the time of their commencement is the right to elect their own President. At the outset the President is nominated by the Governor, but from the start every Council has an elected Deputy President. The Governor (who formerly was *ex-officio* President of his Legislative Council) no longer has any direct connection with its proceedings. The first-named of these newly acquired powers is of sufficient importance to require a detailed explanation of its scope, which can best be given in the terms of the Act itself (section 72D).

72D.—(1) The provisions contained in this section shall have effect with respect to business and procedure in governors' legislative councils.

(2) The estimated annual expenditure and revenue of the province shall be aid in the form of a statement before the council in each year, and the proposals of the local government for the appropriation of provincial revenues and other moneys in any year shall be submitted to the vote of the council in the form of demands for grants. The council may assent, or refuse its assent, to a demand, or may reduce the amount therein referred to either by a reduction of the whole grant or by the omission or reduction of any of the items of expenditure of which the grant is composed:—

Provided that—

(*a*) the local government shall have power, in relation to any such demand, to act as if it had been assented to, notwithstanding the withholding of such assent or the reduction of the amount therein referred to, if the demand relates to a reserved subject, and the governor certifies that the expenditure provided for by the demand is essential to the discharge of his responsibility for the subject; and

(*b*) the governor shall have power in cases of emergency to authorise such expenditure as may be in his opinion necessary for the safety or tranquillity of the province, or for the carrying on of any department; and

(*c*) no proposal for the appropriation of any such revenues or other moneys for any purpose shall be made except on the recommendation of the governor, communicated to the council.

(3) Nothing in the foregoing sub-section shall require proposals to be submitted to the council relating to the following heads of expenditure:—

(*i*) Contributions payable by the local government to the Governor-General in Council; and

(*ii*) Interest and sinking fund charges on loans; and

(*iii*) Expenditure of which the amount is prescribed by or under any law: and

(*iv*) Salaries and pensions of persons appointed by or with the approval of His Majesty or by the Secretary of State in Council; and

(*v*) Salaries of judges of the high court of the province and of the advocate-general.

If any question arises whether any proposed appropriation of moneys does or does not relate to the above heads of expenditure, the decision of the governor shall be final.

Executive and Legislature.—In the light of these facts it is now possible to explain more exactly the relationship between the provincial executive and the provincial legislature. The dual character of the former has already been mentioned, and the corresponding bifurcation of provincial subjects into "reserved" and "transferred" categories. The rules under the act prescribe a list of 20 subjects which are trans

ferred to the administration of the Governor acting with Ministers, the more important of which are Local Self-Government, Medical Administration, Public Health, Education (with certain reservations), Public Works, Agriculture, Excise, and Development of Industries The "reserved" subjects comprise all those in the list of "provincial" (as distinct from "central") subjects which are not transferred.

Machinery.—No change has been made by the Act of 1919 in the machinery and methods of administration by the Governor in Council; decisions are taken at the Council Board, as before, by a majority vote, and the Governor is entitled, as before, to overrule such a vote in certain specified circumstances if he disagrees with it. For such decisions the Governor in Council remains, as before, responsible to the Secretary of State and Parliament, and on questions of legislation and supply he has the power of enforcing them despite opposition by a majority of the Legislative Council. But, the whole spirit of the Act and the existence of a large non-official elected majority in every Provincial Legislative Council is an important factor in determining the policy to be pursued by the official half of the Government in its administration of reserved subjects. A further and not less important factor is the existence in the Government, side by side with the Executive Council, of two or more Ministers appointed from the elected members of the legislature, who, though they are not charged by law with, and in fact are legally absolved from, any responsibility for decisions on matters outside the transferred sphere, will necessarily be able, and in fact are expected, to make their opinions felt by their colleagues in the Executive Council. But these factors, while they will doubtless lead to constant endeavour on the part of the official half of the Government to accommodate its policy to the wishes of its ministerial colleagues and of the majority of the legislature, and to avoid situations which involve resort to the enforcement of its decisions in the face of popular opposition, are not intended to obscure the responsibility to Parliament in the last resort of the Governor in Council for the administration of reserved subjects and the right of His Majesty's Government, and of the Secretary of State as a member thereof, to lay down and require the observance of any principles which they regard as having the support of Parliament, and, in the last resort, of the British electorate.

Transfer of Control.—With regard to transferred subjects the position is very different. Here there has been an actual transfer of control from the British elector and the British Parliament to the elector and the Legislative Council in the Indian province. The provincial subjects of administration are grouped into portfolios, and just as each member of the Executive Council has charge of a portfolio consisting of a specified list of "reserved" subjects or "departments," so each Minister is directly responsible for the administration of those particular transferred "departments" which are included in his portfolio. But his responsibility lies, not, as in the case of a member of the Executive Council, to the Government of India, the Secretary of State and Parliament, but to the Provincial Legislative Council of which he is an elected member and from which he is selected by the Governor as commanding or likely to command the support of the majority of that body. He holds office during the Governor's pleasure, but his retention of office is contingent on his ability to retain the confidence not only of the Governor, but also of the Legislative Council, upon whose vote he is directly dependent for his salary. Further, the control of the Legislative Council over transferred subjects, both as regards supplies and legislation, is almost entirely free from the restrictions just noticed which necessarily qualify its control over the "reserved" subjects. It is thus within the power of the Provincial Council to insist on the pursuit of a policy of its own choice in the administration of transferred subjects by withdrawing its confidence from a Minister who departs from that policy and bestowing it only on a successor who will follow its mandate; and this power is dependent on the provincial elector in virtue of his freedom to control the composition of the Legislative Council by the use which he makes of his vote. No doubt this statement requires some qualification before it can be accepted as literally accurate, for, technically, the authority charged with the administration of transferred subjects is "*the Governor acting with Ministers* appointed under this Act," not the Ministers acting on their own initiative, and, further, the Governor, who is not, of course, subject to removal from office by the Legislative Council, is charged personally with responsibility for the peace and tranquillity of his province, and would be entitled, and indeed bound, to recommend the removal of a department from the transferred list if he found the legislature bent on pursuing a policy in its administration which, in his judgment, was incompatible with the maintenance of peace and tranquillity; yet the powers of control vested in the Legislative Council over the transferred sphere are undoubtedly great, and it was the opinion at all events of the Joint Select Committee that legislature and Ministers should be allowed to exercise them with the greatest possible freedom. "If after hearing all the arguments," observed the Committee, "Ministers should "decide not to adopt his advice, then in the "opinion of the Committee the Governor should "ordinarily allow Ministers to have their way, "fixing the responsibility upon them, even if "it may subsequently be necessary for him to "vote any particular piece of legislation. It "is not possible but that in India, as in all other "countries, mistakes will be made by Ministers "acting with the approval of a majority of the "Legislative Council, but there is no way of "learning except through experience and "the realisation of responsibility."

Provision of Funds.—The terms of the Act leave the apportionment of the provincial revenues between the two halves of the executive for the financing of reserved and transferred subjects respectively to be settled by rules, merely providing that rules may be made "for "the allocation of revenues or moneys for the purpose of such 'administration' *i.e.*, "the "administration of transferred subjects by the "Governor acting with Ministers. Probably the best description available of the method adopted by the rules for the settlement of this matter is the recommendation of the Joint

Select Committee whose proposals have been followed with one modification only to enable the Governor to revoke at any time, at the desire of his Council and Ministers an "order of allocation" or to modify it in accordance with the'r joint wishes. The passage is as follows:—

"The Committee have given much attention to the difficult question of the principle on which the provincial revenues and balances should be distributed between the two sides of the provincial governments. They are confident that the problem can readily be solved by the simple process of common sense and reasonable give-and-take, but they are aware that this question might, in certain circumstances, become the cause of much friction in the provincial government, and they are of opinion that the rules governing the allocation of these revenues and balances should be framed so as to make the existence of such friction impossible. They advise that, if the Governor, in the course of preparing either his first or any subsequent budget, finds that there is likely to be a serious or protracted difference of opinion between the Executive Council and his Ministers on this subject he should be empowered at once to make an allocation of revenue and balances between the reserved and transferred subjects which should continue for at least the whole life of the existing Legislative Council. The Committee do not endorse the suggestion that certain sources of revenue should be allocated to reserved and certain sources to transferred subjects, but they recommend that the Governor should allocate a definite proportion of the revenue, say, by way of illustration, two-thirds to reserved and one-third to transferred subjects, and similarly a proportion, though not necessarily the same fraction of the balances. If the Governor desires assistance in making the allocation, he should be allowed at his discretion to refer the question to be decided to such authority as the Governor-General shall appoint. Further, the Committee are of opinion that it should be laid down from the first that, until an agreement which both sides of the Government will equally support has been reached, or until an allocation has been made by the Governor, the total provisions of the different expenditure heads in the budget of the province for the preceding financial year shall hold good.

The Committee desire that the relation of the two sides of the Government in this matter as in all others, should be of such mutual sympathy that each will be able to assist and influence for the common good the work of the other, but not to exercise control over it. The budget should not be capable of being used as a means for enabling Ministers or a majority of the Legislative Council to direct the policy of reserved subjects; but on the other hand the Executive Council should be helpful to Ministers in their desire to develop the departments entrusted to their care. On the Governor personally will devolve the task of holding the balance between the legitimate needs of both sets of his advisers."

THE CENTRAL GOVERNMENT.

The structural changes made by the Act of 1919 in the system of government outside the nine "Governors' provinces" are of comparatively minor scope, though the spirit of the Act requires, as has already been shown, considerable modification of the relationship hitherto subsisting between the Provincial Governments on the one hand and the Government of India and the Secretary of State in Council on the other. The only concrete changes made in the constitution of the Central Government are the removal of the statutory bar to the appointment of more than six members of the Governor-General's Executive Council (which, however, has had the far-reaching consequence that three of the eight members of the Council are now Indians), and the reconstitution in a much more enlarged, representative and independent form of the central legislature. It has already been observed that this body was, in origin, like all other legislative bodies in India, the Governor-General's Executive Council with the addition of certain "additional members" appointed to assist the Executive Council in the formulation of legislation. Despite its steady growth in size and influence, and despite the introduction of the elective system, the existence of "additional members," who of course under Lord Morley's Act greatly preponderated in numbers over the members proper, i.e., the Executive Councillors, still persisted up to the passing of the Act of 1919. That Act, however, has entirely remodelled the "Indian Legislature," as it is now called, which has become, like the Legislative Council in a Governor's province a legislature with all the inherent powers ordinarily attributed to such a body save such as are specifically withheld by the terms of the Act. It consists of two Chambers. The Upper Chamber, or "Council of State," contains 60 members, of whom 34 are elected (including one member to represent Berar, who, though technically nominated, is nominated as the result of elections held in Berar), and 26 nominated, of whom not more than 20 may be officials. The Lower Chamber, or "Legislative Assembly," consists of 144 members, of whom 104 are elected (including as in the case of the Council of State, one Berar member, who, though actually elected, is technically a nominee). Of the 40 nominated members, 26 are required to be officials. The members of the Governor-General's Executive Council are not *ex-officio* members of either Chamber, but each of them has to be appointed a member of one or other Chamber, and can vote only in the Chamber of which he is a member. Any member of the Executive Council, may, however, speak in either Chamber The President of the Upper Chamber is a nominee of the Governor-General, as also, for the first four years after the constitution of the Chamber, is the President of the Legislative Assembly. But after that period the Lower Chamber is to elect its own President, and it elects its own Deputy-President from the outset. The normal lifetime of each Council of State is five years, and of each Legislative Assembly three years; but either Chamber, or both simul-

taneously, may be dissolved at any time by the Governor-General.

Election.—The method of election for both Chambers is direct, and although the number of electors is considerably smaller than for the Provincial Councils, it is a great advance on the very restricted and for the most part indirect franchise established under the Act of 1909 for the unicameral central legislature which no longer exists. Generally speaking, the electoral scheme for the Lower Chamber is on the same model as that for the Provincial Councils already described, except that, *firstly*, the property qualification for voters (and consequently for candidates) is higher in order to obtain manageable constituencies, and past service with the colours is not *per se* a qualification for the franchise, and *secondly*, that the constituencies necessarily cover a considerably larger area than constituencies for the Provincial Council. The distribution of seats in both Chambers, and the arrangement of constituencies, are on a provincial basis; that is a fixed number of the elective seats in each Chamber is assigned to representatives of each province, and these representatives are elected by constituencies covering an assigned area of the province.

The following table shows the allotment of the elective seats:—

	Legislative Assembly.	Council of State.
Madras	16	5
Bombay ..	16	6
Bengal	17	6
United Provinces ..	16	5
Punjab	12	4
Bihar and Orissa ..	12	3
Central Provinces ..	6	2
Assam	4	1
Burma	4	2
Delhi	1	..
	104	34

Since the area which returns perhaps 80 members to a Provincial Council is the same as the area which returns perhaps 12 members to the Legislative Assembly—namely, the entire province in each case—it follows that on the direct election system this area must be split into constituencies which are much larger than the constituencies for the local Councils, and just as it is generally correct to say that the normal area unit for those rural constituencies for the latter which are arranged on a territorial basis is the district, it may be said that the normal area unit in the case of the Legislative Assembly is the Division (the technical term for the administrative group of districts controlled by a Divisional Commissioner).

The Franchise :—The general result of the first franchise arrangements under the Act is thus that there is in each province a body of electors qualified to vote for, and stand for election to, the Provincial Council, and that a selected number of these voters are qualified to vote for and stand for election to those seats in the Legislative Assembly which are assigned to the province. The qualifications for candidature for the Legislative Assembly are the same in each province, *mutatis mutandis*, as for candidature for the Provincial Council, except that in all provinces, so long as the candidate can show that he resides somewhere within the province, no closer connection with his particular constituency is insisted upon.

The franchise for the Council of State differs in character from that for the Provincial Council and the Legislative Assembly. The concern of the framers of the Act and rules was to secure for the membership of this body a character as closely as possible approximating to a "Senate of Elder Statesmen" and thus to constitute a body capable of performing the function of a "true revising Chamber." With this object, in addition and as an alternative to a high property qualification—adopted as a rough and ready method of enfranchising only persons with a stake in the country—the rules admit as qualifications certain personal attributes which are likely to connote the possession of some past administrative experience or a high standard of intellectual attainment. Examples of these qualifications are past membership of either Chamber of the Legislature as now constituted, or of its predecessor, or of the Provincial Council, the holding of high office in local bodies (district boards, municipalities and corporations), membership of the governing bodies of Universities, and the holding of titles conferred in recognition of Indian classical learning and literature.

Powers :—The powers and duties of the Indian legislature differ but little in character within the "central" sphere from those of the provincial Councils within their provincial sphere, and it has acquired the same right of voting supplies for the Central Government. But as no direct attempt has yet been made to introduce responsible government at the centre, the step in that direction having been avowedly confined to the provinces, and as consequently the Executive Government of India remains legally responsible as a whole for the proper fulfilment of its charge to the Secretary of State and Parliament, it follows that the powers conferred on provincial Governors to disregard an adverse vote of the Legislative Council on legislation or supplies are, as conferred on the Governor-General in his relationship with the Indian Legislature, less restricted in their operation than in the provinces; that is to say, they cover the whole field and are not confined in their application to categories of subjects.

THE INDIA OFFICE.

The Act makes no structural changes in the part played by the India Office in the administration of Indian affairs. Slight alterations have been effected in the number and tenure of office of the members of the Secretary of State's Council, and some relaxations have been made in the statutory rigidity which formerly bound their procedure and that of the Office in general. But provisions now exist which will undoubtedly in time

goes on have a material effect on the activities of the Office as it is now constituted. A High Commissioner for India has been appointed for the purpose of taking over, as the direct agent of the Government of India, that portion of India Office functions which is of the nature of agency, as distinct from administrative supervision and control. The process of separation of staff and functions for the purpose of this transfer will necessarily be somewhat slow, but a substantial beginning has been made by handing over to the direct control of the High Commissioner the large departments which are concerned with the ordering and supply of stores and stationery in England for Government use in India, with the payment of pensions to retired members of Indian services resident in the United Kingdom, and with the assistance of Indian students in England. Concurrently with this change, it is now possible to defray from British revenues the salaries of the Secretary of State and of the Parliamentary Under Secretary, and that portion of the cost of salaries of India Office staff and general maintenance which is attributable to the exercise of its administrative as distinct from purely agency functions.

In due course the apportionment to British estimates will be the cost of the India Office as it exists after the transfer of functions to the High Commissioner has been completely effected; then the salaries of the High Commissioner and his staff will be the only expenses in the United Kingdom chargeable to Indian revenues. Until that time arrives, however, an estimate was the only basis for settlement, and for five years from 1920-21, the cost of the India Office payable from British revenues has been fixed at 136,500*l.*, which includes the salaries of the Secretary of State and of the Parliamentary Under Secretary, and a contribution of 40,000*l.*, which has for some years been made by the Treasury towards Indian expenditure, as the result of the recommendations of the Welby Commission.

THE FUTURE.

The Act of 1919 and its provisions are essentially transitional. It is intended, not to set up a new and permanent constitution, but to make such changes in the law as will enable "the progressive realisation of responsible Government in British India as an integral part of the Empire." This feature of the Act was clearly expressed in its Preamble, but although the Preamble finds no place in the law as amended by the Act of 1919, that law now contains provision for the appointment, after a period of 10 years' trial of the law in its amended form, of a Parliamentary Commission "for the purpose of inquiring into the working of the system of government, the growth of education, and the development of representative institutions in British India, and matters connected therewith," and such a Commission, when appointed, is directed to "report as to whether it is desirable to establish the principle of responsible government, or to extend, modify, or restrict the degree of responsible government then existing" in British India. Had it been possible to legislate more exactly for a process of evolution, the Act would doubtless have provided for a series of such Commissions, as the means of affording to Parliament criteria for determining "the time and manner of each advance" in "progress by successive stages" towards attainment of the "declared policy," of which the Preamble speaks. But it will be the task of a future Parliament to decide what changes, by further legislation or by amendment of the existing statutory rules, it is expedient to adopt in the light of the first Statutory Commission's enquiry: and in taking its decisions that Parliament will, in the main, be "guided" (as its predecessor of 1919 forecasted) "by the co-operation received from those on whom new opportunities for service" have been "conferred, and by the extent to which it is found that confidence can be reposed in their sense of responsibility."

PERSONNEL AND PROCEDURE.

The Governor-General and the "Executive" members of his Council are appointed by the Crown. No limit of time is specified for their tenure of office; but custom has fixed it at five years. There are seven Executive Members of Council. These Members hold respectively the portfolios of Land Revenue and Agriculture, the Home, the Finance and the Education Departments. The Law Member has charge of the Legislative Department, and a member of the Indian Civil Service has charge of the Commerce and Industry Department. The Viceroy acts as his own member in charge of Foreign affairs. Railways are administered by a Board of three members, whose chairman has the status of a Secretary, and are under the general control of the Commerce and Industry Department. The Commander-in-Chief may also be and in practice always is, an "extraordinary" member of the Council. He holds charge of the Army Department. The Governors of Madras, Bombay and Bengal become "extraordinary" members if the Council meets within their Presidencies. The Council may assemble at any place in India which the Governor-General appoints; in practice it meets only in Delhi and Simla.

In regard to his own Department each Member of Council is largely in the position of a Minister of State, and has the final voice in ordinary departmental matters. But any question of special importance, and any matter in which it is proposed to over-rule the views of a Local Government, must ordinarily be referred to the Viceroy. Any matter originating in one department which also affects another must be referred to the latter, and in the event of the Departments not being able to agree, the case is referred to the Viceroy. The Members of Council meet periodically as a Cabinet—ordinarily once a week—to discuss questions which the Viceroy desires to put before them, or which a member who has been over-ruled by the

Viceroy has asked to be referred to Council. If there is a difference of opinion in the Council the decision of the majority ordinarily prevails, but the Viceroy can over-rule a majority if he considers that the matter is of such grave importance as to justify such a step. Each departmental office is in the subordinate charge of a Secretary, whose position corresponds very much to that of a permanent Under-Secretary of State in the United Kingdom, but with these differences—that the Secretary is present at Council meetings; that he attends on the Viceroy, usually once a week, and discusses with him all matters of importance arising in his Department; that he has the right of bringing to the Viceroy's special notice any case in which he considers that the Viceroy's concurrence should be obtained to action proposed by the Departmental Member of Council; and that his tenure of office is usually limited to three years. The Secretaries have under them Deputy, Under and Assistant Secretaries, together with the ordinary clerical establishments. The Secretaries and Under-Secretaries are usually members of the Indian Civil Service. The Government of India has no Civil Service of its own as distinct from that of the Provincial Governments, and officers serving under the Government of India are borrowed from the Provinces.

THE DIVISION OF FUNCTIONS.

The keynote of the scheme is effective provincial autonomy and the establishment of an immediate measure of responsibility in the Provinces all of which are raised to the status of Governors in Council. This demanded a sharp division between Imperial and Provincial functions. The following subjects are reserved to the Government of India, with the corollary that all others vest in the Provincial Governments:—

1. (*a*) Defence of India, and all matters connected with His Majesty's Naval, Military, and Air Forces in India, or with His Majesty's Indian Marine Service or with any other force raised in India, other than military and armed police wholly maintained by local Governments.

(*b*) Naval and military works cantonments.

2. External relations, including naturalisation and aliens, and pilgrimages beyond India.
3. Relations with States in India.
4. Political charges.
5. Communications to the extent described under the following heads, namely:—

(*a*) railway and extra-municipal tramways, in so far as they are not classified as provincial, subjects under entry 6 (*d*) of Part II of this Schedule;

(*b*) aircraft and all matters connected therewith; and

(*c*) inland waterways, to an extent to be declared by rule made by the Governor-General in Council or by or under legislation by the Indian legislature.

6. Shipping and navigation, including shipping and navigation on inland waterways in so far as declared to be a central subject in accordance with entry 5 (*c*).
7. Light-houses (including their approaches) beacons, lightships and buoys.
8. Port quarantine and marine hospitals.
9. Ports declared to be major ports by rule made by the Governor-General in Council or by or under legislation by the Indian legislature.
10. Posts, telegraph and telephones, including wireless installations.
11. Customs, cotton excise duties, income-tax, salt, and other sources of all-India revenues.
12. Currency and coinage.
13. Public debt of India.
14. Savings Banks.
15. The Indian Audit Department and excluded Audit Departments, as defined in rules framed under section 96-D (1) of the Act.
16. Civil law, including laws regarding status, property, civil rights and liabilities, and civil procedure.
17. Commerce, including banking and insurance.
18. Trading companies and other associations
19. Control of production supply and distribution of any articles in respect of which control by a central authority is declared by rule made by the Governor-General in Council or by or under legislation by the Indian legislature to be essential in the public interest.

20. Development of industries, in cases where such development by a central authority is declared by order of the Governor-General in Council, made after consultation with the local Government or local Governments concerned expedient in the public interest.
21. Control of cultivation and manufacture of opium, and sale of opium for export.
22. Stores and stationery, both imported and indigenous, required for Imperial Departments.
23. Control of petroleum and explosives.
24. Geological survey.
25. Control of mineral development, in so far as such control is reserved to the Governor General in Council under rules made or sanctioned by the Secretary of State, and regulation of mines.
26. Botanical Survey.
27. Inventions and designs.
28. Copyright.
29. Emigration from, and immigration into, British India, and inter-provincial migration.
30. Criminal law, including criminal procedure.
31. Central police organisation.
32. Control of arms and ammunition.
33. Central agencies and institutions for research (including observatories), and for professional or technical training or promotion of special studies.
34. Ecclesiastical administration, including European cemeteries.
35. Survey of India.
36. Archæology.
37. Zoological Survey.
38. Meteorology.
39. Census and statistics.
40. All-India services.
41. Legislation in regard to any provincial subject in so far as such subject is in Part

11 of this Schedule stated to be subject to legislation by the Indian legislature, and any powers relating to such subject reserved by legislation to the Governor-General in Council

42. Territorial changes, other than inter-provincial, and declaration of law in connection therewith.

43. Regulation of ceremonial, titles, orders, precedence, and civil uniform.

44. Immovable property acquired by, and maintained at the cost, of the Governor-General in Council.

45. The Public Service Commission.

Government of India.

VICEROY AND GOVERNOR-GENERAL OF INDIA.

His Excellency the Right Hon. RUFUS DANIEL ISAACS. Earl of Reading, P.C., G.C.B., G.M.S.I., G.M.I.E., G.C.V.O., K.C.V.O., *assumed charge of office, 3rd April*, 1921.

PERSONAL STAFF OF THE GOVERNOR-GENERAL.

Private Secretary.—Sir Geoffrey de Montmorency, K.C.V.O., C.I.E., C.B.E., I.C.S.

Asst. Private Secretary.—Capt. C. P. Hancock, M.C.

Military Secretary.—Lt.-Col. C. Kennedy-Crauford-Stuart, C.V.O., C.B.E., D.S.O., 10th Baluch. L. I.

Comptroller of the Household.—Maj. W. W. Muir, M.V.O., O.B.E., 15th Sikhs.

Aides-de-Camp.—Capt. R. Burton, G. G'ds. (Res. of Offr.); Lt. C. M. W. Noel-Hill, K.S.L.I.; Lt. H. G. Gregory-Smith, Black Watch; Capt. H. L. Mostyn-Owen, 19th K.G.O. Lrs. (Extra); Subadar-Major (Hon. Lt.) Dalpat Singh, Sardar Bahadur, I.O.M., 9th Jat R.; Subadar-Major (Hony. Lt.) Gulab Shah, Bahadur, 10th Baluch Regt.

Honorary Aides-de-Camp.—Lt.-Col. G. E. Llewhellin, V.D., Bihar L.H.; Lt.-Col. T. F. Gavin-Jones, late 7th U. P Horse; Lt.-Col. P. R. Cadell, C.S.I., C.I.E., V.D., late 15th Bo. Bn.; Lt.-Col. R. St. J. Hickman, C.I.E., V.D., Surma V. L. H.; Capt. E. J. Headlam, C.M.G., D.S.O., R. I. M.; Lt.-Col S. S. G. Tulloch, V.D., B. N. Ry. R.; Col. A. H. Morin, D.S.O., V.D., S. Prov. M. Rif.; Lt.-Col. R. R. Will, D.S.O., V.D., IV Bde, R. A. (A. F. I.); Col. (Hon. Brig.-Genl.) G. L. Colvin, C.B., C.M.G., D.S.O., E.I. Ry. R. (A. F. I.); Lt.-Col. F. H. T. Buchanan, V.D., Tenn'm Bn. (A. F. I.); Col. F. A. Hadow, C.V.O., N. W. Ry. R. (A. F. I.); Risaldar-Major Jafar Husain, H. E. the Govr.-Genl.'s Body Guard; Nawab Osman Yar-ud-Dowla, Bahadur, Major and Commander of H. F. H. the Nizam's Regular Forces; Sardar Bahadur Lt.-Col. B. Chamraj Urs, Chief Commandant, Mysore State Forces; Sardar Bahadur Sardar Puran Singh, C.I.E., Major-General, Kapurthala State Forces; Lt. Mehr Mahomed Khan, C.I.E., O.B.E., Bahadur, Major-General, in the Muler Kotla, State Forces; Lt.-Col. Nawabzada Haji Muhammad Hamidulla Khan, C.S.I., C.V.O., Bhopal State Forces; Risaldar-Maj. (Hony. Capt.) Abdul Aziz, Sardar Bahadur, late 5th Cav.; Subadar-Major (Hony. Capt.) Madho Singh Rana, Sardar Bahadur, late 4th G. R.; Risaldar-Major (Hony. Capt.) Abdul Karim Khan, Sardar Bahadur, late Govr.-Genl.'s Body-Guard; Subdr.-Maj. (Hony. Capt.) Mit Singh, I.O.M., Sardar Bahadur, late 53rd Sikhs; Risaldar Maj. Karm Singh, I.D.S.M., Bahadur, late 13th Lrs.; Risaldar-Maj. (Hony. Capt.) Muhiud-din Khan, C.I.E., I.D.S.M., Sardar Bahadur, late 31st Lancers.

Surgeon.—Lt.-Col. T. J. Carey Evans, M.C., F.R.C.S., I.M.S.

Commandant of Body Guard.—Major E. G. Atkinson.

Ordinary Members—

COUNCIL.

H. E. Lord Rawlinson, G.C.B., G.C.V.O., K.C.M.G., Commander-in-Chief in India (Army).
Sir William Malcolm Hailey, C.S.I., C.I.E. (Home).
Khan Bahadur Mian Sir Muhammad Shafi, C.I.E. (Law).
Rao Bahadur B. N. Sarma (Education, Health and Lands).
C. A. Innes, C.I.E., I.C.S. (Railways, Commerce and Ecclesiastical).
Sir Basil Blackett, K.B.E. (Finance).
A. C. Chatterji, C.I.E., I.C.S. (Industries and Labour).

SECRETARIAT

REVENUE AND AGRICULTURE DEPARTMENT.

Secretary, J. Hullah, I.C.S.
Deputy Secretary, R. B. Ewbank, I.C.S.,
Assistant Secretary, C. H. Martin.
Superintendents, A. B. E. Thomson, J. H. Green, H. H. Lincoln and T. McDonnell (*on leave*), E. B. Hughes (*Offg.*), and L. H. C. Walker, (*Offg.*).

FINANCE DEPARTMENT.

Ordinary Branch;

Secretary, E. M. Cook, C.I.E., I.C.S.
Deputy Secretary, A. F. L. Brayne, I.C.S.
Assistant Secretary, Rai A. C. Mukherji Bahadur, (*on leave*); S. V. Aiyar, B.A., B. L. (*Offg.*).

Registrar, E. W. Baker I.S.O.

Superintendents, G. J. Piper, V. K. Menon, W. M. Mather, H. Shankar Rao (*Offg.*), Shah Muhammad, Bhagwant Kishore(Temporary), Rai Sahib C. N. Chakraburty, B.A.

Auditor-General, Sir M. F. Gauntlett, K.B.E., C.I.E., I.C.S.

Controller of Currency, A. C. McWatters, C.I.F., I.C.S

Military Finance Branch.

Financial Adviser, B. N. Mitra, C.I.E., C.B.E., M.A.

Military Accountant-General, Colonel R. E. Carr-Hall, C.I.E., I.A.

Deputy Financial Advisers, Lt.-Col. G. W. Rose, D.S.O., I.A., Lt.-Col. A. G. Murray, I.A., M.R. Coburn, O.B.E., Commander A. W. Wood, R.N., Lieut.-Col. W. V. Richards, I.A. (*offg.*), and N. Mason, B.A., Deputy Financial Adviser (*offg.*).

Assistant Financial Advisers, G. E. Hodges, M.B.E., G. M. Turner, F. J. Woolmer, H. I. Macdonald, R.T. Waugh and Rai Sahib K. C. Manlik B.A., Rai Sahib Lala Hari Shankar Kaisth (*offg.*), and A.K. Ghosh, B. A. (*offg.*).

Superintendents, H. D. Banerjee (*on leave*), Gauri Shankar, B.A. (*on leave*); A. J. Mendes (*Provisional*), F. W. Reed (*offg.*), J. R. Hope (*offg.*), and A. T. Bannerji (*offg.*).

FOREIGN DEPARTMENT.

Political Secretary, J. P. Thompson, C.S.I.

Foreign Secretary, Sir H. R. C. Dobbs, C.S.I., C.I.E. (*on deputation*), Denys Bray, C.I.E., C.B.E. (*offg.*).

Deputy Secretary (*Foreign*), E. B. Howell, C.S.I., C.I.E.

Deputy Secretary (*Political*), Major G.D. Ogilvie.

Under Secretary, Major R. J. MacNabb.

Assistant Secretary, E. Bertram Higgs, B.A., M.B.E.

Attache, Khan Sahib Imam-ul-Huk.

Registrar, T. G. B. Waugh (*on leave*), C. W. Kirkpatrick, M.B.E. (*offg. Registrar*).

Military Adviser-in-Chief, Indian State Forces, Major-General Sir H. D. E. Watson, K.B.E., C.B., C.M.G., J.I.E., M.V.O.

Superintendents. D. A. Clarke, F. P. Buckner, J. W. S. Inglis, R. C. Albert, F. Hosley, K. D. Fink, C. H. Harcourt, M. Smith, R. S. Budd, J. W. Edmondson and J. R. Rodgers.

HOME DEPARTMENT.

Secretary, The Hon. Mr. J. Crerar, C.S.I., C.I.E.

Joint Secretary, H. Tonkinson.

Deputy Secretary, C. W. Gwynne.

Superintendents, Ramani Mohan Ganguli, U. C. Stuart, K. P. Anantan, W. D. Almedia, J. C. McDermott. T. P. Roy and N. Banerjee.

Officers on Special Duty, Dr. L. F. Rushbrook Williams, O.B.E. and R. S. Bajpai, BAR.-AT-LAW.

Inspector, Office Procedure.—R. J. Watson.

EDUCATION DEPARTMENT.

Secretary, The Hon. Mr. M. S. D. Butler, C.B. C.I.E., C.V.O, C.B.E., I.C.S.

Educational Commissioner with the Government of India, J. A. Richey, C.I.E.

Deputy Secretary, Kunwar, Maharaj Singh, C.I.E.

Assistant Secretary, Mirza Muhammad Said, M.A., I.E.S.

Superintendents, G. E. Jackson (*on leave*), P. N Sen, L. M. Roy and Dhanpat Rai (*offg.*).

Registrar, Rai Bahadur M. N. Chakrabarti.

LEGISLATIVE DEPARTMENT.

Secretary, H. Moncrieff Smith, C.I.E., I.C.S.

Deputy Secretary (*offg.*), G. H. Spence, I.C.S.

Registrar, C. H. F. Pereira.

Superintendents, A. L. Banerji, E. H. Brandon, D. D. Baird, D. P. Dutt, F. A. Thorpe and A. W. Chick, (*Officiating*).

PUBLIC WORKS DEPARTMENT.

Secretary, Col. Sir S. D'A. Crookshank K.C.M.G., C.B., C.I.E., D.S.O., M.V.O.

Deputy Secretary, D. G. Harris, M.I.E.

Under Secretary, A. Brebner, C.I.E.

Assistant Secretary, C. G. Hamilton.

Superintendents, W. I. Tilden, Atanu Mohan, Banerji, Nihal Chand, L. Bloemink, W. R. Chambers, J. F. Reed and A. M. Price (*offg.*).

Inspr.-Genl. of Irrign. (*offg.*), F. St. J. Gebbie, C.I.E., M.V.O.

COMMERCE AND INDUSTRY DEPARTMENT.

Secretary, The Hon. Mr. D. T. Chadwick, C.I.E.

Deputy Secretary, E. C. Ansorge, I.C.S.

Assistant Secretary, E. F. Rogers.

Registrar, E. P. Jones.

Superintendents, Capt. C. H. Baldrey, Khan Saheb Chaudhri Fateh Din, K. D. Banerji, T. D. Ahmed and Rai Sahib L. Sen, B.A.

RAILWAY BOARD.

Chief Commissioner of Railways, C. L.M. Hindley.

Members, A. M. Clark and G. Richards.

Secretary, R. H. Casement.

Chief Engineer, F. W. Allum, C.B.E.

POST OFFICE & TELEGRAPH DEPT.

Director-General of Posts & Telegraphs, Hon. Mr. G. R. Clarke, O.B.E.

NORTHERN INDIA SALT REVENUE.

Commissioner. J. C. Ferguson. (*on deputation*.

SURVEY DEPARTMENT.

Surveyor-General of India, Col. C. H. D. Ryder, C.I.E., D.S.O.

GEOLOGICAL SURVEY.

Director, E. H. Pascoe, M.A., F.G.S.

Superintendents, E. Vredenburg, B.Sc., F.G.S.; G. H. Tipper, M.A.; G. de P. Cotter, B.A.; J. C. Brown, O.B.E., D.Sc., H. Walker, A.R.C.S., F.G.S. and G. E. Pilgrim, D.Sc.

Chemist, W. A. K. Christie, B.Sc., Ph.D.

BOTANICAL SURVEY.

Director, Lt.-Col. A. T. Gage, M.B., I.M.S.; *Economic Botanist, Madras*, F. R. Parnell; *Economic Botanist, Bombay*, W. Burns, B.Sc.; *Economic Botanist, United Provinces*, H. M. Leake, M.A., F.L.S.; *Systematic Assistant*, V. Narayanasawami, B.A.

ARCHÆOLOGICAL SURVEY.

Director-General of Archæology, Sir J. H. Marshall, M.A., C.I.E.; D. B. Spooner, *Deputy Director-General*; *Superintendent, Western Circle*, Rakhal Das Banerjee, M.A.; *Superintendent, Southern Circle*, A. H. Longhurst; *Superintendent, Northern Circle*, Daya Ram Sahni; *Superintendent, Central Circle*, J. A. Page; *Superintendent, Burma*, C. Duroiselle, I.S.O; *Superintendent, Frontier Circle*, H. Hargreaves.

MISCELLANEOUS APPOINTMENTS.

Director-General, Indian Medical Service, The Hon. Major-General R. C. MacWatt, C.I.E., M.B., F.R.C.S., K.H.S.

Sanitary Commissioner with the Government of India, Lieut.-Col. F. H. G. Hutchinson, L. M. & S.

Deputy Director-General, Indian Medical Service, Lt.-Col. R. A. Needham, C.I.E., I.M.S.

Asstt. Director-General, Indian Medical Service (Sany.), Major E. C. Hodgson, D.S.O., I.M.S. *(Stores)*, Major G. G. Hirst, I.M.S.

Director, Central Research Institute, Kasauli, Lt.-Col. W. F. Harvey, M.A., M.B., D.P.H., I.M.S.

Assistants to Director, Central Research Institute, Kasauli, Lt.-Colonel S. R. Christophers, C.I.E., I.M.S., Major F. W. Cragg and Major H. H. King, I.M.S.

Director-General of Indian Observatories, Dr. G. T. Walker, C.S.I., M.A., D.Sc., F.R.S.

Imperial Meteorologist, C. W. B. Normand.

Director, Kodaikanal and Madras Observatories, T. Royds., D. Sc.

Director, Bombay Observatory, S. K. Banerji, D.S.C.

Meteorologist Aerological Observatory, Agra, G. Chatterjee, M. Sc.

Secretary, Board of Examiners, Lieut.-Colonel C. L. Peart, I.A.

Librarian, Imperial Library, Calcutta, Chapman.

Agricultural Adviser and Director of the Agricultural Research Institute, Pusa, S. Milligan, M.A., B.S.C.

Director, Zoological Survey of India, Indian Museum, N. Annandale, B.A., D.Sc.

Controller of Printing, Stationery and Stamps, M. J. Cogswell.

Superintendent of Government Printing, J. J. Meikle.

Director, Central Intelligence, Lieut.-Col. C. Kaye, C.S.I., C.I.E.

Director-General of Commercial Intelligence, H. A. F. Lindsay, I.C.S.

Director of Statistics, Rai Bahadur D. N. Ghosh.

Controller of Patents and Designs, H. G. Graves.

GOVERNORS-GENERAL OF FORT WILLIAM IN BENGAL.

Name.	Assumed charge of office.
Warren Hastings	20 Oct. 1774
Sir John Macpherson, Bart. ..	8 Feb. 1785
Earl Cornwallis, K. G. (*a*) ..	12 Sep. 1786
Sir John Shore, Bart. (*b*) ..	28 Oct. 1793
Lieut.-General the Hon. Sir Alured Clarke, K.C.B. (*offg.*) ..	17 March 1798
The Earl of Mornington, P.C. (*c*)	18 May 1798
The Marquis Cornwallis, K. G. (2nd time)	30 July 1805
Captain L. A. P. Anderson, Sir George H. Barlow, Bart.	10 Oct. 1805
Lord Minto, P.C. (*d*)	31 July 1807
The Earl of Moira, K.G., P.C. (*e*) ..	4 Oct. 1813
John Adam (*offg.*)	13 Jan. 1823
Lord Amherst, P.C. (*f*)	1 Aug. 1823
William Butterworth Bayley (*offg.*)	13 Mar. 1828
Lord William Cavendish Bentinck, G.C.B., G.C.H., P.C.	4 July 1828

(*a*) Created Marquess Cornwallis, 15 Aug. 1792.

(*b*) Afterwards (by creation) Baron Teignmouth.

(*c*) Created Marquess Wellesley, 2 Dec. 1799.

(*d*) Created Earl of Minto, 24 Feb. 1813.

(*e*) Created Marquess of Hastings, 2 Dec. 1816.

(*f*) Created Earl Amherst, 2 Dec. 1826.

GOVERNORS-GENERAL OF INDIA.

Name.	Assumed charge of office.
Lord William Cavendish Bentinck, G.C.B., G.C.H., P.C.	14 Nov. 1834
Sir Charles Metcalfe, Bart. (*a*) (*offg*).	20 March 1835
Lord Auckland, G.C.B., P.C. (*b*)	4 March 1836
Lord Ellenborough, P.C. (*c*) ..	28 Feb. 1842
William Wilberforce Bird (*offg*).	15 June 1844
The Right Hon. Sir Henry Hardinge, G.C.B. (*d*)	23 July 1844
The Earl of Dalhousie, P.C. (*e*) ..	12 Jan. 1848
Viscount Canning, P.C. (*f*) ..	29 Feb. 1856

(*a*) Afterwards (by creation) Baron Metcalfe.

(*b*) Created Earl of Auckland, 21 Dec., 1839.

(*c*) Afterwards (by creation) Earl of Ellenborough.

(*d*) Created Viscount Hardinge, 2 May 1846.

(*e*) Created Marquess of Dalhousie, 25 Aug. 1849.

(*f*) Afterwards (by creation) Earl Canning.

NOTE.—The Governor-General ceased to be the direct Head of the Bengal Government from the 1st May, 1854, when the first Lieutenant-Governor assumed office. On 1st April, 1912, Bengal was placed under a separate Governor and the appointment of Lieutenant-Governor was abolished.

VICEROYS AND GOVERNORS-GENERAL OF INDIA.

Name.	Assumed charge of office.
Viscount Canning, P.C. (*a*) ..	1 Nov. 1858
The Earl of Elgin and Kincardine, K.T., G.C.B., P.C. ..	12 March 1862
Major-General Sir Robert Napier, K.C.B (*o*) (*offg*) ..	21 Nov. 1863
Colonel Sir William T. Denison; K.C.B. (*offg.*)	2 Dec. 1863
The Right Hon. Sir John Lawrence, Bart., G.C.B., K.C.S.I. (*c*) ..	12 Jan. 1864

Name.	Assumed charge of office.
The Earl of Mayo, K.P. ..	12 Jan. 1869
John Strachey (*d*) (*offg.*) ..	9 Feb. 1872
Lord Napier of Merchistoun, K. T. (*e*) (*offg.*)	23 Feb. 1872
Lord Northbrook, P.C. (*f*) ..	3 May 1872
Lord Lytton, G.C.B. (*g*)	12 Apl. 1876
The Marquess of Ripon, K.G., P.C.	8 June 1880
The Earl of Dufferin, K.P., G.C.B., G.C.M.G., P.C. (*h*)	13 Dec. 1884
The Marquess of Lansdowne, G. C. M. G.	10 Dec. 1888
The Earl of Elgin and Kincardine, P. C.	27 Jan. 1894
Baron Curzon of Kedleston, P.C.	6 Jan. 1899
Baron Ampthill (*offg.*)	30 Apl. 1904
Baron Curzon of Kedleston P.C.(*i*)	13 Dec. 1904
The Earl of Minto, K. G., P. C., G. C. M. G.	18 Nov. 1905
Baron Hardinge of Penshurst, P.C., G.C.B., G.C.M.G., G.C.V O., I.S.O(*j*)	23 Nov. 1910
Lord Chelmsford	Apl. 1916
Lord Reading	Apl. 1921

(*a*) Created Earl Canning, 21 May 1859.

(*b*) Afterwards (by creation) Baron Napier (of Magdala).

(*c*) Afterwards (by creation) Baron Lawrence.

(*d*) Afterwards Sir John Strachey, G.C.S.I., C.I.E.

(*e*) Afterwards (by creation) Baron Napier of Ettrick.

(*f*) Afterwards (by creation) Earl of Northbrook.

(*g*) Created Earl of Lytton, 28 April 1880.

(*h*) Created Marquis of Dufferin and Ava, 12 Nov. 1888.

(*i*) Created an Earl .. .. June 1911

(*j*) During tenure of office, the Viceroy is Grand Master and First and Principal Knight of the two Indian Orders (G.M.S.I., and G.M.I.E.). On quitting office, he becomes G.C.S.I. and G.C.I.E., with the date of his assumption of the Viceroyalty.

The gradual evolution of the Indian constitution is fully traced in the article on "The Government of India," which precedes this; so also are the great changes made by the Reform Act of 1919. For the purposes of easy reference the powers of the Legislatures, as well as the special powers reserved to the Governor-General for the discharge of his responsibilities, which are fully set out in the Act, are reproduced below:—

21. (1) Every Council of States shall continue for five years, and every Legislative Assembly for three years, from its first meeting:

Provided that—

(*a*) either chamber of the legislature may be sooner dissolved by the Governor-General and

(*b*) any such period may be extended by the Governor-General if in special circumstances, he so thinks fit; and

(*c*) after the dissolution of either chamber the Governor-General shall appoint a date not more than six months, or with the sanction of the Secretary of State, not more than nine months after the date of dissolution for the next session of that chamber.

22. (1) An official shall not be qualified for election as a member of either chamber of the Indian legislature, and, if any non-official member of either chamber accepts office in the service of the Crown in India his seat in that chamber shall become vacant.

(4) Every member of the Governor-General's Executive Council shall be nominated as a member of one chamber of the Indian legislature, and shall have the right of attending in and addressing the other chamber, but shall not be a member of both chamber.

24. (3) If any Bill which has been passed by one chamber is not, within six months after the passage of the Bill by that chamber, passed by the other chamber either without amendments or with such amendments as may be agreed to by the two chambers, the Governor-General may in his discretion refer the matter for decision to a joint sitting of both chambers. Provided that standing orders made under this section may provide for meetings of members of both chambers appointed for the purpose, in order to discuss any difference of opinion which has arisen between the two chambers.

(4) Without prejudice to the powers of the Governor-General under section sixty-eight of the principal Act, the Governor-General may where a Bill has been passed by both chambers of the Indian legislature, return the Bill for reconsideration by either chambers.

(7) Subject to the rules and standing orders affecting the chamber, there shall be freedom of speech in both chambers of the Indian legislature. No person shall be liable to any proceeding in any court by reason of his speech or vote in either chamber, or by reason of anything contained in any official report of the proceedings of either chamber.

25. INDIAN BUDGET:—(1) The estimated annual expenditure and revenue of the Governor-General in Council shall be laid in the form of a statement before both chambers of the Indian legislature in each year.

(2) No proposal for the appropriation of any revenue or moneys for any purpose shall be made except on the recommendation of the Governor-General.

(3) The proposals of the Governor-General in Council for the appropriation of revenue or moneys relating to the following heads of expenditure shall not be submitted to the vote of the legislative assembly, nor shall they be open to discussion by either chamber at the time when the annual statement is under consideration, unless the Governor-General otherwise directs—

(*i*) interest and sinking fund charges on loans; and

(*ii*) expenditure of which the amount is prescribed by or under any law; and

(*iii*) salaries and pensions of persons appointed by or with the approval of His Majesty or by the Secretary of State in Council; and

(*iv*) salaries of chief commissioners and judicial commissioners; and

(*v*) expenditure classified by the order of the Governor-General in Council as—

(*a*) ecclesiastical;

(*b*) political;

(*c*) defence.

(4) If any question arises whether any proposed appropriation of revenue of moneys, does or does not relate to the above heads the decision of the Governor-General on the question shall be final.

(5) The proposals of the Governor-General in Council for the appropriation of revenue or moneys relating to heads or expenditure not specified in the above heads shall be submitted to the vote of the legislative assembly in the form of demands for grants.

(6) The legislative assembly may assent or refuse its assent to any demand or may reduce the amount referred to in any demand by a reduction of the whole grant.

(7) The demands as voted by the legislative assembly shall be submitted to the Governor-General in Council, who shall, if he declares that he is satisfied that any demand which has been refused by the legislative assembly is essential to the discharge of his responsibilities, act as if it had been assented to, notwithstanding the withholding of such assent or the reduction of the amount therein referred to, by the legislative assembly.

(8) Notwithstanding anything in this section the Governor-General shall have power, in cases of emergency, to authorise such expenditure as may, in his opinion, be necessary for the safety or tranquillity of British India or any part thereof

26. EMERGENCY POWERS:—(1) Where either chamber of the Indian legislature refuses leave to introduce or fails to pass in a form recommended by the Governor-General any Bill, the Governor-General may certify that the passage of the Bill is essential for the safety, tranquillity or interests of British India or any part thereof, and thereupon—

(*a*) if the Bill has already been passed by the other chamber, the Bill shall, on signature by the Governor-General, notwithstanding that it has not been consented to by both chambers, forthwith become an Act of the Indian legislature in the form of the Bill as originally introduced or proposed to be introduced in the Indian legislature, or (as the case

may be) in the form recommended by the Governor-General; and

(*b*) if the Bill has not already been so passed, the Bill shall be laid before the other chamber, and, if consented to by that chamber in the form recommended by the Governor-General, shall become an Act as aforesaid on the signification of the Governor-General's assent, or, if not so consented to, shall, on signature by the Governor-General, become an Act as aforesaid.

(2) Every such Act shall be expressed to be made by the Governor-General and shall, as soon as practicable after being made, be laid before both Houses of Parliament, and shall not have effect until it has received His Majesty's assent, and shall not be presented for His Majesty's assent until copies thereof have been laid before each House of Parliament for not less than eight days on which that House has sat; and upon the signification of such assent by His Majesty in Council and the notification thereof by the Governor-General, the Act shall have the same force and effect as an Act passed by the Indian legislature and duly assented to:

Provided that, where in the opinion of the Governor-General a state of emergency exists which justifies such action, the Governor General may direct that any such Act shall come into operation forthwith, and thereupon the Act shall have such force and effect as aforesaid, subject, however, to disallowance by His Majesty in Council.

27. SUPPLEMENTAL PROVISIONS:—(1) In addition to the measures referred to in sub-section (2) of section sixty-seven of the principal Act, as requiring the previous sanction of the Governor-General it shall not be lawful without such previous sanction to introduce at any meeting of either chamber of the Indian legislature any measure—

(*a*) regulating any provincial subject, or any part of a provincial subject, which has not been declared by rules under the principal Act to be subject to legislation by the Indian legislature;

(*b*) repealing or amending any Act of a local legislature;

(*c*) repealing or amending any Act or ordinance made by the Governor-General.

(2) Where in either chamber of the Indian legislature any Bill has been introduced or is proposed to be introduced, or any amendment to a Bill is moved, or proposed to be moved, the Governor-General may certify that the Bill or any clause of it, or the amendment affects the safety or tranquillity of British India, or any part thereof, and may direct that no proceedings, or that no further proceedings, shall be taken by the chamber in relation to the Bill, cause, or amendment and effect shall be given to such direction.

THE LEGISLATIVE ASSEMBLY.

President :—The Honourable Sir Alexander Frederick Whyte, Kt.

A.—ELECTED MEMBERS (104).

Constituency.	Name.
Madras City (Non-Muhammadan Urban). ..	Diwan Bahadur Tiruvenkata Rangachariar.
Ganjam *cum* Vizagapatam (Non-Muhammadan Rural).	Mr. Bhupatiraju Venkatapatiraju.
Godavari *cum* Kistna (Non-Muhammadan Rural).	Diwan Bahadur Mocherla Ramachandra Rao Pantulu Garu.
Guntur *cum* Nellore (Non-Muhammadan Rural).	Mr. Kakutur Venkataramanareddi Garu.
Madras ceded districts and Chittoor (Non-Muhammadan Rural).	Mr. Chetluru Doraiswamy Ayyangar
Salem and Coimbatore *cum* North Arcot (Non-Muhammadan Rural).	Mr. R. K. Shanmukham Chetty.
South Arcot *cum* Chingleput (Non-Muhammadan Rural).	Mr. M. K. Acharya.
Tanjore *cum* Trichinopoly (Non-Muhammadan Rural).	Mr. A. Rangaswami Iyengar.
Madura and Ramnad *cum* Tinnevelly (Non-Muhammadan Rural).	Mr. Krishna Aiyangar Rama Aiyangar.
West Coast and Nilgiris (Non-Muhammadan Rural).	Mr. K. Sadasiva Bhat, Avl.
North Madras (Muhammadan)	Haji Syed Abdul Khader Saheb Jeelani.
South Madras (Muhammadan)	Moulvi Sayyid Murtuza Saheb Bahadur.
West Coast and Nilgiris (Muhammadan). ..	Mr. Mahmood Schamnad Saheb Bahadur.
Madras (European)	Sir Gordon Fraser, Kt.
Madras Landholders	Mr. Kunhi Kammaran Nambiyar Chandroth Koodali Thazhetevectil.
Madras Indian Commerce	Sir M. C. T. M. Chettiyar, Kt.
Bombay City (Non-Muhammadan Urban) ..	Mr. Vithalbhai Javerbhai Patel.
Ditto. ..	Mr. Nowroji Maneckji Dumasia.
Sind (Non-Muhammadan Rural)	Mr. Harchandrai Vishindas, C.I.E.
Bombay Northern Division (Non-Muhammadan Rural).	Mr. Jamnadas M. Mehta.
Bombay Southern Division (Muhammadan Rural).	Sardar Mahboob Ali Khan Mohammad Akbar Khan.
Bombay Central Division (Non-Muhammadan Rural).	Mr. Narsinha Chintaman Kelkar.
Ditto.	Mr. Krishnaji Govind Lohokare.
Bombay Southern Division (Non-Muhammadan Rural).	Mr. Dattatraya Venkatesh Belvi.
Bombay City (Muhammadan Urban)	Mr. Mahomed Ali Jinah.
Sind (Muhammadan Rural)	Mr. Ghulam Mahomed Khan Walimohamed Khan Bhurgri.
Bombay Northern Division (Muhammadan Rural).	Mr. Mahomed Ebrahim Makan.
Bombay (European)	Mr. Henry Richard Dunk.
Ditto.	Mr. Hugh Golding Cocke.
The Indian Merchants' Chamber and Bureau (Indian Commerce).	Sir Purshotamdas Thakurdas, Kt., C.I.E., M.B.E.
Gujarat and Deccan Sardars and Inamdars (Landholders).	Sardar Vishnu Narayan Mutalik.

Constituency.	Name.
The Ahmedabad Millowners' Association (Indian Commerce).	Sheth Kasturbhai Lalbhai.
Calcutta (Non-Muhammadan Urban).	Mr. Bepin Chandra Pal.
Calcutta Suburbs (Non-Muhammadan Urban)..	Mr. Tulsi Chandra Goswami.
Burdwan Division (Non-Muhammadan Rural)...	Mr. Amarnath Dutt.
Presidency Division (Non-Muhammadan Rural).	Mr. Bhabendra Chandra Roy.
Dacca Division (Non-Muhammadan Rural). ..	Mr. Kshitish Chandra Neogy.
Chittagong and Rajshahi Divisions (Non-Muhammadan Rural).	Mr. Kumar Sankar Ray.
Calcutta and Suburbs (Muhammadan Urban) ..	Mr. Yacoob C. Ariff.
Burdwan and Presidency Divisions (Muhammadan Rural).	Khan Bahadur Mohammad Shams-uz-Zoha.
Dacca Division (Muhammadan Rural)	Mr. Alimuzzaman Chaudhuri.
Do. do.	Khwaja Abdul Karim.
Chittagong Division (Muhammadan Rural) ..	Mr. Muhammad Kazim Ali.
Rajshahi Division (Muhammadan Rural) ..	Mr. Kabeerud-Din Ahmed.
Bengal (European)	Sir Campbell Ward Rhodes, Kt., C.B.E.
Do.	Mr. Darcy Lindsay, C.B.E.
Do.	Mr. W. S. J. Willson.
Bengal Landholders	Mr. Surendra Chandra Ghose.
Marwari Association (Indian Commerce) ..	Mr. Rang Lal Jajodia.
Cities of the United Provinces (Non-Muhammadan Urban).	Pandit Motilal Nehru.
Meerut Division (Non-Muhammadan Rural)..	Pandit Shamlal Nehru.
Agra Division (Non-Muhammadan Rural) ..	Mr. Narayan Das.
Rohilkund and Kumaon Division (Non-Muhammadan Rural).	Mr. C. S. Ranga Iyer.
Allahabad and Jansi Divisions (Non-Muhammadan Rural).	Pandit Madan Mohan Malaviya.
Benares and Gorakhpur Divisions (Non-Muhammadan Rural).	Pandit Krishna Kant Malaviya.
Lucknow Division (Non-Muhammadan Rural) .	Pandit Harkaran Nath Misrah.
Fyzabad Division (Non-Muhammadan Rural).	Dr. Kishanlal Nehru.
Cities of the United Provinces (Muhammadan Urban).	Haji Wajihuddin.
Meerut Division (Muhammadan Rural). ..	Nawab Ismail Khan.
Agra Division (Muhammadan Rural).	Dr. Lodhi Karim Hyder.
Rohilkund and Kumaon Divisions (Muhammadan Rural).	Maulvi Muhammad Yaqub.
United Provinces Southern Divisions (Muhammadan Rural).	Mr. Yusuf Imam.
Lucknow and Fyzabad Divisions (Muhammadan Rural).	Vacant.
United Provinces (European)	Colonel Sir Henry John Ludlam Stanyon, Kt., C.I.E., V.D.

Constituency.	Name.
United Provinces Landholders	Raja Amarpal Singh, M.B.E.
Ambala Division (Non-Muhammadan).	Lala Dunichand.
Jullundur Division (Non-Muhammadan) ..	Lala Hans Raj.
West Punjab (Non-Muhammadan)	Mr. Chaman Lal.
East Punjab (Muhammadan)	Mr. Abdul Haye.
East Central Punjab (Muhammadan)	Sheikh Sadib Hasan.
West Central Punjab (Muhammadan).	Khan Sahib Ghulam Bari.
North Punjab (Muhammadan)	Chaudhri Baawal Baksh.
North-West Punjab (Muhammadan)	Sayyad Ghulam Abbas.
South-West Punjab (Muhammadan)	Makhdum Syed Rajan Bakhsh Shah.
East Punjab (Sikh)	Sardar Kartar Singh.
West Punjab (Sikh)	Sardar Gulab Singh.
Punjab Landholders	Baba Ujahgar Singh Bedi.
Tirhut Division (Non-Muhammadan)	Mr. Shayama Charan.
Do. do.	Mr. Gaya Prasad Singh.
Orissa Division (Non-Muhammadan)	Mr. Nilkantha Das.
Do. do.	Mr. Bhubanananda Das.
Patna *cum* Shahabad (Non-Muhammadan) ..	Mr. Ambika Prasad Sinha.
Gaya *cum* Monghyr (Non-Muhammadan) ..	Rai Hari Prasad Lal.
Bhagalpur, Purnea and the Santhal Parganas (Non-Muhammadan).	Mr. Ganganand Sinha.
Chota Nagpur Division (Non-Muhammadan) ..	Mr. Devaki Prashad Sinha.
Patna and Chota Nagpur *cum* Orissa (Muhammadan).	Khan Bahadur Sarfaraz Husain Khan.
Bhagalpur Division (Muhammadan)	Moulvi Main Asjad-ul-lah.
Tirhut Division (Muhammadan)	Maulvi Muhammad Shafee.
Bihar and Orissa Landholders	Raja Raghunandan Prashad Singh.
Nagpur Division (Non-Muhammadan) ..	Mr. M. V. Abhyankar.
Central Provinces Hindi Divisions (Non-Muhammadan).	Dr. H. S. Gour.
Do. do.	Mr. Sambbhu Dayal Misra.
Central Provinces (Muhammadan)	Mr. M. Samiullah Khan.
Central Provinces Landholders	Seth Govind Das.
Assam Valley (Non-Muhammadan)	Srijut Tarum Ram Phookun.
Surma Valley *cum* Shillong (Non-Muhammadan)	Mr. Kamini Kumar Chanda.
Assam (Muhammadan)	Mr. Ahmad Ali Khan.
Assam (European)	Mr. Eustace Joseph.
Burma (Non-European)	Maung Tok Kyi.
Do.	Maung Kun.
Do.	Maung Ba Si.
Burma (European)	Mr. Edward Gibson Fleming.
Delhi (General)	Mr. Piyare Lal.
Ajmer-Merwara (General)	Rai Sahib M. Harbilas Sarda.

Province or body represented.	Name.
B.—NOMINATED MEMBERS (EXCLUDING THE PRESIDENT) (40).	
OFFICIAL MEMBERS (25)	
Government of India	The Honourable Sir Malcolm Hailey, K.C.S.I., C.I.E.
Do.	The Honourable Sir Charles Innes, K.C.S.I., C.I.E.
Do.	The Honourable Mr. Atul Chandra Chatterjee, C.I.E.
Do.	The Honourable Sir Basil Phillott Blackett, K.C.B.
Do.	Mr. Ernest Burdon, C.I.E.
Do.	Sir Henry Moncrieff Smith, Kt., C.I.E.
Do.	Mr. Montagu Sherard Dawes Butler, C.B. C.I.E., C.V.O., C.B.E.
Do.	Mr. Evelyn Berkeley Howell, C.S.I., C.I.E.
Do.	Mr. Alfred Alan Lethbridge Parsons.
Do.	Mr. Geoffrey Rothe Clarke, C.S.I., O.B.E.
Do.	Mr. Alexander Robert Loftus Tottenham.
Do.	Mr. James Alexander Richey, C.I.E.
Do.	Mr Laurence Frederic Rushbrook Williams, C.B.E.
Madras	Mr. Thomas Eyebron Moir, C.S.I., C.I.E.
Do.	Mr. Julius Matheson Turing.
Bombay	Mr. Philip Edward Percival.
Do.	Mr. Percy Barnes Haigh.
Bengal	Mr Lewis Sydney Steward O'Malcy, C.I.E.
Do.	Mr. Girish Chandra Nag.
United Provinces	Mr. Henry Edward Holme.
The Punjab	Mr. Hubert Calvert.
Bihar and Orissa	Rai Bahadur Shyam Narayan Singh, M.B.E.
The Central Provinces	Mr. Rustomji Faridoonji.
Assam	Mr. Basil Copleston Allen, C.S.I.
Burma	Lieutenant-Colonel Francis Charles Owens.
Berar representative	Mr. Madhao Srihari Aney.
NON-OFFICIAL MEMBERS (14.)	
Madras	Sir Palamaneri Sundaram Aiyer Sivaswamy Aiyer, K.C.S.I., C.I.E.
Bombay	Sir Chimanlal Harilal Setalvad, Kt.
Do.	Sardar Bomanji Ardeshir Dalal.
Bengal	Prince Afsar-ul-Mulk Mirza Muhammad Akram Hussain Bahadur.
Do.	Mr. Keshav Chandra Roy, C.I.E.
The United Provinces	
The Punjab..	
Bihar and Orissa	
The Central Provinces	
Assam	
North-West Frontier Province	Nawab Sir Sahibzada Abdul Qaiyum, K.C.I.E.
Indian Christian	Dr. Surendra Kumar Datta.
Anglo-Indian Community	Lieutenant-Colonel H. A. J. Gidney.
Labour interests	Mr. Narayan Malhar Joshi.

THE COUNCIL OF STATE.

President—The Hon'ble Sir Alexander Phillips Muddiman, Kt., C.S.I., C.I.E.

A.—ELECTED MEMBERS (33).

Constituency.	Name.
Madras (Non-Muhammadan)	Sir S. M. Annamalai Chettiyar, Kt.
Do.	Mr. K. V. Rangaswamy Ayyangar.
Do.	The Rt. Hon'ble V. S. Srinivasa Sastri, P.C.
Do.	Diwan Bahadur V. Ramabhadra Naidu.
Madras (Muhammadan)	Khan Bahadur Sir Ahmad Tambi Maricair, Kt.
Bombay (Non-Muhammadan	Mr. Lallubhai Samaldas.
Do.	Mr. Phiroze C. Sethna.
Do.	Mr. Raghunath Pandurang Karandikar.
Bombay Presidency (Muhammadan)	Khan Bahadur Ebrahim Haroon Jaffer.
Sind (Muhammadan)	Mr. Ali Baksh Muhammad Hussain.
Bombay Chamber of Commerce	Sir Arthur Henry Froom, Kt.
East Bengal (Non-Muhammadan)	Raja Pramada Nath Ray of Dighapatia.
West Bengal (Non-Muhammadan)	Sir Deva Prasad Sarvadhikary, Kt., C.I.E.
Do.	Vacant.
East Bengal (Muhammadan)	Maulvi Abdul Karim.
West Bengal (Muhammadan)	Haji Chowdhuri Mohammad Ismail Khan.
Bengal Chamber of Commerce	Vacant.
United Provinces Central (Non-Muhammadan).	Raja Sir Rampal Singh, K.C.I.E.
United Provinces Northern (Non-Muhammadan.	Lala Sukhbir Sinha.
United Provinces Southern(Non-Muhammadan)	Raja Moti Chand, C.I.E.
United Provinces West (Muhammadan) ..	Nawab Muhammad Abdul Majid, C.I.E.
United Provinces East (Muhammadan) ..	Saiyid Raza Ali.
Punjab (Non-Muhammadan)	Rai Bahadur Lala Ram Saran Das, C.I.E.
Punjab (Sikh)	Sardar Jogendra Singh.
East Punjab (Muhammadan)	Sir Zulfiqar Ali Khan, Kt., C.S.I.
West Punjab (Muhammadan)	Colonel Nawab Sir Umar Hayat Khan, K.C.I.E., C.B.E., M.V.O.
Bihar and Orissa (Non-Muhammadan) ..	Maharajadhiraja Sir Rameshawara Singh, G.C.I.E., K.B.E., of Darbhanga.
Do. ..	Maharaja Bahadur Keshav Prasad Singh, C.B.E., of Dumraon.
Bihar and Orissa (Muhammadan)	Khan Bahadur Saiyid Zahir-ud-din.
Central Provinces (General)	Sir Manekjee Byramjee Dadabhoy, Kt., C.I.E.
Assam (Non-Muhammadan)	Srijut Chandradhar Barua.
Burma (General)	Mr. Sevasila Vedamurti.
Burma Chamber of Commerce	Vacant.

B.—NOMINATED MEMBERS (26 *excluding the President*).

(*a*) *Official Members* (*not more than* 19 *excluding President*).

Government of India	His Excellency General Lord Rawlinson, G.C.B. G.C.V.O., K.C.M.G.
Do.	Mian Sir Muhammad Shafi, K.C.S.I., C.I.E.
Do.	Sir B. Narasimha Sarma, K.C.S.I.
Do.	Mr. David Thomas Chadwick, C.I.E.
Do.	Mr. James Crerar, C.S.I., C.I.E.
Do.	Major-General Robert Charles MacWatt, C.I.E., M.B., F.R.C.S., K.H.S.
Do.	Mr. Arthur Cecil McWatters, C.I.E.
Do.	Mr. Arthur Herbert Ley, C.I.E.
Do.	Mr. J. P. Thompson, C.S.I.
Do.	Mr. Claude Alexander Barron, C.S.I., C.I.E. C.V.O.
Bombay	Mr. Walter Curzon Shepherd.
Bengal	Khan Bahadur Amin-ul-Islam.
The United Provinces	Vacant.
Punjab	Mr. A. M. Stow, O.B.E.
Bihar and Orissa	Mr. Hugh Kynaston Briscoe, C.I.E.

Constituency.	Name.
(b) Berar Representative.	
Berar Representative	Mr. Ganesh Srikrishna Khaparde.
(c) Non-Officials.	
Madras	M. R. Ry. Ganpati Agraharam Annadhura Ayyar Natesam Avargal.
Do.	Sir Leslie Creery Miller, Kt.
Bombay	Sir Dinshah Edulji Wacha, Kt.
Bengal	Maharaja Soshi Kanta Acharyya, Chaudhuri of Muktagacha, Mymensingh.
United Provinces	Khan Bahadur Nawab Sir Mohamed Muzamil-ullah Khan, O.B.E., K.C.S.I., of Bhikampur.
Punjab	Nawab Sir Amiruddeen Ahmed Khan, K.C.I.E., of Loharu.
Do.	Sirdar Charanjit Singh.
Punjab (Indian Christian)	Raja Sir Harnam Singh, K.C.I.E., of Loharu.
Delhi	Sir Mahammad Rafique, Kt.
North-West Frontier Provinces	Major Nawab Mahomed Akbar Khan, C.I.E., Khan of Hoti.

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The Provincial Governments.

The object of the Reforms is the progressive realisation of responsible Government. Responsible government implies two conditions, first, that the members of the executive government should be responsible to their constituents, and secondly that these constituents should exercise their power through the agency of their representatives in the Assembly. These two conditions entail that there exist constituencies based on a franchise broad enough to represent the interests of the population generally, and capable of selecting representatives intelligently; secondly, that there is recognised and constitutional practice that the executive Government cannot retain office unless it commands the support of a majority in the Assembly. In India, these conditions are not realised. There must be a period of political education which can only be achieved through the gradually expanding exercise of responsibility. Practical considerations make the immediate handing over of complete responsibility impossible. Accordingly, the principle is adopted of transferring responsibility for certain functions of Government while reserving control over others, while at the same time establishing substantial provincial autonomy.

Provincial Autonomy.—Since substantial provincial autonomy is to be a reality, the provinces must not be dependent on the Indian Government for the means of provincial development. The general idea of the scheme on this matter is that an estimate should first be made of the scale of expenditure required for the upkeep and development of the services which clearly appertain to the Indian sphere; that resources with which to meet this expenditure should be secured to the Indian Government; and that all other revenues should then be handed over to the provincial Governments which will thenceforth be held wholly responsible for the development of all provincial services. The principal changes in detail is the abolition of divided heads of revenue. Indian and provincial heads of revenue are retained as at present; but to the former income-tax and general stamps are to be added and to the latter land revenue, irrigation, excise and judicial stamps. It follows that expenditure on famine relief and the protective irrigation works will fall upon the provinces, though in the matter of famine relief, the Indian Government could never wholly renounce responsibility in the case of any failure on the part of the provinces.

This arrangement leaves the Government of India with a large deficit. In order to supplement this, the contribution from each province to the Government of India is assessed and fixed on the following basis:—

In the financial year 1921-22 contributions shall be paid to the Governor-General in Council by the local Governments mentioned below according to the following scale:—

Name of Province.	Contributions (In lakhs of rupees).
Madras	348
Bombay	58
Bengal	63
United Provinces	240
Punjab	175
Burma	64
Central Provinces and Berar ..	22
Assam	15

From the financial year 1922-23 onwards a total contribution of 983 lakhs, or such smaller sum as may be determined by the Governor General in Council, shall be paid to the Governor-General in Council by the local Governments mentioned in the preceding rule. When for any year the Governor-General in Council determines as the amount of the contribution a smaller sum than that payable for the preceding year, a reduction shall be made in the contribution of those local Governments only whose last previous annual contribution exceeds the proportion specified below of the smaller sum so determined as the total contribution; and any reduction so made shall be proportionate to such excess:—

Madras	.. 17—90ths.
Bombay	.. 13—90ths.
Bengal	.. 19—90ths.
United Provinces ..	.. 18—90ths.
Punjab	.. 9—90ths.
Burma	.. 6½—90ths.
Central Provinces and Berar	.. 5—90ths.
Assam	.. 2½—90ths.

In cases of emergency the local Government of any province may be required by the Governor-General in Council, with the sanction of, and subject to the conditions approved by the Secretary of State, to pay to the Governor-General in Council a contribution for any financial year in excess of the amount required by the preceding rules in the case of that year.

This arrangement has caused much heart-burning in practice. The Government of India have absorbed the growing heads of revenue, leaving the Provinces with diminishing Excise revenues and increasing Expenditure. The Bengal contribution had to be foregone in 1922-23. The Madras and the United Provinces Governments in the same year utilised for making their payments parts of general loans that they raised and otherwise

devoted to reproductive purposes. The Government of India have accepted the obligation to diminish and finally cease their calls for provincial contributions as soon as their own financial position enables them to do so. One of the strongest reasons which they advanced in March, 1923, for the doubling of the Salt Tax was that if the increased tax were maintained in future years it would afford good hope for early reduction of the contributions. At the annual conference of Finance Members of the Government of India and the Provincial Governments held in Delhi in November, 1923, the representative of the Central Government in his opening speech, as chairman, showed a broad and sympathetic appreciation of the provincial position and though the proceedings of the conference have not been published it is understood that a cordial mutual understanding was reached.

The System of Government.—In all the provinces there is collective administration, the system of a Governor in Council. At the head of the Executive is the Governor, with an Executive Council nominated by the Governor. Associated with the Executive Council as part of the Government are one or more Ministers chosen by the Governor from among the elected members of the Legislative Council and holding office for the life of the Council.

The plan is adopted of making a division of the functions of the Provincial Government, between those which may be made over to popular control and those which for the present must remain in official hands. These functions are called "transferred" and "reserved" respectively. In the Provincial Executive the Governor in Council has charge of the reserved subjects. This is one part of the Executive. The other part of the Executive consists of the Governor and Minister or Ministers and deals with the "transferred" subjects. As a general rule the Executive deliberate as a whole although there may be occasions upon which the Governor prefers to discuss a particular question with that part of the Government directly responsible. The decision upon a transferred subject and on the supply for it in the provincial budget is taken after general discussion by the Governor and his Ministers; the decision on a reserved subject is taken after similar discussion by the Governor and the members of his Executive Council.

The Ministers hold office not at the will of the legislature but at the will of their constituents. Their salary while they are in office is secured to them and is not at the pleasure of the Legislative Council. They together with the Governor form the administration for the transferred subjects. It is not intended that the Governor should from the first be bound to accept the decision of his Ministers, because he will himself be generally responsible for the administration. But it is also not intended that he should be in a position to refuse assent at discretion to all his Ministers' proposals. The intention is rather that the Ministers should avail themselves of the Governor's trained advice upon administrative questions, while he on his part is willing to meet their wishes to the furthest possible extent, in cases where he realises they have the support of popular opinion.

The keynote of the scheme, it has been explained, is the establishment of effective provincial autonomy and the introduction of responsible government in the Provinces. This connotes a sharp division of authority between the Central Government and the Provinces and the division of the provincial administration into two parts, the Reserved Subjects, namely those reserved to the Governor and his Executive Council; and the Transferred Subjects, or the subjects transferred under certain conditions to Ministers chosen from the Legislative Council. In the section dealing with the Government of India (q.v.) a list is given of the subjects reserved to the Central Government; all other subjects are delegated to the Provinces. The division of the provincial administration between Reserved and Transferred subjects is given in the following statement:—

List of Provincial Subjects Transferred.

Column I.	Column II.
1. Local self-government—that is to say, matters relating to the constitution and powers of municipal corporations, improvement trusts, district boards, mining boards of health, and other authorities established in the provinces for purposes of local self-governments, exclusive of matters arising under the Cantonments Act, 1910; subject to legislation by the Indian legislature as regards (*a*) the powers of such authorities to borrow otherwise than from a provincial Government, and (*b*) the levying by such authorities of taxation not included in Schedule II to the Schedule Taxes Rules.	All Governors' provinces.
2. Medical administration, including hospitals, dispensaries and asylums, and for medical education.	Ditto.
3. Public health and sanitation and statistics; subject to legislation by the Indian legislature in respect to infection and contagious diseases to such extent as may be declared by any Act of the Indian legislature.	Ditto.
4. Pilgrimages within British India	Ditto.

List of Provincial Subjects for Transfer—contd.

Column I.	Column II.
5. Education, other than European and Anglo-Indian education, provided that— (*a*) the following subjects shall be excluded, namely:—	All Governors' provinces.
(*i*) the Benares Hindu University and such other Universities constituted after the commencement of these rules as may be declared by the Governor General in Council to be central subjects, and	
(*ii*) Chiefs' Colleges and any institution maintained by the Governor General in Council for the benefit of members of His Majesty's Forces or of other public servants or of the children of such members or servants; and	II. European and Anglo-Indian education is transferred in Burma.
(*b*) the following subjects shall be subject to legislation by the Indian legislature, namely:—	
(*i*) the control of the establishment and the regulation of the constitutions and functions of University constituted after the commencement of these rules, and	
(*ii*) the definition of the jurisdiction of any University outside the province in which it is situated, and	
(*iii*) for a period of five years from the date of the commencement of these rules, the Calcutta University and the control and organisation of secondary education in the Presidency of Bengal.	
6 Public Works included under the following heads, namely:—	
(*a*) construction and maintenance of provincial buildings, other than residences of Governors of provinces, used or intended for any purpose in connection with the administration of the province on behalf of the departments concerned, save in so far as the Governor may assign such work to the departments using or requiring such buildings; and care of historical monuments, with the exception of ancient monuments as defined in section 2 (1) of the Ancient Monuments Preservation Act, which are for the time being declared to be protected monuments under section 3 (1) of that Act: provided that the Governor General in Council may, by notification, in the *Gazette of India*, remove any such monument from the operation of this exception;	All Governors' provinces, except Assam.
(*b*) roads, bridges, ferries, tunnels, ropeways, and causeways, and other means of communication, subject to such conditions as regards control over construction and maintenance of means of communication declared by the Governor General in Council to be of military importance, and as regards incidence of special expenditure connected therewith, as the Governor General in Council may prescribe;	
(*c*) tramways within municipal areas; and	
(*d*) light and feeder railway and extra-municipal tramways, in so far as provision for their construction and management is made by provincial legislation; subject to legislation by the Indian legislature in the case of any such railway or tramway which is in physical connection with a main line or is built on the same gauge as an adjacent main line.	

List of Provincial Subjects for Transfer—concld.

Column I.	Column II.
7. Agriculture, including research institutes, experimental and demonstration farms, introduction of improved methods, provision for agricultural education, protection against destructive insects and pests and prevention of plant diseases; subject to legislation by the Indian legislature in respect to destructive insects and pests and plant diseases to such extent as may be declared by any Act of the Indian legislature.	All Governors' provinces.
8 Civil Veterinary Department, including provision for veterinary training, improvement of stock, and prevention of animal diseases; subject to legislation by the Indian legislature in respect to animal diseases to such extent as may be declared by any Act of the Indian legislature.	Ditto.
9. Fisheries	All Governors' provinces; except Assam.
10. Co-operative Societies	All Governors' provinces.
11. Forests, including preservation of game therein; subject to legislation by the Indian legislature as regards disforestation of reserved forests.	Bombay and Burma.
12 Excise, that is to say, the control of production, manufacture, possession, transport, purchase, and sale of alcoholic liquor and intoxicating drugs and the levying of excise duties and license fees on or in relation to such articles, but excluding, in the case of opium, control of cultivation, manufacture, and sale for export.	All Governors' provinces, except Assam.
13. Registration of deeds and documents; subject to legislation by the Indian legislature.	All Governors' provinces.
14. Registration of births, deaths, and marriages; subject to legislation by the Indian legislature for such classes as the Indian legislature may determine.	Ditto.
15. Religious and charitable endowments	Ditto.
16. Development of industries, including industrial research and technical education.	Ditto.
17. Stores and stationery required for transferred departments; subject in the case of imported stores and stationery, to such rules as may be prescribed by the Secretary of State in Council.	Ditto.
18. Adulteration of food-stuffs and other articles; subject to legislation by the Indian legislature as regards import and export trade.	Ditto.
19. Weight and measures; subject to legislation by the Indian legislature as regards standards.	Ditto.
20. Libraries (other than the Imperial Library), Museums (except the Indian Museum, the Imperial War Museum, and the Victoria Memorial, Calcutta) and Zoological Gardens.	Ditto.

POWERS OF THE LEGISLATURES.

Under the Reform Act there has been set up a Legislative Council in each Governor's Province, which consists of the members of the Executive Council and of nominated and elected members. The Governor is not a member of the Legislative Council, but he has the right of addressing the Council and may for that purpose require the attendance of the members. The number of members of the Legislative Council varies from Province to Province, but the Act provides that not more than twenty per cent. shall be official members and at least seventy per cent. shall be elected members. The powers of the Legislative Council and the special powers of Governors are clearly set out in the Act and the essential clauses are reproduced here:—

8. (1) Every Governor's legislative council shall continue for three years from its first meeting:

Provided that—

(*a*) the council may be sooner dissolved by the Governor; and

(*b*) the said period may be extended by the Governor for a period not exceeding one year, by notification in the official gazette of the province, if in special circumstances (to be specified in the notification) he so thinks fit; and

(*c*) after dissolution of the council the Governor shall appoint a date not more than six months or, with the sanction of the Secretary of State, not more than nine months from the date of dissolution for the next session of the council.

10. (1) The local legislature of any province has power, subject to the provisions of this Act, to make laws for the peace and good government of the territories for the time being constituting that province.

(2) The local legislature of any province may, subject to the provisions of the sub-section next following, repeal or alter as to that province any law made either before or after the commencement of this Act by any authority in British India other than that local legislature.

(3) The local legislature of any province may not, without the previous sanction of the Governor-General, make or take into consideration any law—

(*a*) imposing or authorising the imposition of any new tax unless the tax is a tax scheduled as exempted from this provision by rules made under the principal Act; or

(*b*) affecting the public debt of India, or the customs duties or any other tax or duty for the time being in force and imposed by the authority of the Governor General in Council for the general purposes of the Government of India, provided that the imposition or alteration of a tax scheduled as aforesaid shall not be deemed to affect any such tax or duty; or

(*c*) affecting the discipline or maintenance of any part of His Majesty's naval, military, or air forces; or

(*d*) affecting the relations of the government with foreign princes or states; or

(*e*) regulating any central subject; or

(*f*) regulating any provincial subject which has been declared by rules under the principal Act, to be, either in whole or in part, subject to legislation by the Indian legislature, in respect of any matter to which such declaration applies; or

(*g*) affecting any power expressly reserved to the Governor-General in Council by any law for the time being in force; or

(*h*) altering or repealing the provisions of any law which, having been made before the commencement of this Act by any authority in British India other than that local legislative is declared by rules under the principal Act to be a law which cannot be repealed or altered by the local legislature without previous sanction; or

(*i*) altering or repealing any provision of an Act of the Indian legislature made after the commencement of this Act, which by the provisions of that Act may not be repealed or altered by the local legislature without previous sanction:

Provided that an Act or a provision of an Act made by a local legislature, and subsequently assented to by the Governor-General in pursuance of this Act, shall not be deemed invalid by reason only of its requiring the previous sanction of the Governor-General under this Act.

(4) The local legislature of any province has not power to make any law affecting any Act of Parliament.

11. (2) The estimated annual expenditure and revenue of the province shall be laid in the form of a statement before the council in each year, and the proposals of the local government for the appropriation of provincial revenue and other moneys in any year shall be submitted to the vote of the council in the form of demands for grants. The council may assent, or refuse its assent, to a demand, or may reduce the amount therein referred to either by a reduction of the whole grant or by the omission or reduction of any of the items of expenditure of which the grant is composed:

Provided that—

(*a*) the local government shall have power in relation to any such demand, to act as if it had been assented to, notwithstanding the withholding of such assent or the reduction of the amount therein referred to, if the demand relates to a reserved subject, and the Governor certifies that the expenditure provided for by the demand is essential to the discharge of his responsibility for the subject; and

(*b*) the Governor shall have power in cases of emergency to authorise such expenditure as may be in his opinion necessary for the safety or tranquillity of the province, or for the carrying on of any department; and

(*c*) no proposal for the appropriation of any such revenues or other moneys for any purpose shall be made except on the recommendation of the Governor, communicated to the council.

(3) Nothing in the foregoing sub-section shall require proposals to be submitted to the Council relating to the following heads of expenditure:—

(*i*) contribution payable by the government to the Governor-General in Council; and

(*ii*) interest and sinking fund charges on loans; and

(*iii*) expenditure of which the amount is prescribed by or under any law; and

(*iv*) salaries and pensions of persons appointed by or with the approval of His Majesty or by the Secretary of State in Council; and

(*v*) salaries of judges of the High Court of the province and of the Advocate-General.

If any question arises whether any proposed appropriation of moneys does or does not relate to the above heads of expenditure, the decision of the Governor shall be final.

(4) Where any Bill has been introduced or is proposed to be introduced, or any amendment to a Bill is moved or proposed to be moved, the Governor may certify that the Bill or any clause of it or the amendment affects the safety or tranquillity of his province or any part of it or of another province, and may direct that no proceedings or no further proceedings shall be taken by the council in relation to the Bill, clause or amendment, and effect shall be given to any such direction.

(7) Subject to the rules and standing orders affecting the council, there shall be freedom of speech in the Governors' legislative councils. No person shall be liable to any proceedings in any Court by reason of his speech or vote in any such council or by reason of anything contained in any official report of the proceedings of any such council.

12. **Return and Reservation**:—(1) Where a Bill has been passed by a local legislative council the Governor, Lieutenant-Governor or Chief Commissioner may, instead of declaring that he assents to or withholds his assent from the Bill, return the Bill to the council for reconsideration, either in whole or in part, together with any amendments which he may recommend, or, in cases prescribed by rules under the principal Act may, and if the rules so require shall, reserve the Bill for the consideration of the Governor-General.

(2) Where a Bill is reserved for the consideration of the Governor-General, the following provisions shall apply:—

(*a*) The Governor, Lieutenant-Governor or Chief Commissioner may, at any time within six months from the date of the reservation of the Bill with the consent of the Governor-General, return the Bill for further consideration by the council with a recommendation that the council shall consider amendments thereto:

(*b*) After any Bill so returned has been further considered by the council, together with any recommendation made by the Governor, Lieutenant-Governor or Chief Commissioner relating thereto, the Bill, if re-affirmed with or without amendment, may be again presented to the Governor, Lieutenant-Governor, or Chief Commissioner.

(*c*) Any Bill reserved for the consideration of the Governor-General shall, if assented to by the Governor-General within a period of six months from the date of such reservation, become law on due publication of such assent, in the same way as a Bill assented to by the Governor, Lieutenant-Governor or Chief Commissioner but, if not assented to by the Governor-General within such period of six months, shall lapse and be of no effect unless before the expiration of that period either

(*i*) the Bill has been returned by the Governor, Lieutenant-Governor or Chief Commissioner, for further consideration by the council; or

(*ii*) in the case of the council not being in session, a notification has been published of an intention so to return the Bill at the commencement of the next session.

(3) The Governor-General may (except where the Bill has been reserved for his consideration), instead of assenting to or withholding his assent from any Act passed by a local legislature, declare, that he reserves the Act for the signification of His Majesty's pleasure thereon, and in such case the Act shall not have validity until His Majesty in Council has signified his assent and his assent has been notified by the Governor-General.

13. **Emergency Powers**:—(1) Where a governor's legislative council has refused leave to introduce, or has failed to pass in a form recommended by the Governor, any Bill relating to a reserved subject the governor may certify that the passage of the Bill is essential for the discharge of his responsibility for the subject, and thereupon the Bill shall, notwithstanding that the council have not consented thereto, be deemed to have passed, and shall, on signature by the governor, become an Act of the local legislature in the form of the Bill as originally introduced or proposed to be introduced in the council or (as the case may be) in the form recommended to the council by the governor.

(2) Every such Act shall be expressed to be made by the governor, and the governor shall forthwith send an authentic copy thereof to the Governor-General, who shall reserve the Act for the signification of His Majesty's pleasure, and upon the signification of such assent by His Majesty in Council, and the notification thereof by the Governor-General, the Act have the same force and effect as an Act passed by the local legislature and duly assented to:

Provided that where, in the opinion of the Governor-General a state of emergency exists which justifies such action, he may, instead of reserving such Act, signify assent thereto, and thereupon the Act shall have such force and effect as aforesaid, subject however to disallowance by His Majesty in Council.

(3) An Act made under this section shall as soon as practicable after being made, be laid before each House of Parliament, and an Act which is required to be presented for His Majesty's assent shall not be so presented until copies thereof have been laid before each House of Parliament for not less than eight days on which that House has sat.

The Administration :—Each Local Government works through a Secretariat, which is divided into various departments, each under a Secretary. In addition to the Secretaries, there are special departmental heads such as the Inspectors General of Police, Jails, and Registration; the Director of Public Instruction, the Inspector-General of Civil Hospitals or Surgeon-General, the Sanitary Commissioner and the Superintendent of the Civil Veterinary Department. There are also Chief Engineers for Public Works and Irrigation, who are likewise Secretaries to Government. In nearly all the Provinces except Bombay, the revenue departments are administered, under Government, by a Board of Revenue.

The administrative system is based on the repeated sub-division of territory, each administrative area being in the responsible charge of an officer who is subordinate to the officer next in rank above him. The most important of these units is the District, and India embraces more than 250 Districts, with an average area of 4,430 square miles and an average population of 931,000. In Madras there is no local officer above the head of the District; elsewhere a Commissioner has the supervision of a Division comprising from four to six Districts. The head of a District is styled either the Collector and District Magistrate or the Deputy Commissioner. He is the representative of the Government and embodies the power of the State. He is concerned in the first place with the land and the land revenue. He has also charge of the local administration of the excise, income tax, stamp duty and other sources of revenue. As a Magistrate of the first class, he can imprison for two years and fine up to a thousand rupees. In practice he does not try many criminal cases, although he supervises the work of the other Magistrates in the District.

In addition to these two main departments the Collector is interested in all matters pertaining to the welfare of the people. In some branches of the administration his functions are, in consequence of the formation of special departments, such as those of Public Works, Forests, Jails, Sanitation, and Education less direct than was formerly the case. But even in matters dealt with by separate departments, his active co-operation and direction in counsel are needed. The Municipal Government of all considerable towns is vested in Municipalities but it is the duty of the Collector to guide and control their working. He is no longer the Chairman of the District Board which, with the aid of subsidiary boards, maintains roads, schools and dispensaries, and carries out sanitary improvements in rural areas.

Other important district officers are the Superintendent of Police, who is responsible for the discipline and working of the police force, and the Civil Surgeon, who (except in Bombay) is the head of the medical and sanitary administration. The local organisation of Government Public Works, Forests, Education and other special departments varies in different parts of the country. Each District has its own law officer, styled the Government Pleader.

The Districts are split up into sub-divisions, under Junior Officers of the Indian Civil Service or members of the Provincial Service called Deputy Collectors. In Madras, Bombay and the United Provinces there are smaller sub-district units called taluks or tahsils, administered by tahsildars (Bombay Mamlatdars), with naib tahsildars or mahalkarris. The tahsildar is assisted by subordinate officers, styled revenue inspectors or kanungos and the village officers. The most important of the latter are the headman who collects the revenue, the karnam, karkun or patwari who keeps the village accounts, and the chaukidar or village watchman.

INSTRUCTIONS TO GOVERNORS.

Prior to the inauguration of the Reforms the following instructions were issued to Governors under the Royal Sign Manual:—

Instructions to the Governor or acting Governor for the time being of the Presidency or Province of ——:—Whereas by the Government of India Act provision has been made for the gradual development of self-governing institutions in British India with a view to the progressive realisation of Responsible Government in that country as an integral part of our Empire, and whereas it is our will and pleasure that in the execution of the office of the Governor in and over the Presidency or the Province of ——you shall further the purposes of the said Act to the end that the institutions and methods of Government therein provided shall be laid upon the best and surest foundations, that the people of the said Presidency or Province shall acquire such habits of political action and respect such conventions as will best and soonest fit them for self-government, and that our authority and the authority of the Governor-General in Council shall be duly maintained. Now, therefore, we do hereby direct and enjoin you and declare our will and pleasure to be as follows —

1. You shall do all that lies in your power to maintain those standards of good administration, to encourage religious toleration, co-operation and good will among all classes and creeds, to ensure the probity of public finance and the solvency of the Presidency or Province, and to promote all measures making for the moral, social and industrial welfare of the people and tending to fit all classes of the population without distinction to take their due share in the public life and government of the country.

2. You shall bear in mind that it is necessary and expedient that those now and hereafter to be enfranchised shall appreciate the duties, responsibilities and advantages which spring from the privilege of enfranchisement, that is to say, that those who exercise the power, henceforward entrusted to them, of returning representatives to the Legislative Council being enabled to perceive the effects of their choice of a representative, and that those who are returned to the Council, being enabled to perceive the effects of their votes given therein, shall come to look for the redress of their grievances and the improvement of their condition to the working of representative institutions.

3. DUTY OF THE MINISTERS:—Inasmuch as certain matters have been reserved for the administration according to law of the Governor in Council, in respect of which the authority of our Governor-General in Council shall remain unimpaired, while certain other matters have been transferred to the administration of the Governor acting with a Minister, it will be for you so to regulate the business of the government of the Presidency or Province that so far as may be possible the responsibility for each of these respective classes of matters may be kept clear and distinct.

4. Nevertheless, you shall encourage the habit of joint deliberation between yourself, your councillors and your ministers in order that the experience of your official advisers may be at the disposal of your ministers, and that the knowledge of your ministers as to the wishes of people may be at the disposal of your councillors.

5. You should assist ministers by all the means in your power in the administration of the transferred subjects and advise them in regard to their relations with the Legislative Council.

6. In considering a minister's advice and deciding whether or not there is sufficient cause in any case to dissent from his opinion, you shall have due regard to his relations with the Legislative Council and to the wishes of the people of the Presidency or Province, as expressed by their representatives therein.

SPECIAL CHANGES:—But in addition to the general responsibilities with which you are, whether by statute or under this instrument, charged we do further hereby specially require and charge you:—

(1) To see that whatsoever measures in your opinion necessary for maintaining safety and tranquillity in all parts of your Presidency or Province and for preventing occasions of religious or racial conflict are duly taken and that all orders issued by our Secretary of State or by our Governor-General in Council on our behalf, to whatever matters relating, are duly complied with.

(2) To take care that due provision shall be made for the advancement and social welfare of those classes amongst the people committed to your charge, who whether on account of the smallness of their number or their lack of educational or material advantages or from any other cause, specially rely upon our protection and cannot as yet fully rely for their welfare upon joint political action, and that such classes shall not suffer or have cause to fear neglect or oppression.

(3) To see that no order of your Government and no act of your Legislative Council shall be so framed that any one of the diverse interests of, or arising from, race, religion, education, social condition, wealth or any other circumstance may receive unfair advantage or may unfairly be deprived of privileges or advantages which they have heretofore enjoyed, or be excluded from the enjoyment of benefits which may hereafter be conferred on the people at large.

(4) To safeguard all members of our services employed in the said Presidency or Province in the legitimate exercise of their functions and in the enjoyment of all recognised rights and privileges, and to see that your Government order all things justly and reasonably in their regard and that due obedience is paid to all just and reasonable orders and diligence shown in their execution.

(5) To take care that while the people inhabiting the said Presidency or Province shall enjoy all facilities for the development of commercial and industrial undertakings, no monopoly or special privilege which is against the common interests shall be established; and no unfair discrimination shall be made in matters affecting commercial or industrial interests.

Instructions to the Governor-General.

The instructions to the Governor-General were not made public while Lord Chelmsford held office, but after Lord Reading had succeeded him the following revised Instrument of Instructions was published in June 1921:—

Instructions to Our Governor-General of India given at Our Court at Buckingham Palace this 15th day of March 1921.

Whereas by the Government of India Act it is enacted that the Governor-General of India is appointed by Warrant under Our Royal Sign Manual, and We have by Warrant constituted and appointed a Governor-General to exercise the said office subject to such instructions and directions as he, or Our Governor-General for the time being, shall from time to time receive or have received under Our Royal Sign Manual or under the hand of one of Our Principal Secretaries of State;

And whereas certain instructions were issued under Our Royal Sign Manual to Our said Governor-General bearing date the nineteenth day of November 1918:

And whereas by the coming into operation of the Government of India Act, 1919, it has become necessary to revoke the said Instructions and to make further and other provisions in their stead;

Now, therefore, We do by these Our Instructions under Our Royal Sign Manual hereby revoke the aforesaid Instructions and declare Our pleasure to be as follows:—

I. Our Governor-General for the time being (thereinafter called Our said Governor-General) shall with all due solemnity cause our Warrant under Our Royal Sign Manual appointing him to be read and published in the presence of the Chief Justice for the time being or, in his absence, of the Senior Judge of one of the High Courts established in British India, and of so many of the Members of the Executive Council of Our said Governor-General as may conveniently be assembled.

Our said Governor-General shall take the Oath of Allegiance and the Oath for the due execution of the Office of Our Governor-General of India, and for the due and impartial administration of Justice in the forms hereto appended; which Oaths the said Chief Justice for the time being or, in his absence, the Senior Judge of one of Our said High Courts shall, and he is hereby required to, tender and administer unto him.

II. And We do authorise and require Our said Governor-General from time to time by himself or by any other person to be authorised by him in that behalf, to administer to every person who shall be appointed by Us by Warrant

under Our Royal Sign Manual to be a Governor of one of Our presidencies or provinces in India, and to every person who shall be appointed to be a Lieutenant-Governor or a Chief Commissioner, the Oaths of Allegiance and of Office in the said forms.

III. And We do authorise and require Our said Governor-General from time to time, by himself or by any other person to be authorised by him in that behalf, to administer to every person who shall be appointed by Us by Warrant under Our Royal Sign Manual or by the Secretary of State in Council of India to be a Member of the Governor-General's Executive Council or a Member of a Governor's Executive Council, and to every person who shall be appointed to be a Member of a Lieutenant-Governor's Executive Council, and to every person whom any of Our said Governors shall appoint to be a Minister, the Oaths of Allegiance and of Office in the said forms together with the Oath of Secrecy hereto appended.

IV. And We do further direct that every person who under these Instructions shall be required to take an Oath, may make an affirmation in place of an Oath if he has any objection to making an Oath.

V. And We do hereby authorise and empower Our said Governor-General in Our name and on Our behalf to grant to any offender convicted in the exercise of its criminal jurisdiction by any Court of Justice within Our said Territories a pardon either free or subject to such lawful conditions as to him may seem fit.

VI. And inasmuch as the policy of Our Parliament is set forth in the Preamble to the said Government of India Act, 1919, We do hereby require Our said Governor-General to be vigilant that this policy is constantly furthered alike by his Government and by the local Governments of all Our presidencies and provinces.

VII. In particular it is Our will and pleasure that the powers of superintendence, direction and control over the said local Governments vested in Our said Governor-General and in Our Governor-General in Council shall, unless grave reason to the contrary appears, be exercised with a view to furthering the policy of the local Governments of all Our Governors' provinces, when such policy finds favour with a majority of the Members of the Legislative Council of the province.

VIII. Similarly, it is Our will and pleasure that Our said Governor-General shall use all endeavour consistent with the fulfilment of his responsibilities to Us and to Our Parliament for the welfare of Our Indian subjects, that the administration of the matters committed to the direct charge of Our Governor-General in Council may be conducted in harmony with the wishes of Our said subjects as expressed by their representatives in the Indian Legislature, so far as the same shall appear to him to be just and reasonable.

IX. For above all things it is Our will and pleasure that the plans laid by Our Parliament for the progressive realisation of responsible government in British India as an integral part of Our Empire may come to fruition, to the end that British India may attain its due place among Our Dominions. Therefore We do charge Our said Governor-General by the means aforesaid and by all other means which may to him seem fit to guide the course of Our subjects in India whose governance We have committed to his charge so that, subject on the one hand always to the determination of Our Parliament, and, on the other hand, to the co-operation of those on whom new opportunities of service have been conferred, progress toward, such realisation may ever advance to the benefit of all Our subjects in India.

X. And We do hereby charge Our said Governor-General to communicate these Our Instructions to the Members of his Executive Council, and to publish the same in such manner as he may think fit

Administrative Divisions.

Provinces.	No. of Districts.	Area in Square miles.	Population (1921).
Ajmer Merwara	2	2,711	495,899
Andamans and Nicobars	....	3,143	26,833
Assam	12	52,959	7,598,861
Baluchistan	6	45,804	421,679
Bengal	28	78,412	46,653,177
Bihar and Orissa	21	83,205	33,998,778
Bombay (Presidency)	26	123,064	19,338,586
Bombay	26	75,918	16,005,170
Sind	6	47,066	3,278,493
Aden	....	80	54,923
Burma	41	236,738	13,205,564
Central Provinces and Berar	22	100,345	13,908,514
Coorg	1	1,582	164,459
Delhi	....	....	486,741
Madras	24	141,726	42,322,270
North-West Frontier Province (Districts and administered Territories)	5	16,466	2,247,696
Punjab	29	97,209	20,678,393
United Provinces of Agra & Oudh	48	107,164	45,590,946
Agra	36	83,198	33,420,638
Oudh	12	23,966	12,170,308
Total, British Territory	267	1,097,001	247,138,396

States and Agencies.	No. of Districts.	Area in Square miles.	Population (1921).
Baluchistan States	....	86,511	378,999
Baroda State	....	8,099	2,121,875
Bengal States	....	32,773	896,173
Bihar and Orissa	....	....	5,965,431
Bombay States	....	65,761	7,412,341
Central India Agency	....	78,772	9,180,403
Central Provinces States	....	31,188	2,068,482
Assam States	....	....	383,672
Hyderabad State	....	82,698	12,453,627
Kashmir State	....	80,900	3,322,080
Madras States	....	9,969	5,460,029
Cochin State	....	....	979,019
Travancore State	....	....	4,005,849
Mysore State	....	29,444	5,976,660
North-West Frontier Province (Agencies and Tribal areas).	....	....	2,828,055
Punjab States	....	36,592	4,415,401
Rajputana Agency	....	127,541	9,357,012
Sikkim	....	....	81,722
United Provinces States	....	5,079	1,134,824
Total, Native States	....	**675,267**	**71,936,786**
Grand Total, India	....	**1,772,168**	**319,075,182**

The Bombay Presidency.

The Bombay Presidency stretches along the west coast of India, from Sind in the North to Kanara in the South. It embraces, with its feudatories and Aden, an area of 187,074 square miles and a population of 26,757,648. Of this total 63,453 square miles are in Native States, with a population of 7,412,341. Geographically included in the Presidency but under the Government of India is the first class Native State of Baroda, with an area of 8,182 square miles and a population of 2,032,798.

The Presidency embraces a wide diversity of soil, climate and people. In the Presidency Proper are the rich plains of Gujarat, watered by the Nerbudda and the Tapti, whose fertility is so marked that it has long been known as the Garden of India. South of Bombay City the province is divided into two sections by the Western Ghats, a range of hills running parallel to the coast. Above Ghats are the Deccan Districts, with a poor soil and an arid climate, south of these come the Karnatic districts. On the sea side of the Ghats is the Konkan, a rice-growing tract, intercepted by creeks which make communication difficult. Then in the far north is Sind, totally different from the Presidency Proper, a land of wide and monotonous desert except where irrigation from the Indus has brought abounding fertility.

The People.

The population varies as markedly as soil and climate. In Sind Mahomedans predominate. Gujarat has remained true to Hinduism although long under the dominion of powerful Mahomedan kings. Here there is an amplitude of caste divisions, and a people, who although softened by prosperity, are amongst the keenest trading races in the world. The Deccan peasant has been seasoned by adversity; the saying goes that the Deccan expects a famine one year in every three, and gets it; the population is much more homogeneous than in Gujarat, and thirty per cent. are Mahrattas. The Karnatic is the land of the Lingayets, a Hindu reforming sect of the twelfth century, and in the Konkan there is a large proportion of Christians. Four main languages are spoken, Sindi, Gujarati, Marathi and Kanarese, with Urdu a rough *lingua franca* where English has not penetrated. The main castes and tribes number five hundred.

Industries.

The principal industry is agriculture, which supports sixty-four per cent. of the population. In Sind the soils are wholly alluvial, and under the influence of irrigation produce yearly increasing crops of wheat and cotton. In Gujarat they are of two classes, the black cotton soil, which yields the famous Broach cottons, the finest in India, and alluvial, which under careful cultivation in Ahmedabad and Kaira makes splendid garden land. The dominant soil characteristic of the Deccan is black soil, which produces cotton, wheat, gram and millet, and in certain tracts rich crops of sugarcane. The Konkan is a rice land, grown under the abundant rains of the submontane regions, and in the south the Dharwar cotton vies with Broach as the best in India. There are no great perennial rivers suitable for irrigation, and the harvest is largely dependent upon the seasonal rainfall, supplemented by well irrigation. A chain of irrigation works, consisting of canals fed from great reservoirs in the region of unfailing rainfall in the Ghats, is gradually being completed, and this will ultimately make the Deccan immune to serious drought. More than any other part of India the Presidency has been scourged by famine and plague during the past twenty years. The evils have not been unmixed, for tribulation has made the people more self-reliant, and the rise in the values of all produce, synchronising with a certain development of industry, has induced a considerable rise in the standard of living. The land is held on what is known as the ryotwari tenure, that is to say, each cultivator holds his land direct from Government under a moderate assessment, and as long as he pays this assessment he cannot be dispossessed.

Manufactures.

Whilst agriculture is the principal industry, others have no inconsiderable place. The mineral wealth of the Presidency is small, and is confined to building stone, salt extracted from the sea, and a little manganese. But the handicrafts are widely distributed. The handloom weavers produce bright-coloured saris, and to a diminishing extent the exquisite kincobs of Ahmedabad and Surat. Bombay silver ware has a place of its own, as well as the brass work of Poona and Nasik. But the tendency is to submerge the indigenous handicrafts beneath industry organised on modern lines. Bombay is the great centre in India of the textile trade. This is chiefly found in the headquarter city, Bombay.

Number of Looms in Bombay Island.	65,521
Number of Spindles in Bombay Island.	3,117,284
Number of hands employed in the Textile Industry in Bombay Island.	149,224
Consumption of Cotton by the Mills in Bombay Island	5,87,099 Candies of 784 lbs. each
Number of Spindles in Ahmedabad.	1,127,994
Number of Looms in Ahmedabad ..	26,162
Number of Spindles in Sholapore ..	266,900
Number of Looms in Sholapore ..	4,687
Number of Spindles in the Bombay Presidency (excluding Bombay Island)	1,910,192
Number of Looms in the Bombay Presidency (excluding Bombay Island)..	40,008

Great impetus has been given to Bombay industries by the provision of electric power generated fifty miles away on the Ghats, and the year 1919 witnessed a phenomenal flotation of new industrial companies of almost every description.

The situation of Bombay on the western sea-board in touch at once with the principal markets of India and the markets of the West has given Bombay an immense sea-borne trade. The older ports, Surat, Broach, Cambay and Mandvie, were famous in the ancient days, and their bold and hardy mariners carried Indian commerce to the Persian Gulf and the coasts of Africa. But the opening

of the Suez Canal and the increasing size of ocean steamers have tended to concentrate it in modern ports with deep water anchorages, and the sea-borne trade of the Presidency is now concentrated at Bombay and Karachi, although attempts are being made to develop Mormugao, in Portuguese territory, into an outlet for the trade of the Southern Mahratta Country.

Administration.

The Presidency is administered by a Governor and an Executive Council of four members with the assistance of three Ministers. The exact change made in the functions of the Provincial Governments is indicated in the section on the Provincial Governments (*q. v.*) where a description is given of the division of the administration into two branches, the Reserved Subjects, administered by the Governor and his Council and the Transferred Subjects, administered by the Governor and his Ministers, the whole Government commonly meeting and acting as one. In another part of that section the division between Reserved and Transferred subjects is shown. This new form of administration under the Reform Act of 1919 came into operation in January 1921. All papers relating to public service business reach Government through the Secretariat, divided into seven main departments each under a Secretary (*a*) Finance; (*b*) Revenue: (*c*) Home; (*d*) Political; (*e*) General, Educational, Marine and Ecclesiastical; (*f*) Legal; (*g*) Public Works. The senior of the Civilian Secretaries is entitled the Chief Secretary. The Government frequently moves. It is in Bombay from November to the end of March; at Mahableshwar from April to June; in Poona from June to November; but the Secretariat is always in Bombay. Under the Governor-in-Council the Presidency is administered by four Commissioners. The Commissioner in Sind has considerable independent powers. In the Presidency Proper there are Commissioners for the Northern Division, with headquarters at Ahmedabad; the Central Division at Poona; and the Southern Division at Belgaum. Each district is under a Collector, usually a Covenanted Civilian, who has under him one or more Civilians as Assistant Collectors, and one or more Deputy Collectors. A collectorate contains on an average from eight to ten talukas, each consisting of from one to two hundred villages whose whole revenues belong to the State. The village officers are the patel, who is the head of the village both for revenue and police purpose; the talati or kulkarni, clerk and accountant; the messenger and the watchman. Over each Taluka or group of village is the mamlatdar, who is also a subordinate magistrate. The charge of the Assistant Deputy Collector contains three or four talukas. The Collector and Magistrate is over the whole District. The Commissioners exercise general control over the Districts in their Divisions. The control of the Government over the Native States of the Presidency is exercised through Political Agents.

Justice.

The administration of justice is entrusted to the High Court sitting in Bombay, and comprising a Chief Justice, who is a barrister, and seven puisne judges, either Civilians, Barristers, or Indian lawyers. In Sind the Court of the Judicial Commissioner (The Judicial Commissioner and three Additional Judges) is the highest court of civil and criminal appeal. Of the lower civil courts the court of the first instance is that of the Subordinate Judge recruited from the ranks of the local lawyers. The Court of first appeal is that of the District or Assistant Judge, or of a first class subordinate judge with special powers. District and Assistant Judges are Indian Civilians, or members of the Provincial Service. In cases exceeding Rs. 5,000 in value an appeal from the decision of the Subordinate or Assistant Judge and from the decision of the District Judge in all original suits lies to the High Court. District and Assistant Judges exercise criminal jurisdiction throughout the Presidency, but original criminal work is chiefly disposed of by the Executive District Officers. Capital sentences are subject to confirmation by the High Court. In some of the principal cities Special Magistrates exercise summary jurisdiction (Bombay has four Presidency Magistrates, as well as Honorary Magistrates exercising the functions of English Justices of the Peace) and a Court of Small Causes, corresponding to the English Country Courts.

Local Government.

Local control over certain branches of the administration is secured by the constitution of local boards and municipalities, the former exercising authority over a District or a Taluka, and the latter over a city or town. These bodies are composed of members either nominated by Government or elected by the people, who are empowered to expend the funds at their disposal on education, sanitation, the construction of roads and tanks, and general improvements. Their funds are derived from cesses on the land revenue, the toll and ferry funds. The tendency of recent years has been to increase the elective and reduce the nominated element, to allow these bodies to elect their own chairmen, whilst large grants have been made from the general revenues for water supply and drainage.

Public Works.

The Public Works Department is under the control of two Chief Engineers who act as Secretaries to the Government; one for General Works and the other for Irrigation. Under them are Superintending Engineers in charge of divisions and Executive Engineers in charge of districts, with the Consulting Architect. The chief irrigation works are in Sind and consist of a chain of canals fed by the annual inundations from the Indus and one perennial canal the Jamrao. In the Presidency proper the principal protective works are the Nera Canal, Gokak Canal, Mutha Canal and the Godavari Canal Scheme. In addition there is under construction a chain of protective irrigation works, originating in reservoirs in the Ghat regions. The Godavari canals were completed during the year 1917-18, the Pravara canals are approaching completion and the works in connection with the Nira Right Bank Canal are making good progress.

Police.

The Police Force is divided into three categories: District Police, Railway Police and the Bombay City Police. The District Police are under the Inspector-General who is either a member of the Gazetted Force or a Covenanted Civilian. Under him are the Deputy Inspector-Generals for Sind and the Northern and Southern Ranges of the Presidency proper, for Railways and for Criminal Investigation. District Superintendents of Police have charge of each District with a regular cadre comprising Assistant Superintendents, Sub-Inspectors, Chief Constables and Constables. The Bombay City Police is a separate force maintained by Government under a Commissioner who is responsible direct to Government.

Education.

Education is imparted partly through direct Government agency, partly through the medium of grants-in-aid. Government maintain Arts Colleges at Bombay, Poona, Gujarat and Dharwar; the Grant Medical College, the Poona College of Engineering, the Agricultural College, Veterinary College, School of Art, Law School and a College of Commerce. The Royal Institute of Science is now open in Bombay. Also in Bombay City, and the headquarters of each district, a model secondary school. The other secondary schools are in private hands; the majority of the primary schools are maintained by District and Local Boards with a grant-in-aid. The Bombay Municipality is responsible for primary education in Bombay City. (*q. v.* Education).

The Compulsory Education Act passed in 1922 enables local bodies to enforce compulsory primary education, the cost of the scheme being defrayed partly by Government and partly by the local authority.

The Educational Department is administered by a Director, with an Inspector in each Division and a Deputy Inspector with Assistants in each district. Higher education is controlled by the Bombay University (established in 1857) consisting of the Chancellor (the Governor of the Presidency), the Vice-Chancellor appointed by Government for two years), and 100 Fellows of whom 10 are *ex-officio*; 10 elected by the Graduates, 10 by the Faculties, and 80 are nominated by the Chancellor.

The principal educational institutions are:—

Government Arts Colleges—

Elphinstone College, Bombay, Principal, Mr. A. L. Covernton.

Deccan College, Poona, Principal, Mr. H. G. Rawlinson, M.A.

Gujarat College, Ahmedabad, Principal, the Rev. W. G. Robertson.

Dharwar College.

Private Arts Colleges—

St. Xaviers, Bombay (Society of Jesus), Principal, Rev. Father Blatter.

Wilson College, Bombay (Scottish Mission), Principal, Rev. J. Mackenzie.

Ferguson College, Poona (Deccan Educational Society), Principal, Mr. Kanitkar,

Baroda College, Baroda (Baroda State), Principal, Mr. A. B. Clarke.

Samaldas College, Bhavnagar (Bhavnagar State), Principal, Mr. T. K. Shabani.

Bahauddinbhai College, Junagadh State, Principal, Mr. S. H. Hodivala.

Special Colleges—

Grant Medical College, Bombay (Government), Dean, Major B. Higham.

College of Engineering, Poona (Government), Principal, Mr. W. L. C. Trench.

Agricultural College, Poona (Government), Principal, Dr. William Burns.

Chiefs' College, Rajkot, Principal, Mr. C. Mayne.

College of Science, Ahmedabad.

Law School, Bombay, Principal, Mr. B. J. Wadia.

College of Commerce, Bombay, Principal, Mr. M. L. Tannan.

Veterinary College, Bombay, Mr. K. Hewlett.

Bombay Bacteriological Laboratory, Director Lt.-Col. Glen Liston, C.I.E., I.M.S.

Sir J. J. School of Art, Bombay (Government), Principal, Mr. W. E. G. Solomon.

Victoria Technical Institute, Bombay. Principal, Mr. A. J. Turner.

Medical.

The Medical Department is in charge of the Surgeon-General and Sanitation of the Director of Public Health, both members of the Indian Medical Service. Civil Surgeons stationed at each district headquarters are responsible for the medical work of the district; whilst sanitation is entrusted to one of the Assistant Directors of Public Health. Three large hospitals are maintained by the Government in Bombay, and well-equipped hospitals exist in all important up-country stations. Over three million persons including 78,000 in-patients are treated annually. The Presidency contains 6 Lunatic Asylums and 16 institutions for the treatment of Lepers. Vaccination is carried out by a staff under the direction of the Director of Public Health. Sanitary work has received an immense stimulus from the large grants made by the Government of India out of the opium surpluses.

Finance.

Under the Reform Scheme of 1919 Provincial Finance entered on a new phase. Before the passing of this Act Provincial finance was incorporated in Imperial Finance. The Provinces had certain heads of revenue of their own and other heads which they divided with the Government of India. By the new constitution a comparatively clean cut was made between the Finances of the Government of India and those of the Provinces. Such revenues as they enjoy the Provinces enjoy in full, and in return they make cash contributions to the Government of India, fixed for a term of years. The general principle underlying this settlement is that those contributions shall gradually disappear. The present contribution of the Government of Bombay is Rs. 56 lakhs.

Estimated Revenue for 1923-24.

	PRINCIPAL HEADS OF REVENUE.	Rs.
II	Taxes on Income	....
V	Land Revenue	5,75,11,000
VI	Excise	4,01,81,000
VII	Stamps	2,06,35,000
VIII	Forests	82,79,000
IX	Registration	13,85,000
	Total ..	12,79,91,000
	Irrigation, Navigation, Embankment, &c.	
XIII	Works for which Capital Accounts are kept	43,90,000
XIV	Work for which no Capital Accounts are kept	1,40,000
	Total ..	45,30,000
	Debt Service.	
XVI	Interest	1,00,05,000
	Civil Administration.	
XVII	Administration of Justice	17,46,000
XVIII	Jails and Convict Settlements	4,76,000
XIX	Police	1,62,000
XX	Ports and Pilotage	....
XXI	Education	10,05,000
XXII	Medical	6,23,000
XXIII	Public Health	2,68,000
XXIV	Agriculture	3,11,000
XXV	Industries	1,09,000
XXVI	Miscellaneous Departments	1,18,000
	Total ..	48,18,000
	Civil Works.	
XXX	Civil Works	14,68,000
	Miscellaneous.	
XXXIII	Receipts in aid of Superannuation	12,93,000
XXXIV	Stationery and Printing	2,30,000
XXXV	Miscellaneous	3,11,000
	Total ..	18,34,000
XL	Miscellaneous adjustments between the Central and Provincial Governments	12,57,000
	Total Revenue ..	15,19,03,000
	Capital Account not charged to Revenue.	
XLII	Bombay Development Scheme	1,06,75,000
	Debts, Deposits and Advances	12,84,09,000
	Opening Balance	3,66,76,000
	Grand Total ..	32,76,63,000

Estimated Expenditure for 1923-24.

	DIRECT DEMANDS ON THE REVENUE.	
2.	Taxes on Income	....
5.	Land Revenue	1,60,89,000
6.	Excise	30,00,000
7.	Stamps	6,32,000
8.	Forest	47,51,000
9.	Registration	7,43,000
	Total ..	2,70,15,000

Estimated Expenditure for 1923-24—*contd.*

		Rs.
	Irrigation, Embankment, &c., Revenue Account.	
14.	Interest on works for which Capital Accounts are kept	50,03,000
15.	Other Revenue Expenditure financed from Ordinary Revenue	45,13,000
	Total	95,16,000
16.	Construction of Irrigation, Embankment, &c., Works	30,00,000
	Debt Service.	
19.	Interest on Ordinary Debt	1,48,65,000
21.	Sinking Funds	9,39,000
	Total	1,58,04,000
	Civil Administration	
22.	General Administration	1,19,51,000
24.	Administration of Justice	72,58,000
25.	Jails and Convict Settlements	27,49,000
26.	Police	1,88,54,000
27.	Ports and Pilotage	36,000
30.	Scientific Departments	67,000
31.	Education	1,89,84,000
32.	Medical	48,80,000
33.	Public Health	22,30,000
34.	Agriculture	25,95,000
35.	Industries	3,63,000
37.	Miscellaneous Departments	5,02,000
	Total	7,04,69,000
	Currency, Mint and Exchange.	
40.	Exchange	....
	Civil Works.	
41.	Civil Works	1,16,05,000
	Miscellaneous.	
43.	Famine Relief and Insurance	31,60,000
45.	Superannuation Allowances and Pensions	55,14,000
46.	Stationery and Printing	21,35,000
47.	Miscellaneous	34,52,000
	Total	1,42,61,000
51.	Contribution and Assignments to Central Government by Provincial Government	56,00,000
52.	Miscellaneous Adjustments between the Central and Provincial Governments	....
	Total	56,00,000
	Total Expenditure	15,72,70,000
	Capital Account not charged to Revenue.	
55.	Construction of Irrigation Works	52,72,000
59.	Bombay Development Scheme	2,96,91,000
	Other Expenditure not charged to Revenue	1,17,55,000
	Debts Deposit and Advances	8,24,09,000
	Closing Balance	4,12,66,000
	Grand Total	32,76,63,000

Governor and President in Council.

His Excellency The Right Hon'ble Sir Leslie Orme Wilson, P.C., G.C.I.E., C.M.G., D.S.O.

Personal Staff.

Private Secy.—C. G. Adam, C.S.I., I.C.S.

Mily. Secretary—Major H. G. Vaux, C.I.E., M. V. O.—(on leave).

Surgeon.—Lt.-Col. G. J. Grafton-Young, I.M.S.

Aides-de-Camp.—Capt. G. S. Rawstorne, 2nd Bn., Seaforth Highlanders, Lt. J. H. Carmichael, 1st Bn., Argyle and Sutherland Highlanders, Captain J. R. Aird, M. C., Grenadier Guards and Lt. R. G. G. Byron, 4th Royal Irish Dragoon Guards.

Honorary Aides-de-Camp.—Captain A. K. MacEwan, O. B. E.; Mr. C. N. Moberley, C.I.E., Stephen Calvocoressi; Meherban Sir Parashramrav Ramchandrarav Alias Bhausaheb Patwardhan, K.C.I.E., Chief of Jamkhandi; Meherban Abdul Majid Khan Diller Jang Bahadur, Nawab of Savanur; Thakor Saheb Bahadursinhji Mansinhji of Palitana; Kumar Shri Shivaisinhji of Jamnagar; Shaikh Abdul Khaliq of Mangrol.

Commandant H. E. the Governor's Bodyguard.—Major J. Nethersole, M.C., 25th Cavalry.

Indian Aide-de-Camp.—Captain Balkrishna Rao, Sardar Bahadur, 110th Mahrattas.

Members of Council and Ministers.

The Hon. Sir M. H. W. Hayward, Kt., I.C.S., The Hon. Mr. H. S. Lawrence, C.S.I., I.C.S., The Hon. Mr. C. V. Mehta, The Hon. Mr. Cowasji Jehangir (Jr.), C.I.E., O.B.E., The Hon. Khan Bahadur Shaikh Ghulam Hussain Hidayatallah. The Hon. Mr. A. M. K. Dehlavi and the Hon. Mr. B. V. Jadhav, M.A., LL.B.

The Educational portfolio includes, among other subjects, Medical Administration, Public Health, Sanitation and Industrial Development. The Minister of Local Self-Government also deals with Public Works (roads and buildings) and the Civil Veterinary Department; while Agriculture, Co-operative Societies, Registration and some other matters are in charge of the Minister of Forests and Excise.

SECRETARIES TO GOVERNMENT.

Chief Secretary, Financial Department.—G. E. Chatfield, C.I.E., I.C.S.

Home Department.—Alexander Montgomerie, C.I.E., I.C.S.—(on deputation).

Secretary, Political Department—J. B. E. Hotson, O.B.E., I.C.S.

Revenue—G. A. Thomas, B.A., I.C.S.

General, Educational, Marine and Ecclesiastical—J. C. Ker, M.A., I.C.S.

Legal Department and Remembrancer of Legal Affairs.—Stephen James Murphy, I.C.S.

Public Works Department.—E. M. Proes C.S.I.

Public Works Department, Joint Secretary—R. T. Harrison.

MISCELLANEOUS APPOINTMENTS.

Advocate-General, Jamshedji Behramji Kanga, M.A., LL.B.

Inspector-General of Police, F. C. Griffith, O.B.E.

Director of Public Instruction, The Hon. Mr. J. G. Covernton. C.I.E.—(on furlough); F. B. P. Lory (Acting).

Surgeon-General, The Hon. Major-General W. E. Jennings, M.D., I.M.S.

Oriental Translator, Shaikh Yakub Vazir Muhammad, M.B.E.

Chief Conservator of Forests, W. E. Copleston. C.S.I.

Talukdari Settlement Officer, J. H. Garrett.

Settlement Commissioner and Director of Land Records, F. G. H. Anderson.

Director of Agriculture, Dr. Harold H. Mann, D. Sc.

Registrar of Co-operative Societies, Otto Rothfeld, B.A., I.C.S.

Municipal Commissioner, Bombay, H.B. Clayton. C.I.E., I.C.S.

Vice-Chancellor, Bombay University, Sir Chimanlal H. Setalvad.

Registrar, Bombay University, Fardunji Dastur.

Commissioner of Police, Bombay, P. A. Kelly.

Director of Public Health, Lieut.-Col. William O'Sullivan Murphy, M.B., I.M.S.

Accountant-General, W. Alder, C.I.E., I.C.S.

Inspector-General of Prisons, Lt.-Col. F. O. N. Mell, C.I.E., I.M.S.

Postmaster-General, P. G. Rogers, C.I.E., I.C.S.

Commissioner of Customs, Salt, Opium and Excise, W. C. Shepherd, B.A., I.C.S.

Collector of Customs, Bombay, A. M. Green, M.A., I.C.S.

Consulting Architect to Government, Samuel Woods Hill, A.R.I., B.A.

Consulting Surveyor to Government, Arthur Edward Mirams, F.S.I., F.S.A., F.R.S.I.

Registrar of Companies, Capt. H. C. B. Mitchell.

Director of Development, Sir Lawless Hepper, KT., R.E.

Director, Labour Office, G. Findlay Shirras, M.A.

Director, Bureau of Information, G. F. Gennings.

Sheriff, Iswardas Lakhmidas, J. P.

GOVERNORS OF BOMBAY.

Sir Abraham Shipman	1662
Died on the island of Anjediva in Oct. 1664	
Humfrey Cooke	1665
Sir Gervase Lucas	1666
Died, 21st May, 1667.	
Captain Henry Garey (*Officiating*) ..	1667
Sir George Oxenden	1668
Died in Surat, 14th July, 1669.	

Gerald Aungier 1669
Died in Surat, 30th June, 1677.
Thomas Rolt 1677
Sir John Child, Bart. 1681
Bartholomew Harris 1690
Died in Surat, 10th May, 1691.
Daniel Annesley (*Officiating*) 1694
Sir John Gayer 1694
Sir Nicholas Waite.. 1704
William Aislabie 1708
Stephen Strutt (*Officiating*) 1715
Charles Boone 1715
William Phipps 1722
Robert Cowan 1729
Dismissed.
John Horne 1734
Stephen Law 1739
John Geekie (*Officiating*) 1742
William Wake 1742
Richard Bourchier.. 1750
Charles Crommelin.. 1760
Thomas Hodges 1767
Died, 23rd February, 1771.
William Hornby 1771
Rawson Hart Boddam 1784
Rawson Hart Boddam 1785
Andrew Ramsay (*Officiating*) 1788
Major-General William Medows 1788
Major-General Sir Robert Abercromby, K.C.B. (*a*). 1790
George Dick (*Officiating*) 1792
John Griffith (*Officiating*).. 1795
Jonathan Duncan 1795
Died, 11th August, 1811.
George Brown (*Officiating*) 1811
Sir Evan Nepean, Bart. 1812
The Hon. Mountstuart Elphinstone .. 1819
Major-General Sir John Malcolm, G.C.B. 1827
Lieut.-General Sir Thomas Sidney Beckwith, K.C.B. 1830
Died, 15th January, 1831.

John Romer (*Officiating*) 1831
The Earl of Clare 1831
Sir Robert Grant, G.C.H. 1835
Died, 9th July, 1838.
James Farish (*Officiating*) 1838
Sir J. Rivett-Carnac, Bart. 1839
Sir William Hay Macnaghten, Bart. (*b*) 1841
George William Anderson (*Officiating*) .. 1841
Sir George Arthur, Bart., K.C.H. 1842
Lestock Robert Reid (*Officiating*) .. 1846
George Russell Clerk 1847
Viscount Falkland 1848
Lord Elphinstone, G.C.H., P.C. 1853
Sir George Russell Clerk, K.C.B. (2nd time) 1860
Sir Henry Bartle Edward Frere, K.C.B. 1862
The Right Hon. William Robert Seymour Vesey FitzGerald. 1867
Sir Philip Edmond Wodehouse, K.C.B. .. 1872
Sir Richard Temple, Bart., K.C.S.I. .. 1877
Lionel Robert Ashburner, C.S.I. (*Acting*).. 1880
The Right Hon. Sir James Fergusson, Bart., K.C.M.G. 1880
James Braithwaite Peile, C.S.I. (*Acting*).. 1885
Baron Reay 1885
Baron Harris 1890
Herbert Mills Birdwood, C.S.I. (*Acting*) .. 1890
Baron Sandhurst 1890
Baron Northcote, C.B. 1900
Sir James Monteath, K.C.S.I. (*Acting*) .. 1903
Baron Lamington, G.C.M.G., G.C.I.E. .. 1903
J. W. P. Muir-Mackenzie, C.S.I. (*Acting*). 1907
Sir George Sydenham Clarke, G.C.M.G., G.C.I.E. (*c*). 1907
Baron Willingdon, G.C.I.E 1913
Sir George Ambrose Lloyd, G.C.I.E., D.S.O. 1918
Sir Leslie Orme Wilson, P.C., G.C.I.E., C.M.G., D.SO. 1923

(*a*) Proceeded to Madras on duty in Aug., 1793, and then joined the Council of the Governor-General as Commander-in-Chief in India on the 28th Oct., 1793.

(*b*) Was appointed Governor of Bombay by the Honourable the Court of Directors on the 4th Aug., 1841, but, before he could take charge of his appointment, he was assassinated in Cabul on the 23rd Dec., 1841.

(*c*) Afterwards (by creation) Baron Sydenham.

BOMBAY LEGISLATIVE COUNCIL.

ELECTED MEMBERS.

Name and class of Constituency.	Name of Member.
Bombay City (Non-Muhammadan North) Urban Constituency.	Mr. J. K. Mehta. Mr. Poonjabhai Thackersey. Mr. A. N. Surve
Bombay City (Non-Muhammadan South) Urban Constituency.	Mr. K. F. Nariman. Mr. M. B. Velkar. Dr. K. E. Dadachanji.
Karachi City (Mon-Muhammadan) Urban Constituency.	Mr. Durgadas Bhojraj Advani.
Ahmedabad City (Non-Muhammadan) Urban Constituency.	Mr. Gajanan Krishnarao Mavlankar.
Surat City (Non-Muhammadan) Urban Constituency.	Mr. Maganlal Motiram Mehta.
Sholapur City (Non-Muhammadan) Urban Constituency.	Mr. Nagappa Aralappa Abdulpurkar.
Poona City (Non-Muhammadan) Urban Constituency.	Mr. Laxman Balwant Bhopatkar, M.A., LL.B.
Ahmedabad District (Non-Muhammadan) Rural Constituency.	Mr. Jethalal Chimanlal Swaminarayan. Mr. Harilal Dalsukhram Saheba.
Broach District (Non-Muhammadan) Rural Constituency.	Mr. Harilal Harjivandas Narielwalla.
Kaira District (Non-Muhammadan) Rural Constituency.	Rao Saheb Dadubhai Purshotamdas Desai. Mr. Dhanabhai Narsinhbhai Patel.
Panch Mahals District (Non-Muhammadan) Rural Constituency.	Mr. Wamanrao Sitaram Mukadam.
Surat District (Non-Muhammadan) Rural Constituency.	Mr. Hassamal B. Shivdasani. Dr. M. K. Dixit.
Thana and Bombay Suburban Districts (Non-Muhammadan) Rural Constituency.	Mr. Govind Balwant Pradhan. Mr. Shankarrao Jayaramrao (already notified reserved seat).
Ahmednagar District (Non-Muhammadan) Rural Constituency.	Mr. Chintaman Mohaniraj Sapturishi. Mr. Namdeo Eknath Navale (Reserved seat.)
East Khandesh District (Non-Muhammadan) Rural Constituency.	Mr. Luxman Shivram Chaudari. Dongarsing Ramji Patil. Mr. Purshotam Gopal Joshi.
Nasik District (Non-Muhammadan) Rural Constituency.	Mr. R. G. Pradhan. Mr. Ramchandra Dharmaji Shinde, B.A., LL.B (Reserved seat.)
Poona District (Non-Muhammadan) Rural Constituency.	Mr. Narayan Ramji Gunjal. Mr. Gangajirao Mukundrao Kalbhor.
Satara District (Non-Muhammadan) Rural Constituency.	Mr. R. G. Soman. Mr. B. V. Jadhav (Minister). K. B. D. B. Cooper.
Belgaum District (Non-Muhammadan) Rural Constituency.	**Mr. B. K. Dalvi.** **Mr. S. N. Augadi.**

Name and class of Constituency.	Name of Member.
Bijapur District (Non-Muhammadan) Rural Constituency.	Mr. S. A. Sardesai of Rakkasgi.
Dharwar District (Non-Muhammadan) Rural Constituency.	Mr. Vishwanath Narayan Jog. Mr. Shiddappa Tatappa Kambli.
Kanara District (Non-Muhammadan) Rural Constituency.	Mr. Manjunath Devarbhatt Karki.
Ratnagiri District (Non-Muhammadan) Rural Constituency.	Mr. Bhaskar Ramchandra Nanal, B.A., LL.B., Mr. Venkatrao Anandrao Survey (Reserved seat.)
Eastern Sind (Non-Muhammadan) Rural Constituency.	Mukhi Jethanand Pritamdas.
Western Sind (Non-Muhammadan) Rural Constituency.	Mr. Bhojsing Gurdinomal Pahalajani.
Sholapur District (Non-Muhammadan) Rural Constituency.	Mr. Valchand Ramchand Kothari.
Kolaba District (Non-Muhammadan) Rural Constituency.	Mr. Madhavrao Baburao Powar.
Western Khandesh District (Non-Muhammadan) Rural Constituency.	Mr. Shankar Shrikrishna Deo.
Bombay City (Muhammadan) Urban Constituency.	Mr. Jafferbhoy A. Lalji. Mr. Hussenbhoy M. Rahimtoola.
Karachi City (Muhammadan) Urban Constituency.	Haji Abdullah Haroon.
Ahmedabad and Surat Cities (Muhammadan) Urban Constituency.	Khan Saheb A. M. Mansuri.
Poona and Sholapur Cities (Muhammadan) Urban Constituency.	Mr. Abdul Latif Haji Hajrat Khan of Sholapur.
The Northern Division (Muhammadan) Rural Constituency.	Mr. Alibhai Esabhai Patel. Mr. Ali Mahomedkhan Dehlavi (Minister). Sardar Narharsinghji Iswarshinghji.
The Central Division (Muhammadan) Rural Constituency.	Maulvi Rafiuddin Ahmed. Mr. Giyasuddin Ziauddin Khatib. Haji Inayatulla.
The Southern Division (Muhammadan) Rural Constituency.	Mr. Abdulkadar *alias* Fakirmahomed Ibrahim. Khan Pathan of Dharwar. Khan Bahadur Ismailsaheb Madarsaheb Bedrekar of Bijapur. Mr. Sayad Sahajadesaheb Haidarsaheb Inamdar of Belgaum.
Hyderabad District (Muhammadan) Rural Constituency.	The Hon. K. B. Ghulam Husain Hidayatallah (Minister). Mr. Noor Mahomed Mahomed Sijawal.
Karachi District (Muhammadan) Rural Constituency.	Haji Fazul Muhammad. Haji Khamiso Gul Mahomed.
Larkana District (Muhammadan) Rural Constituency.	K. B. Shah Nawazkhan Ghulam Murtaza Bhutto. K. S. Karimbaksh Ali Mardankhan Jatoi. Mr. Mahomed Ayub Shah Mahomed Khuhro.
Sukkur District (Muhammadan) Rural Constituency.	Mr. Rasulbux Shah. **Mr. K. C. Jan Mahomed Khan.**

Name and class of Constituency.	Name of Member.
Thar and Parkar (Muhammadan) Rural Constituency.	Mr. Ghulam Nabi Shah Moujali Shah Syed.
	Mr. Jan Mahomed Wali Mahomed Bhurgri.
Nawabshah District (Muhammadan) Rural Constituency.	Khan Saheb Haji Serai Imambaksh Ghulam Rasul Jatoi.
Upper Sind Frontier District (Muhammadan) Rural Constituency.	Khan Bahadur Hazarkhan Rahimkhan Khosa of Kadirpur.
Bombay City (European) Constituency ..	Mr. Joe Addyman.
Presidency (European) Constituency ..	Mr. Albert Clifford Owen.
Deccan Sardars and Inamdars Constituency.	Sardar Gangadharrao Narayanrao Mujumdar.
Gujarat Sardars and Inamdars Constituency.	Sardar Bhasaheb *alias* Dulabawa Raisingji.
Jagirdars and Zamindars Constituency ..	Mr. Muhammad Kamil Shah Kabul Muhammad Shah Sayed.
Bombay University Constituency ..	Mr. M. R. Jayakar.
Bombay Chamber of Commerce Constituency	Mr. Frank Nelson. Mr. Vincent Alpe Grantham.
Karachi Chamber of Commerce Constituency.	Mr. F. Clayton.
Bombay Trades Association Constituency...	Mr. A. Greville Bullocke.
Bombay Millowners' Association Constituency.	Vacant.
Ahmedabad Millowners' Association Constituency.	Mr. Gordhandas I. Patel
Indian Merchants' Chamber and Bureau ..	Mr. Lalji Naranji.

NOMINATED.

Officials.

Mr. F. G. Pratt, I.C.S.
,, R. T. Harrison.
,, A. Montgomerie, C.I.E., I.C.S.
,, S. J. Murphy, I.C.S.
,, G. E. Chatfield, C.I.E., I.C.S.
,, G. W. Hatch, I.C.S.
,, L. J. Mountford, C.B.E., I.C.S.
,, G. Wiles, I.C.S.

Sir Lawless Hepper, Kt.
Mr. G. A. Thomas, I.C.S.
,, W. F. Hudson, C.I.E., I.C.S.
,, C. B. Pooley.
,, K. S. Framji.

Non-Officials.

Mr. J. B. Kanga.
,, Vasantrao Anandrao Dabholkar, O.B.E.
,, E. E. Woods.
,, James Padmakar Bunter, LL.B.
,, Sitaram Keshav Bole.
,, R. S. Nekaljay.
Dr. Cosmas Fernandez, M.D.

The Madras Presidency.

The Madras Presidency, officially the Presidency of Fort St. George, together with the Native States, occupies the whole southern portion of the peninsula, and, excluding the Native States, has an area of 141.075 square miles. It has on the east, on the Bay of Bengal, a coast-line of about 1,200 miles; on the west, on the Indian Ocean, a coast-line of about 450 miles. In all this extent of coast, however, there is not a single natural harbour of any importance; the ports, with the exception of Madras, which has an artificial harbour, are merely open roadsteads. A plateau, varying in height above sea-level from about 1,000 to about 3,000 ft., and stretching northwards from the Nilgiri Hills, occupies the central area of the Presidency; on either side are the Eastern and the Western Ghats, which meet in the Nilgiris. The height of the western mountain-chain has an important effect on the rainfall. Where the chain is high, the intercepted rain-clouds give a heavy fall, which may amount to 150 inches, on the seaward side, but comparatively little rain falls on the landward side of the range. Where the chain is low, rain-clouds are not checked in their westward course. In the central tableland and on the east coast the rainfall is small and the heat in summer excessive. The rivers, which flow from west to east, in their earlier course drain rather than irrigate the country; but the deltas of the Godaveri, Kistna and Cauvery are productive of fair crops even in time of drought and are the only portions of the east coast where agriculture is not dependent on a rainfall rarely exceeding 40 inches and apt to be untimely.

Population.

The population of the Presidency was returned at the census of 1921 as 42,794, 155, an increase over the figure of 1911 of 2·2 per cent. The tendency has been for the more densely populated portions of the province to increase their numbers while the sparsely inhabited tracts have still further declined in density. Hindus account for 89 per cent. of the population, Mahomedans for 7, Christians for 3 and Animists for 1. The vast majority of the population is of the Dravidian race and the principal Dravadian languages, Tamil and Telugu, are spoken by 18 and 16 million persons respectively. Of every thousand people, 410 speak Tamil, 377 speak Telgu, 75 Malayalam, 37 Oriya, 35 Canarese and 23 Hindustani.

Agriculture.

The principal industry of the province is agriculture in which 68 per cent. of the population is engaged, nearly 49 per cent. having a direct interest as land-owners and tenants. The normal area under cultivation is 39 million square miles. The principal food crops are rice, cholam, ragi and kambu. The industrial crops are cotton, sugar-cane and ground-nuts. A special feature of the agricultural activities in the presidency is the large industry which the planting community have built up contributing substantially to the economic development of the province. They have organised themselves as a registered body under the title of "The United Planters' Association of Southern India' on which are represented the coffee, tea, rubber and a few other minor planting products. So important a place do they occupy in the body politic that Government have given them special representation on the Legislature besides passing regulations for the control of their labour. Government have also appointed a Deputy Director of Agriculture for the planting districts besides one or two expert officers working in their area. Over a hundred thousand acres are under tea and coffee cultivation, the proportion being about half and half. The irrigation works in the Presidency are mainly on the east coast and supply water for just about one-third of the cultivated area. There are about 28,000 tanks, 6,200 river channels, 6,100 spring channels, 1,400 annicuts and nearly 400,000 ayacut wells and 225,000 supplementary wells of all sorts. The Agricultural and the Industrial Departments are under the Reform Act Transferred Subjects with a minister in charge. The executive head of the Department of Agriculture is the Director of Agriculture.

Forests.

The Forest Department which is maintained for the conservation and exploitation of Government Forests is controlled by the Chief Conservator of Forests. There are six Conservators of Forests for the Presidency with separate local charges. During 1921-22, the area of reserved forests rose from 18,826 square miles to 18,863 square miles. The output of timber during the year under review was 108,400 tons against 98,450 tons in the previous year. About 30,000 tons were extracted by departmental agency and the rest by purchasers.

Manufacturers.

During the year there were 21 cotton mills at work in the Presidency. Of these four were in the French settlement at Pondicherry and one each in Travancore and Cochin. Employment was afforded to 34,400 operatives. The plant in use consisted of nearly 5,000 looms and 560,000 spindles. The number of jute mills rose from three to four employing 3,700 operatives. There are 120 minor industrial concerns which do not come within the cope of the Factories Act. The bulk of these are oil mills and rope, rubber and tile works. Tanneries predominate among the works run without mechanical power, followed by rope work and cotton weaving establishments. A Commissioner of labour is in control of the Department of Factories. Of the 545 factories, which were in existence during the year, 355 were perennial and the remainder seasonal. The average daily number of operatives in the factories rose from 101,655 to 102,341. The Department of industries, which is in charge of a Director assisted by a Board o non-official gentlemen, furnishes useful information to an increasing number of enquirers. Guidance is given in the choice of markets, the selection of plant, the best source for the supply of raw materials, and the commercial value of projected schemes.

Trade.

The aggregate value of the sea-borne trade of the Presidency was Rs. 73·83 crores and showed an increase of Rs. 0·55 crore or 0·75 per cent. as compared with that of the previous year and that of Rs. 15·67 crores or 27 per cent. as compared with 1913-14. Excluding Government transactions which showed a decrease of Rs. 2·20 crores the value of the trade was Rs. 73·30 crores, a figure Rs. 2·75 crores or 4 per cent higher than that of the previous year. The total value of the foreign trade in private merchandise declined by 4 per cent. to Rs. 45·54 crores but was Rs. 3·28 crores or 7 per cent. in excess of the figure for 1913-14. Imports valued at Rs. 20·87 crores were Rs. 4·52 crores higher than 1913-14, but were Rs. 4·09 crores or 16 per cent. less than in 1920-21. The decrease was due to smaller receipts of cotton manufactures, metals, motor vehicles, paper, hardware, etc., the chief items showing increases being railway plant and rolling stock, machinery, coal, mineral oils, and cotton twist and yarn. Exports amounted to Rs. 24·67 crores as compared with Rs. 22·37 crores in the previous year, an increase of 10 per cent. when compared with 1913-14 the figure showed a decline of 5 per cent. Imports of carriages and carts rose from Rs. 4·16 lakhs to Rs. 9·39 lakhs. There was a heavy fall in imports of motor vehicles from Rs. 118·19 lakhs to Rs. 29·07 lakhs. The total exports of raw hides and skins amounted to only 94 tons valued at Rs. 0·29 lakhs. Exports of raw skins went up from 1,776 tons to 3,029 tons or by 70 per cent. in weight and from Rs. 48·05 lakhs to Rs. 63·48 lakhs or by 32 per cent. in value. The number of entries from coasting ports rose from 15,028 vessels of 4,179,255 tons to 16,691 of 5,717,988 tons. The number of clearances to coasting ports was 16,659 of 5,539,784 tons as against 15,186 of 4,195,968 tons.

Justice.

The Superior Court for Civil and Criminal judicial work in the Presidency is the High Court at Madras, which consists of a Chief Justice and eleven puisne judges. The existing law provides for a maximum of 20 High Court Judges. For the administration of criminal justice there are 25 Session Judges in the mofussil, Additional and Assistant Sessions Judges being provided to assist Courts in which the work is heavy. Then there are the District Magistrates, the Subordinate Magistrates and Honorary Magistrates. The administration of civil justice is carried on by 24 District Judges, 29 Subordinate Judges and District Munsiffs. In the Presidency Town there are a City Civil Court consisting of one Judge and small Causes Court consisting of a Chief Judge and two other Judges. During the year under review, the total number of criminal courts in the Presidency including the High Court was 960. The number of cases under the Penal Code fell from 111,677 to 102,696, the most noticeable decreases being under theft and assaults. Civil suits instituted in the Presidency during the year was 496,244, giving a proportion of one suit for every 85 persons of the Presidency.

Police.

The Head of the Police Department is the Inspector-General. The Presidency is divided into four ranges, each of which is under a Deputy Inspector-General of Police. A Superintendent of Police is stationed at the head-quarters of each district, and in most districts there are Assistant Superintendents or Deputy Superintendents. The sanctioned strength of the permanent police force at the end of the year was about 30,000. The cost of the Department during 1921-22 was 162 lakhs of rupees as against 153 lakhs in the previous year. The political agitation and the riots connected with it have kept the force very busy and the report of a Committee which sat to enquire into the riots has called attention to the inadequate number of the police force and of the armed reserves.

Local Government.

A District Board has been formed for every district and Taluk Boards exist in all districts except the Nilgiris and the Agency Division. Union Boards have been established in areas which though more or less urban are not yet fit to become Municipalities. The Madras Local Boards Act (1920) gives each class of Local Boards (District, Taluk and Union) an independent status and distinguishes their funds and functions. Not less than three-fourths of the members should be elected, the President of a Union Board should invariably be elected; the President of a Taluk Board should be elected unless the Government otherwise directs; the President of a District Board may be appointed or elected at the discretion of the Government. The total expenditure of Local Boards during 1921-22 was Rs. 236.04 lakhs.

Public Works.

The Public Works Department is responsible for the construction and maintenance of buildings belonging to Government, navigable canals and irrigation works. At the head of the Department are two Chief Engineers the senior of whom the Secretary to Government and the junior Joint Secretary. The expenditure incurred on irrigation works during the year rose by Rs. 8·31 lakhs to Rs. 88.96 lakhs, and the revenue by Rs. 4·12 lakhs to Rs. 281·17 lakhs

Education.

The quinquennium ending with 1921-22 has been one of considerable progress in all branches of education in the Madras Presidency. The total number of public institutions rose by 1,400 to 37,204 and their strength by 53,820 to 1,742,493 during the year, while the number of private institutions decreased from 3,927 with 111,177 pupils to 3,443 with 94,529 pupils. The percentage of male scholars to the male population increased from 6·5 in 1916-17 to 7·0 in 1921-22 and the corresponding percentage for female scholars rose from 1·5 to 1·8; the percentage of the total number of scholars of both sexes to the total population rose from 4·0 to 4·03. The total expenditure of the year rose from Rs. 319·09 lakhs to Rs. 339·98 lakhs of which Rs. 245·12 lakhs represented direct expenditure. Higher education is controlled by the Madras University, the constitution of which was considerably liberalised last year. The principal educational institutions in the Province are the Presidency College, the Christian College and Pachaiyappa's College, Madras; the St. Joseph's College, Trichinopoly; Government College, Kumbakonam; the Government

College, Rajamundry; the Maharaja's College, Trivandrum; the Agricultural College, Coimbatore; the Medical and Engineering Colleges, Madras.

Medical.

The Medical Department is controlled by the Surgeon-General to Government. During 1921, the expenditure of the Department rose from Rs. 52·28 lakhs to Rs. 56·63 lakhs. The number of hospitals maintained in the Presidency totalled 742 of which 532 were vested in local bodies. The total number of inpatients and out-patients treated in all classes of institutions during the year was 152,701 and 8,563,775 respectively. In addition to the Medical College at Madras, there are five Medical Schools at Royapuram, Tanjore, Vizagapatam, Calicut and Madura.

Co-operative Societies.

The number of co-operative societies in the Presidency continued to expand rapidly. At the beginning of 1923, the total number of societies was composed of 33 financing banks, 211 unions, 6 289 agricultural societies and 856 non-agricultural societies. The total working capital of all the societies is about Rs. 600 lakhs and the paid-up share capital 80 lakhs. Deposits received from individuals exceed Rs. 200 lakhs. The cost to Government of supervising the societies is in the neighbourhood of Rs. 6 lakhs.

Government.

The Madras Presidency is governed on a system generally similar to that obtaining in Bombay and Bengal. At the head is the Governor usually selected from the ranks of British public men or of ex-Governors of Colonies. Under the Reform Scheme there are associated with the Governor four Members of the Executive Council in charge of the Reserved Subjects and three Ministers in charge of the Transferred Subjects. Madras administration differs, however, in some important respects from that of other major Provinces. There is no intermediate local authority between the Collector of the District and the authorities at headquarters, the Commissioner being unknown in Madras. Part of the power which would be reserved elsewhere for the Commissioner is given to the Collector, whose status is rather higher in Madras than elsewhere, and part is exercised by the Board of Revenue. Each member of the Board of Revenue is in fact a Commissioner for specific subjects throughout the Presidency. This conduces to administration by specialists and to the maintenance of equal progress in specific matters in every part of the Presidency, but it leaves the Government without an official who can judge of the general administration of large parts of the country. For these and other reasons the Decentralisation Commission recommended that a system of Commissionerships be introduced in Madras.

Estimated Revenue for 1923-24.	Amount of Rs.	Rs.
Principal Heads of Revenue.		
II.—Taxes on Income	*Nil.*	
V.—Land Revenue	6,34,37,000	
VI.—Excise	5,43,35,000	
VII.—Stamps	2,29,45,000	
VIII.—Forest	56,52,000	
IX.—Registration	37,42,000	
TOTAL ..		15,05,11,000
Irrigation, Navigation, Embankment, etc.		
XIII.—Works for which capital accounts are kept	92,98,000	
XIV.—Works for which no capital accounts are kept ..	1,33,000	
TOTAL ..		94,31,000
Debt Services.		
XVI.—Interest		11,07,000
Civil Administration.		
XVII.—Administration of Justice	14,22,000	
XVIII.—Jails and Convict Settlements	8,68,000	
XIX.—Police	6,00,000	
XX.—Ports and Pilotage	1,000	
XXI.—Education	5,90,000	
XXII.—Medical	3,17,000	
XXIII.—Public Health	18,000	
XXIV.—Agriculture	3,61,000	
XXV.—Industries	12,50,006	
XXVI.—Miscellaneous Departments	3,14,000	
TOTAL ..		57,49,000
Civil Works.		
XXX.—Civil Works		6,15,000
Miscellaneous.		
XXXIII.—Receipts in aid of Superannuation	3,15,000	
XXXIV.—Stationery and Printing	2,34,000	
XXXV.—Miscellaneous	4,06,000	
TOTAL ..		9,55,000
Contributions and Assignments from the Central Government.		
XL.—Miscellaneous adjustments between the Central and Provincial Governments		3,45,000
TOTAL REVENUE.		16,87,13,000
Capital Accounts not charged to Revenue.		
Debts, Deposits and Advances		1,42,12,000
Opening Balance		5,52,000
GRAND TOTAL ..		18,34,77,000

Estimated Expenditure for 1923-24.	Rs.	Amount of Rs.
Direct Demands on the Revenue.		
5.—Land Revenue	1,44,46,500	
6.—Excise	31,96,000	
7.—Stamps	7,52,000	
8.—Forests	50,89,000	
9.—Registration	23,64,000	
TOTAL		2,58,47,500
Irrigation, Embankment, etc., Revenue Account.		
14.—Interest on works for which capital accounts are kept	39,22,000	
15.—Other Revenue Expenditure financed from Ordinary Revenue	39,23,000	
TOTAL		78,45,000
Irrigation, Embankment, etc., Capital Account (charged to Revenue).		
16.—Construction of Irrigation, Embankment, etc., works.		68,000
Debt Services.		
19.—Interest on ordinary debt	7,32,000	
20.—Interest on other obligations	1,000	
21.—Sinking funds	.....	
TOTAL		7,33,000
Civil Administration.		
22.—General Administration	1,36,24,800	
24.—Administration of Justice	98,13,000	
25.—Jails and Convict Settlements	37,21,000	
26.—Police	2,04,03,000	
27.—Ports and Pilotage	54,000	
30.—Scientific Departments	1,57,500	
31.—Education	1,72,08,000	
32.—Medical	57,36,000	
33.—Public Health	23,45,000	
34.—Agriculture	30,42,000	
35.—Industries	21,45,200	
37.—Miscellaneous departments	15,11,000	
TOTAL		7,97,60,500
Civil Works.		
41.—Civil Works		1,12,50,000
Miscellaneous.		
43.—Famine Relief and Insurance	6,61,000	
45.—Superannuation allowances and pensions	52,35,000	
46.—Stationery and Printing	27,06,000	
47.—Miscellaneous	22,66,000	
TOTAL		1,08,68,000
Contribution and Assignments to the Central Govt. by Provincial Governments.		
51.—Contributions and Assignments to the Central Government by Provincial Government	3,48,00,000	
52.—Miscellaneous Adjustment between the Central and Provincial Government	.....	
TOTAL		3,48,00,000
TOTAL EXPENDITURE		17,11,72,000
Capital Account not charged to Revenue.		
55.—Construction of Irrigation, Navigation, etc., works		11,72,000
60.—Civil Works		3,99,000
Debts, Deposits and Advances		95,94,000
Closing Balance		11,40,000
GRAND TOTAL		18,34,77,000

Governor.

His Excellency Lt.-Col. Viscount Goschen, C.B.E.

Personal Staff.

Private Secy., E. C. Smith, I.C.S.

Military Secy., Major K. O. Goldie, O.B.E.

Surgeon, Major D. P. Johnstone, R.A.M.C.

Aide-de-Camp, Major Trevor Newall Watson.

Extra Aide-de-Camp, Lieut. R. H. Boyle.

Extra Aide-de-Camp, Captain John Pratt.

Commandant, H. E. the Governor's Body Guard, Major Mansel Halket Jackson, D.S.O., M.C.

Indian Aide-de-Camp, Risaldar Yakub Khan.

Members of Council.

Sir Charles G. Todhunter.

Khan Bahadur Sir Muhamad Habibulla Sahib

Arthur Rowland Knapp, C.S.I., C.B.E., I.C.S., (*on leave*).

C. P. Ramaswami Ayyar, C.I.E.

R. A. Graham, C.S.I.

Ministers.

The Raja of Panagal.

Dewan Bahadur Sivaghanum Pillay.

Rao Bahadur A. P. Patro.

SECRETARIES TO GOVERNMENT.

Chief Secretary, R. A. Graham, C.S.I., I.C.S.

Revenue Secretary, L. T. Harris, C.S.I., I.C.S. (*on leave*); E. W. Legh, I.C.S. (*Acting*).

Local and Municipal Secretary, F. J. Richards.

Public Works Secretary, W. Hutton (*on leave*) M. R. Kharegat (*Acting*).

MISCELLANEOUS APPOINTMENTS.

Director of Public Instruction, Richard Littlehailes, M.A.

Registrar of Madras University, F. Dewsbury.

Inspector-General of Police, Frank Armitage.

Surgeon-General, Major-General Gerard Godfrey Giffard, C.S.I.

Director of Public Health, Major A. J. H. Russell, M.A., M.D., I.M.S.

Accountant-General, A. Newmarch.

Inspector-General of Prisons, Lt.-Colonel John Phillip Cameron, I.M.S.

Postmaster-General, R. W. Hanson.

Collector of Customs, A. E. Boyd.

Commissioner of Salt, Abkari, etc., A. Y. G. Campbell, M.A., C.I.E., C.B.E.

Inspector-General of Registration, J. Venkatanarayana Naidu.

Meteorologist and Deputy Director, Madras Observatory, S. R. U. Savur.

Acting Director, Kodaikanal Observatory, Thomas Royds.

Supdt., Govt. Central Museum, and Principal Librarian, Connemara Public Library, F. H. Gravely.

Director of Agriculture, H. C. Sampson, B.SC., C.I.E.

Consulting Architect, W. H. Nicholls.

Chief Conservator of Forests, S. Cox, C.I.E.

Presidents and Governors of Fort St. George in Madras.

William Gyfford	1684
Elihu Yale	1687
Nathaniel Higginson	1692
Thomas Pitt	1698
Gulston Addison	1709
Died at Madras, 17 Oct., 1709.	
Edmund Montague (*Acting*)	1709
William Fraser (*Acting*)	1709
Edward Harrison	1710
Joseph Collet	1711
Francis Hastings (*Acting*)	1727
Nathaniel Elwick	1727
James Macrae	1725
George Morton Pitt	1730
Richard Benyon	1735
Nicholas Morse	1744
John Hinde	..
Charles Floyer	1747
Thomas Saunders	1750
George Pigot	1755
Robert Palk	1763
Charles Bourchier	1767
Josias DuPre	1770
Alexander Wynch	1773
Lord Pigot (Suspended)	1775
George Stratton	1776
John Whitehill (*Acting*)	1777
Sir Thomas Rumbold, Bart.	1778
John Whitehill (*Acting*)	1780
Charles Smith (*Acting*)	1780
Lord Macartney, K.B.	1781

Governors of Madras.

Lord Macartney, K.B.	1785
Alexander Davidson (*Acting*)	1785
Major-General Sir Archibald Campbell, K.B.	1786

John Hollond (*Acting*) 1789
Edward J. Hollond (*Acting*) 1790
Major-General William Medows 1790
Sir Charles Oakeley, Bart. 1792
Lord Hobart 1794
Major-General George Harris (*Acting*) .. 1798
Lord Clive 1799
Lord William Cavendish Bentinck .. 1803
William Petrie (*Acting*) 1807
Sir George Hilaro Barlow, Bart., K.B. .. 1807
Lieut.-General the Hon. John Abercromby. 1813
The Right Hon. Hugh Elliot 1814
Major-General Sir Thomas Munro, Bart., K.C.B. Died, 6 July, 1827. 1820
Henry Sullivan Grœme (*Acting*) .. 1827
Stephen Rumbold Lushington 1827
Lieut.-General Sir Frederick Adam, K.C.B. 1832
George Edward Russell (*Acting*) 1837
Lord Elphinstone, G.C.H., P.C. 1837
Lieut.-General the Marquess of Tweeddale, K.T., C.B. 1842
Henry Dickinson (*Acting*) 1848
Major-General the Right Hon. Sir Henry Pottinger, Bart., G.C.B. 1848
Daniel Eliott (*Acting*) 1851
Lord Harris 1854
Sir Charles Edward Trevelyan, K.C.B. .. 1859
William Ambrose Morehead (*Acting*) .. 1860
Sir Henry George Ward, G.C.M.G. .. 1860
Died at Madras, 2 August, 1860.
William Ambrose Morehead (*Acting*) .. 1860
Sir William Thomas Denison, K.C.B. .. 1861
Acting Viceroy, 1863 to 1864.
Edward Maltby (*Acting*) 1863
Lord Napier of Merchistoun, K.T. (*a*) .. 1866
Acting Viceroy.
Alexander John Arbuthnot, C.S.I. (*Acting*) 1872
Lord Hobart 1872
Died at Madras, 27 April, 1875.
William Rose Robinson, C.S.I (*Acting*) .. 1875
The Duke of Buckingham and Chandos .. 1875
The Right Hon. W. P. Adam 1880
Died at Ootacamund, 24 May, 1881.
William Hudleston (*Acting*) 1881
The Right Hon. M. E. Grant Duff .. 1881
The Right Hon. Robert Bourke, P.C. .. 1886
Lord Connemara, 12 May, 1887 (by creation).
John Henry Garstin, C.S.I. (*Acting*) .. 1890
Baron Wenlock 1891
Sir Arthur Elibank Havelock, G.C.M.G. .. 1896
Baron Ampthill 1900
Acting Viceroy and Governor-General, 1904.
James Thomson, C.S.I. (*Acting*) 1904
Gabriel Stokes, C.S.I. (*Acting*) 1906
Hon. Sir Arthur Lawley, K.C.M.G., G.C.I.E. 1906
Sir Thomas David Gibson-Carmichael, Bart., K.C.M.G., G.C.I.E. (*b*) 1911
Became Governor of Bengal, 1 April, 1912
Sir Murray Hammick, K.C.S.I., C.I.E. 1912
(*Acting*).
Right Hon. Baron Pentland, P.C., G.C.I.E. 1912
Baron Willingdon 1918
Lord Goschen 1924

(*a*) Afterwards (by creation) Baron Napier of Ettrick.

(*b*) Afterwards (by creation) Baron Carmichael of Skirling.

MADRAS LEGISLATIVE COUNCIL.

PRESIDENT.

The Hon. Diwan Bahadur L. D. Swamikannu Pillai Avargal, C.I.E., I.S.O.

I.—MEMBERS OF THE EXECUTIVE COUNCIL.

Ex-officio.

The Hon. Sir Charles Todhunter, K.C.S.I.
The Hon. Sir Arthur Rowland Knapp, K.C.I.E., C.S.I., C.B.E.
The Hon. Mr. C. P. Ramaswami Ayyar, C.I.E.
The Hon. the Raja of Kollengode, C.I.E.

II.—ELECTED MEMBERS.

(a) Ministers.

The Hon. the Raja of Panagal.
The Hon. Diwan Bahadur T. N. Sivagnanam Pillai Avargal.
The Hon. Sir A. P. Patro, Kt.

(b) Other Members.

M. R. Ry. Rao Bahadur C. Natesa Mudaliyar Avargal, M.L.C.
„ „ O. Tanikachala Chettiyar Avargal, M.L.C.
Diwan Bahadur Sir P. Tyagaraya Chetti, Kt., M.L.C.
M. R. Ry. Sami Venkatachalam Chetti Garu, M.L.C.
„ Rao Sahib K. V. Ramachari Avargal, M.L.C.
„ „ T. C. Tangavelu Pillai Avargal, M.L.C.
„ Diwan Bahadur K. Suryanarayanamurti Nayudu Garu, M.L.C.
„ A. V. Bhanoji Rao Garu, M.L.C.
„ Chavadi K. Subrahmania Pillai Avargal, M.L.C.
„ Diwan Bahadur P. Kesava Pillai Avargal, M.L.C.
„ G. Rameswara Rao Garu, M.L.C.
„ T. Adinarayana Chettiyar Avargal, M.L.C.
„ W. Vijiaraghava Mudaliyar Avargal, M.L.C.
„ Rao Bahadur K. Krishnaswami Nayudu Garu, M.L.C.
„ K. Sitarama Reddiyar Avargal, M.L.C.
„ R. Srinivasa Ayyangar Avargal, M.L.C.
„ K. Venkatachala Padayachi Avargal, M.L.C.
„ A. Ranganatha Mudaliyar Avargal, M.L.C.
„ P. Siva Rao Garu, M.L.C.
„ A. Ramaswami Mudaliyar Avargal, M.L.C.
„ C. Muttayya Mudaliyar Avargal, M.L.C.
„ C. Ramalinga Reddi Garu, M.L.C.
„ B. Muniswami Nayudu Garu, M.L.C.
„ C. V. Venkataramana Ayyangar Avargal, M.L.C.
„ Rao Bahadur T. A. Ramalinga Chettiyar Avargal, M.L.C.
„ V. C. Vellingiri Goundar Avargal, M.L.C.
„ K. Koti Reddi Garu, M.L.C.
„ Rai Bahadur T. M. Narasimhacharlu Garu, M.L.C.

Sriman Biswanath Das Mahasayo, M.L.C.
M. R. Ry. J. Kuppuswami Garu, M.L.C.
,, P. Anjaneyulu Pantulu Garu, M.L.C.
,, Rao Bahadur P. C. Ethirajulu Nayudu Garu, M.L.C.
,, B. Mahabala Hegde Avargal, M.L.C.
,, Rao Sahib U. Rama Rao Avargal, M.L.C.
,, M. Gangaraju Garu, M.L.C.
,, M. Sithayya Garu, M.L.C.
,, P. Peddiraju Garu, M.L.C.
,, K. Sarvarayudu Garu, M.L.C.
,, Rao Bahadur C. Venkataranga Reddi Garu, M.L.C.
,, K. Sarabha Reddi Garu, M.L.C.
,, Diwan Bahadur M. Krishnan Nayar Avarga M.L.C.
V. Madhava Raja Avargal, M.L.C.
,, Rao Bahadur A. S. Krishna Rao Pantulu Garu, M.L.C.
,, B. Ramachandra Reddi Garu, M.L.C.
,, P. C. Muthu Chettiyar Avargal, M.L.C.
,, Rao Bahadur P. K. A. Ct. Virappa Chettiyar Avargal, M.L.C.
,, C. D. Appavu Chettiyar Avargal, M.L.C.
,, Rao Sahib S. Ellappa Chettiyar Avargal, M.L.C.
,, C. Maruthavanam Pillai Avargal, M.L.C.
,, V. Venkatarama Ayyar *alias* Pantulu Ayyar Avargal, M.L.C.
,, S. Muthiah Mudaliyar Avargal, M.L.C.
Sir K. Venkatareddi Nayudu Garu, Kt., M.L.C.
M. R. Ry. P. N. Marthandam Pillai Avargal, M.L.C.
,, Diwan Bahadur S. Rm. M. Ct. Pethachi Chettiyar Avargal M.L.C.
,, M. R. Seturatnam Ayyar Avargal, M.L.C.
,, H. B. Ari Gowder Avargal, M.L.C.
,, P. C. Venkatapati Raju Garu, M.L.C.
,, Rao Bahadur C. V. S. Narasimharaju Garu, M.L.C.
,, P. T. Rajan Avargal, M.L.C.
,, C. Ponnuswami Nayudu Garu, M.L.C.
,, A. Chidambara Nadar Avargal, M.L.C.
Muhammad Moosa Sait Sahib Bahadur, M.L.C.
Abbas Ali Khan Bahadur, M.L.C.
Muhammad Yahya Ali Sahib Bahadur, M.L.C.
M. Abdulla Ghattala Sahib Bahadur, M.L.C.
V. Hamid Sultan Marakkayar Sahib Bahadur, M.L.C.
Munshi Abdul Wahab Sahib Bahadur, M.L.C.
Khan Sahib Saiyid Diwan Abdul Razzaq Sahib Bahadur, M.L.C.
Khan Bahadur P. Khalif-la-lah Sahib Bahadur, M.L.C.
T. M. Moidu Sahib Bahadur, M.L.C.
Kottal Uppi Sahib Bahadur, M.L.C.
Khan Bahadur Haji Abd-ul-lah Haji Qasim Sahib Bahadur, M.L.C.
Abdul Hye Sahib Bahadur, M.L.C.
T. N. Bava Ravuthar Muhammad Sahib Bahadur, M.L.C.
Mr. M. Ratnaswami, M.L.C.
Mr. J. A. Saldanha, M.L.C.
Mr. S. Arpudaswami Udayar, M.L.C

Rao Bahadur Cruz Fernandez, M.L.C.
Mr. J. D. Samuel, M.L.C.
Mr. P. W. Partridge, M.L.C.
Mr. A. E. Rencontre, M.L.C.
M. R. Ry. S. Satyamurti Avargal, M.L.C.
Mr. C. R. T. Congreve, M.L.C.
M. R. Ry. V. N. Suryanarayana Raju Garu, M.L.C.
„ S. R. Y. Ankineau Prasad Bahadur Garu, M.L.C.
Dr. P. Subbarayan, M.L.C.
The Raja of Ramnad, M.L.C.
M. R. Ry. K. Prabhakaran Tampan Avargal, M.L.C.
Mr. C. E. Wood, M.L.C.
Mr. A. J. Leech, M.L.C.
Mr. L. C. Nicholson, M.L.C.
M. R. Ry. C. Gopala Menon Avargal, M.L.C.
„ Rao Bahadur A. M. Murugappa Chettiyar Avargal, M.L.C.
„ B. Venkataratnam Garu, M.L.C.

Vacant.

III.—NOMINATED MEMBERS.

(*a*) *Officials.*

Mr. G. F. Paddison, C.S.I., I.C.S., M.L.C.
Mr. W. E. Legh, C.I.E., I.C.S., M.L.C.
Vacant.
Mr. P. L. Moore, C.I.E., I.C.S., M.L.C.
Mr. H. Tireman, M.L.C.
Dr. John Mathai, M.L.C.
Mr. R. W. Davies, I.C.S., M.L.C.

(*b*) *Non-officials.*

Mr. J. A. Davis, M.L.C.
M. R. Ry. Rao Bahadur P. Raman Avargal, M.L.C.
„ Rao Sahib P. V. Gopalan Avargal, M.L.C.
„ L. C. Guruswami, Avargal, M.L.C.
„ G. Premayya Garu, M.L.C.
„ P. V. S. Sundaramurti Avargal, M.L.C.
„ R. Srinivasan Avargal, M.L.C.
„ R. Veerian Avargal, M.L.C.
„ B. Obalesappa Garu, M.L.C.
„ P. K. S. A. Arumuga Nadar Avargal, M.L.C.
„ P. Sagaram Garu, M.L.C.
„ Raghuchandra Bellal Avargal, M.L.C.
„ T. Mallesappa Garu, M.L.C.
„ O. M. Narayanan Nambudiripad Avargal, M.L.C
„ N. Devendrudu Garu, M.L.C.
Hony. Lt. Madurai, M.L.C.
M. R. Ry. P. S. Rajappa Tevar Avargal, M.L.C.
„ K. S. Ponnuswami Pillai Avargal, M.L.C

(*c*) *Special Members.*

Mr. Bradford Leslie, M.L.C.
„ J. L. P. Roche Victoria, M.L.C.

SECRETARY TO THE COUNCIL.

M. R. Ry. R. V. Krishna Ayyar Avargal, B.A., M.L.

The Bengal Presidency.

The Presidency of Bengal, as constituted on the 1st April 1912, comprises the Burdwan and Presidency divisions and the district of Darjeeling, which were formerly administered by the Lieutenant-Governor of Bengal; and the Rajshahi, Dacca and Chittagong divisions which by the partition of the old Province had been placed under the administration of the Lieutenant-Governor of Eastern Bengal and Assam. The area of the Presidency is 82,277 square miles, and it possesses a population of 47,569,145 persons; included within this area are the two Indian States of Cooch Behar and Tripura, which are under the general supervision of the Government of Bengal. The area of the British territory is 76,843 square miles. Bengal comprises the lower valleys and deltas of the Ganges and Brahmaputra, and in the main consists of a great alluvial plain intersected in its southern portion by innumerable waterways. In the north are the Himalayan mountains and submontane tracts of Darjeeling and Jalpaiguri, and on the south-east the hills in Tripura and Chittagong, while on the west the Chota Nagpur plateau is continued by an undulating tract running through the western portions of Midnapur, Bankura, Burdwan and Birbhum. The general range of the country however is very low, and a great fertile plain extends southward from Jalpaiguri to the forests and swamps known as the Sunderbans, which lie between the area of cultivation and the Bay of Bengal.

The People.

Of the inhabitants of the Presidency 25,486,124 or 53·55 per cent. are Mahomedans and 20,809,148 Hindus. These two major religions embrace all, but 2·73 per cent. of the population, Christians, Buddhists and Animists combined, number 1,273,873.

Bengali is spoken by ninety-two per cent. of the population of the Presidency and Hindi and Urdu by 3·8 per cent. The Oriya-speaking people number 298,372 and Naipali is the tongue of 93,060 persons principally residents in the Darjeeling and Jalpaiguri districts. The great majority of the speakers of the Munda languages are Santals in West and North Bengal.

Industries.

According to the returns of the Census of 1921 nearly 37 million or over 77 per cent. of the population derive their support from pasture and agriculture, and of these more than 30½ millions are cultivators, and more than 4½ millions farm servants and field labourers. The area under jute in 1922 is estimated at 1,550,000 acres against 1,329,000 in 1921. Bengal is the most important rice-producing area in Northern India, and it is computed that about 85 per cent. of the cultivated area of the Presidency is devoted to its production. Other crops include barley, wheat, pulses and oil-seeds, the area devoted to the last named being 1,493,300 acres. Sugar is produced both from the sugar-cane and from the date-palm, and tobacco is grown for local consumption in nearly every district of Bengal. The area under tea in 1922 was 176,900 acres. There were 300 plantations employing a daily average of 131,356 permanent and 5,147 temporary hands.

Manufacture and Trade.

The main industries in this part of India in addition to the agricultural industry are the jute mill industry, the tea industry (largely an Assam industry) and coal mining. The jute mills in and around Calcutta constitute the principal manufacturing industry of the Presidency. From 1st April to 31st December 1921 all jute mills worked four days per week. From 1st January to 31st March 1922, double shift mills worked four days of 13½ hours each per week, single shift mills five days per week, namely four days of 11 hours each and one day of 10 hours. There were 77 mills at work during the year 1921-22 with 42,529 looms and 896,815 spindles. The average number of persons employed daily was 284738. The labour supply of mills during the year has been fair, but there have been many days lost through strikes at different mills. The value of the exports of Raw Jute by sea from Calcutta during 1921-22 decreased by Rs. 2,12 lakhs to Rs. 13,71 lakhs. The quantity exported was also less than in the preceding year by 4,000 tons and amounted to 457,000 tons. The Jute cess benefited the Calcutta Improvement Trust to the extent of Rs. 8·2 lakhs, while Rs. 9·5 lakhs were collected in the preceding year. The exports of raw and manufactured Jute represented 51 per cent of Calcutta's exports during 1921-22 and those with the exception of cotton were India's premier exports in that year. Other principal industries were cotton twist and yarn, silk yarn and cloth, hand-made cloth, sugar, molasses and paper. Thirteen cotton mills were at work during 1921-22 employing daily on an average 12,843 persons. The silk weaving industry continues to decline. There was only one silk mill working during 1921 which employed 143 hands. The manufacture of tea is carried on an extensive scale in Darjeeling and Jalpaiguri. The capital employed by joint stock companies in the industry in India amounted to about Rs. 42 crores and the daily average labour force to 772,000 during 1921. In 1921 the number of coal mines under the scope of the Indian Mines Act worked in Bengal was 268. The total output for Bengal was 4,259,642 tons against 4,207,452 tons raised in 1920, while the output of all the mines in Bengal, Bihar and Orissa, and Assam amounted to 17,536,328 tons. The paid up capital of joint stock, coal companies only in the industry employed in these provinces is approximately Rs.956 lakhs. The daily average of persons employed in the coal mines in Bengal was 45,813 and in Bengal, Bihar and Orissa, and Assam 175,188. Three paper mills produced 23,603 tons of paper valued at Rs. 1,97,39,119 in 1921.

In 1921-22 the foreign sea-borne trade of Bengal (excluding treasure but including Government stores) amounted to Rs. 197 crores of which 106 crores represented imports and Rs. 91 crores exports. Of the total foreign and coasting trade of Bengal, more than 96 per cent. was the share of Calcutta. The six chief exports from Bengal are in order of importance; jute (raw and manufactures), tea

lac, hides and skins (raw), raw cotton and seeds, and the six leading imports are cotton goods, machinery and mill-work, sugar metals, railway plant and rolling stock, and oils.

Administration.

The present form of administration in Bengal dates from January 1921. In 1912 the Government of the Province underwent an important change, when in accordance with the Proclamation of His Majesty the King-Emperor at Delhi the Province was raised from the status of a Lieutenant-Governor to that of a Governor-in-Council, thus bringing it into line with the Presidencies of Madras and Bombay. In 1921 under the Reform Scheme, the Local Government was reconstituted, certain of the departments being placed under the control of Ministers appointed from among elected members of the Legislative Council. There are four members of the Executive Council, who are in charge of the "reserved subjects," and three Ministers, who are in charge of the 'transferred subjects." The working of this system and the division of the administration into these two classes of subjects is fully described in the sections to which reference is made.

Bengal is administered by five Commissioners, the divisions being those of the Presidency, Burdwan, Rajshahi, Dacca and Chittagong. The unit of administration is the District Magistrate and Collector. As Collector he supervises the ingathering of the revenue and is the head of all the Departments connected with it, while as District Magistrate he is responsible for the administration of criminal justice in the district. The immediate superior of the District Magistrate is the Divisional Commissioner. Commissioners are the channels of communication between the local officers and the Government. In certain revenue matters they are, in their turn, subject to the Board of Revenue in Calcutta; in other matters they are under the direct control of Government.

Justice.

The administration of Justice is entrusted to the High Court of Calcutta which consists of the Chief Justice who is a Barrister and 15 Puisne judges including one additional judge who are Barristers, Civilians or Vakils. Below the High Court are the District and Additional Judges, the Small Cause Court and Subordinate Judges and the Munsifs. Of these officers the District and Additional Judges and a certain number of subordinate Judges are also endowed with the powers of a Criminal Court while the remainder have jurisdiction in Civil matters only. Criminal Justice is administered by the High Court, the Courts of Session and the Courts of the various classes of Magistrates. On its appellate side the High Court disposes of appeals from the order of a Court of Session, and it also confirms, modifies or annuls sentences of death passed by Sessions Courts. Calcutta has five Presidency Magistrates, including a Temporary Magistrate, two Municipal Magistrates and also a number of Honorary Magistrates and it possesses a Court of Small Causes with Judges who dispose cases of the class that are usually heard in County Courts in England.

Local Self-Government.

By Bengal Act III of 1884 which regulates municipal bodies in the interior and its subsequent amendments the powers of Commissioners of municipalities have been increased and the elective franchise has been extended. Municipal expenditure now comprises a large number of objects, including veterinary institutions and the training and employment of Health Officers and Sanitary Inspectors and female medical practitioners. The Commissioners also have large powers in regard to the water-supply and the regulation of buildings. In Calcutta Act (III) of 1899 created three co-ordinate municipal authorities, the Corporation, the General Committee, and the Chairman. The total number of Commissioners is fifty, of whom 25 are elected, and the remainder appointed by Government and by commercial bodies. In order to improve the insanitary and congested areas of the city, the Calcutta Improvement Trust has been created with extensive powers. In the mofussil, District and Local Boards exercise considerable powers, with regard to Public Works, Education and Medical relief and Union Committees have been formed which deal for the most part with the control of village roads, sanitation and water-supply.

Bengal Act V of 1919 introduced a new system of self-government by the creation of village authorities vested with the power and duties necessary for the management of communal village affairs and entrusted with powers of self-taxation. The new village authority, to be called the Union Board, will replace the existing Chaukidari *panchayats* and the Union Committee and will deal with the village police, village roads, water supply, sanitation, primary school and dispensaries. The Act also empowers Government to create out of the members of the Union Board Village Benches and Courts for the trial of petty criminal and civil cases arising within the union. The Act has been extended to all Districts in the Presidency except Darjeeling, Chittagong, and Malda and over 2,000 Union Boards were notified, of which about 1,400 have actually been constituted.

Public Works.

The Public Works Department is under the charge of a Chief Engineer who is also the Secretary to Government in the P. W. and Railway Departments.

The P. W. D. deals with questions regarding the construction of public buildings and roads.

The Railway Department deals with questions regarding acquisition of lands required by the several Railways and alignment of main lines of Railways and Tramway projects

Irrigation.

The Irrigation Department deals with matters connected with the numerous embankments and drainage works as well as the waterways that intersect the Presidency.

Marine.

The Marine Department deals with all questions connected with the Bengal Pilot Service, merchant shipping, the importation of explosives and inland navigation.

Police.

The Bengal Police force comprises the Military Police, the District Police, the Railway Police, and the River Police. The Bengal Police are under the control of the Inspector-General of Police, the present Inspector-General being a member of the Imperial Police Service. Under him are Deputy Inspectors-General, for the Dacca Range the Rajshahi range, the Presidency range, the Burdwan range and the Bakarganj range and also one Deputy Inspector-General in charge of the C. I. D. and the Intelligence Branch. Each district is in charge of a Superintendent, and some of the more important districts have an Additional Superintendent. The Railway Police is divided into three distinct charges each under a Superintendent. The River Police is also under a Superintendent. The cadre comprises Assistant Superintendents, Deputy Superintendents, Inspectors, Sub-Inspectors, Sergeants, Assistant Sub-Inspectors, head constables and constables. There is also a Village Police, composed of daffadars and chowkidars, who receive a monthly salary which is collected from the villages or unions by the Panchayat or Union board. There is a training college and school at Sardah, in the district of Rajshahi where newly appointed gazetted officers, and constables of the Bengal police learn their duties. The Calcutta City Police is a separate force maintained by Government under a Commissioner who is responsible direct to Government. The Commissioner has under him Deputy Commissioners, Assistant Commissioners, Inspectors, Sub-Inspectors, Sergeants, Assistant Sub-Inspectors, head constables and constables. A school for the training of recruits for the Calcutta Police force has been established at Calcutta. The annual cost of the Police is over 188 lakhs.

Medical.

The head of the Medical Department is the Surgeon General with the Government of Bengal, and Sanitation is in charge of the Director of Public Health, the former appointment is always held by a member of the Indian Medical Service, while the latter post is now so reserved. There is also a Chief Engineer, Public Health Department, Bengal. In the districts the Civil Surgeons are responsible for medical work. There are 24 hospitals in Calcutta 10 of which are supported by the Government and 445,083 persons were treated at these institutions of whom 41,368 were in-patients. In the mofussil districts there are 827 hospitals and dispensaries; the number of patients treated in them was 7,564,957 including 70,053 in-patients.

Education.

In the Presidency of Benga education is imparted partly through Government agency and partly through private bodies, assisted to some extent by Government grants-in-aid. Government maintains three Arts Colleges in Calcutta (of which one is a college for women and one the Sanskrit College), one at Hughli, one at Krishnagar, two at Dacca, one at Rajshahi and one at Chittagong. It also maintains three training colleges, one at Calcutta, one at Dacca, and one at Kurseong for teachers who teach in secondary schools through the medium of English and 5 norma schools, one in each division, for the training of teachers in secondary schools through the medium of the vernacular; also an engineering college at Sibpur and an engineering school at Dacca, two medical colleges, a veterinary college, a school of art and a commercial school in Calcutta and a weaving school at Serampore, It also provides at the headquarters of all districts, except Burdwan and Midnapore, and also at certain other mofussil centres, High English schools for the education of boys, while to some Government Arts Colleges high schools are attached. In Calcutta there are four Government high schools for boys, two of which are attached to Presidency College and one to the Sanskrit College. Government high schools for girls exist only in the headquarters stations of Calcutta, Dacca, Mymensingh, Barisal and Chittagong. The other secondary schools, with the exception of a few middle schools managed either by Government or by municipal and district boards, are under private control. The administration of primary education in all areas, which are not under municipalities, rests with the district boards, grants being given from provincial revenues to the boards, which contribute only slightly from their own funds. Only in backward localities are such schools either entirely managed, or directly aided, by Government. Apart from the institutions referred to above, 95 institutions called Guru Training Schools are maintained by the Department for the training of primary school teachers. For the education of Mohomedans, there are senior madrasas at Calcutta, Dacca, Chittagong and Hughli, and one junior madrasa at Rajshahi which are managed by Government. There are also certain Government institutions for technical and industrial education. All institutions for technical and industrial education (except B. E. College the Ahsanullah School of Engineering, Dacca the Government Commercial Institute and the Government School of Act, Calcutta) are now under the control of the Director of Industries. A large proportion of educational work of every grade is under the control of various missionary bodies, which are assisted by Government grants-in-aid.

The municipalities are required to expend a certain proportion of their ordinary income on education. They are mainly responsible for primary education within their jurisdiction, but schools in these areas are eligible also for grants from Government. These bodies maintain a first grade Arts College and a high school at Burdwan, a high school at Santipur and a high school at Chittagong.

There are in the Presidency:—

Arts Colleges	38	Secondary Schools	2,651
Law ,,	3	Primary Schools	47,688
Medical Colleges	3	Special ,,	2,472
Engrg. College	1	Private Institutions	1,298
Training Colleges	5		
Veterinary College	1		

with 19,50,929 pupils in all.

The Department is administered by a Director of Public Instruction, assisted by an Assistant Director and an Assistant Director for Muhammadan Education. Each division is in charge of a Divisional Inspector assisted by a certain number of Additional or second Inspec-

tors and Assistant Inspectors for Mahommedan Education according to the requirements of the several divisions. Similarly the administrative charge of the primary education of each district is in the hands of a District Inspector assisted by Sub-Divisional Inspectors and Sub-Inspectors of Schools, the latter class officers being in some instances helped by officers of humbler status called Assistant Sub-Inspectors and Inspecting Pandits and Maulvis. Higher education is controlled by the Universities of Calcutta and Dacca established in 1857 and 1921, respectively, administered by the Chancellor (the Governor of Bengal), the Vice-Chancellor (appointed by Government) and a number of ex-officio elected and nominated fellows. The University of Calcutta maintains a Law College, called the University Law College, Calcutta. The Dacca University also has Law Department attached to it. The Calcutta University is mainly an examining body, but it has now made itself responsible for the actual teaching of students, for which purpose it employs an agency which is quite distinct from the staffs of the affiliated colleges.

The University at Dacca is of the residential type. There is a Board for Secondary and Intermediate Education at Dacca. It conducts the Matriculation and Intermediate Examinations for the students of institutions at Dacca and also the Islamic Matriculation and Intermediate Examinations.

The following University Professorships have been founded at Calcutta—(1) Prasanna Kumar Tagore Law Professorship, (2) Minto Professorship of Economics, (3) George V. Professorship of Mental and Moral Science, (4) Hardinge Professorship of Higher Mathematics, (5) Carmichael Professorship of Ancient Indian History and Culture, (6) Palit Professorships of Chemistry and Physics, (7) Sir Rash Behary Ghose Professorship of Applied Mathematics, Physics, Chemistry and Botany, (8) Two Professorships of English and (9) University Professorship of Comparative Philology.

The principal educational institutions are:—

GOVERNMENT ARTS COLLEGES.

Presidency College, Calcutta.
Rajshahi College.
Chittagong College
Sanskrit College.
Hughli College.
Krishnagar College.
Bethune College.
Intermediate classes attached to Eden High School for Girls, Dacca.
Dacca Intermediate College.

PRIVATE ARTS COLLEGES.

Aided

Scottish Churches College, Calcutta.
St. Xavier's College, Calcutta.
Jagannath Intermediate College, Dacca.
Brajmohan College, Barisal.
Anandamohan College, Mymensingh.
Victoria College, Comilla.
Wesleyan Mission College, Bankura.
Victoria College, Narail.
Hindu Academy, Daulatpur.
Serampore College.
St. Paul's Cathedral Mission College, Calcutta
Edward College, Pabna
Diocesan College, Calcutta.
Bagerhat College, Khulna.
Carmichael College, Rangpur.

Unaided.

City College, Calcutta.
Ripon College, Calcutta.
Bangabasi College, Calcutta.
Vidyasagar College, Calcutta.
Central College, Calcutta.
Krishna Chandra College, Hetampur.
Burdwan Raj College.
Uttarpara College.
Krishnath College, Berhampore.
Loreto House, Calcutta.
Rajendra College, Faridpur.
South Subarban College, Bhowanipur.
Feni College.

MUNICIPAL.

Midnapore College.

COLLEGES FOR PROFESSIONAL TRAINING.

Engineering—Government.

Bengal Engineering College, Sibpur.

Teaching—Government.

David Hare Training College.
Dacca Training College.
Dow Hill Training College, Kurseong

Aided.

Diocesan College, Calcutta.

Unaided.

Loreto House, Calcutta.

Medicine—Government.

Medical College, Calcutta.
School of Tropical Medicine and Hygiene Calcutta.

Aided.

Carmichael Medical College, Belgachi, Calcutta

Law.

University Law College, Calcutta.
The Law Department, attached to the Dacca University.
The Law Department, attached to the Ripon College, Calcutta

THE FINANCES OF BENGAL.

As under the reformed constitution the Provinces enjoy substantial financial autonomy, the finances of Bengal are set out in some detail.

ESTIMATED REVENUE FOR 1923-24.

Heads of Revenue.

	Thousands of Rs.
Land Revenue	3,06,27
Excise	2,05,00
Stamps	3,35,00
Forest	21,50
Registration	24,00
Subsidised Companies	100
Irrigation, Navigation, Embankment and Drainage Works for which Capital Accounts are kept (Net)	—55
Irrigation, Navigation, Embankment and Drainage Works for which no Capital Accounts are kept	201
Interest	405
Administration of Justice	14,50
Jails and Convict Settlements	14,05
Police	4,98
Ports and Pilotage	22
Education	10,87
Medical	10,55
Public Health	12
Agriculture	3,41
Industries	6,35
Miscellaneous Departments	11
Civil Works	5 95
Receipts in aid of Superannuation	4,21
Stationery and Printing	4,69
Miscellaneous	41,14
Miscellaneous Adjustments between the Central and Provincial Governments	75
Loans and Advances by the Bengal Government	12,56
Loans between the Central and the Bengal Government	..
Famine Insurance Fund	1,75
Total	10,34,49
Opening balance	60,83
Grand Total	10,95,32

ESTIMATED EXPENDITURE FOR 1923-24.

Heads of Expenditure.

Land Revenue	31,69
Excise	15,68
Stamps	8,90
Forests	12,74
Registration	18,41
Interest on Works for which Capital Accounts are kept	17,07
Other Revenue Expenditure financed from ordinary Revenue	12,57

	Thousands of Rs.
Construction of Irrigation, Navigation and Drainage Works.—	
Finance from Ordinary Revenue	866
Interest on Ordinary Debt	675
Sinking Funds	..
General Administration	1,29,26
Administration of Justice	1,15,23
Jails and Convict Settlements	39,44
Police	1,88,83
Ports and Pilotage	2,09
Scientific Departments	30
Education	1,26,68
Medical	56,27
Public Health	25,60
Agriculture	21,93
Industries	12,33
Miscellaneous Departments	2,79
Exchange on Transactions with London	10,18
Civil Works	93,12
Famine Relief and Insurance	200
Superannuation Allowances and Pensions	51,23
Stationery and Printing	23,59
Miscellaneous	3,99
Miscellaneous Adjustments between the Central and Provincial Governments	40
Capital Expenditure not charged to Revenue—	
Construction of Irrigation, Navigation Embankment and Drainage Works	2,50
Loans and Advances by the Bengal Government	11,84
Loans between the Central and the Bengal Government	4,35
Total	10,33,34
Closing balance	61,98
Grand Total	10,95,32

Administration.

Governor and President in Council.

His Excellency The Rt. Hon. Victor Alexander George Robert Bulwer-Lytton, Earl of Lytton, P.C., G.C.I.E., took his seat, 28th March 1922.

Personal Staff.

Private Secretary, H. R. Wilkinson, I.C.S.

Military Secretary, Lieut.-Colonel J. Mackenzie, C.I.E.

Surgeon, Major E. H. V. Hodge, I.M.S.

Aides-de-Camp, Major H. G. Benton and Captain S. B. Horn, M.C.

Honorary Aides-de-Camp, Lt.-Col. F. E. Wood, Lt.-Col. A. K. Tennent, and Capt. O. Goldsmith.

Extra Aide-de-Camp, Capt D. W M. Prinsep.

Indian Aide-de-Camp, Risaldar Mal Singh.

Members of Council.

The Hon. Mr. Hugh Lansdown Stephenson C.S.I., C.I.E., I.E.S.

" " Maharajadhiraja Bahadur of Burdwan, K.C.S.I., K.C.I.E.

" " Mr. James Donald, C.I.E., I.C.S., (Temporary).

" " Sir Abdur Rahim.

Secretariat.

Chief Secretary to Government, L. Birley, C.I.E., I.C.S.

Secretary, Revenue Department, M. C. McAlpin,

Secretary, Finance and Commerce Departments, A. Marr.

Secretary to the Council and Secretary, Legislative Department, C. Tindall, C.I.E.

Secretary to Government, Public Works Department, and Chief Engineer, C. P. Walsh (*on leave*); G. G. Dey

MISCELLANEOUS APPOINTMENTS.

Director of Public Instruction, W. W. Hornell.

Principal, School of Arts, P. Brown.

Inspector-General of Police, Robert Boyle Hyde.

Commissioner, Calcutta Police, Sir Reginald Clarke.

Conservator of Forests, R. C. Milward.

Surgeon-General, Major General Benjamin Hobbs Deare, C.I.E., I.M.S.

Collector of Customs, Calcutta, A. H. Lloyd, B.A., I.C.S. (*on leave*); W. W. Walker, B.A., (*Officiating*).

Commissioner of Excise and Salt, Satis Chandra Mukerji, I.C.S.

Accountant-General, J. C. Mitra, M.A., B.L.

Inspector-General of Prisons, Lt.-Col. F. S. C. Thompson, I.M.S.

Postmaster-General, H. N. Hutchinson, O.B.E. I.C.S.

Inspector-General of Registration, Khan Bahadur Amin-ul-Islam.

Director of Agriculture, G. Evans, M.A.

Protector of Emigrants, Major Charles Aikman Gourlay, I.M.S.

Superintendent, Royal Botanic Gardens, Lieut Colonel A. T. Gage.

LIEUTENANT-GOVERNORS OF BENGAL.

Frederick J. Halliday	1854
John P. Grant	1859
Cecil Beadon	1862
William Grey	1867
George Campbell	1871
Sir Richard Temple, Bart., K.C.S.I. ..	1874
The Hon. Ashley Eden, C.S.I.	1877
Sir Steuart C. Bayley, K.C.S.I. (*Offig.*) ..	1879
A. Rivers Thompson, C.S.I., C.I.E... ..	1882
H. A. Cockerell, C.S.I. (*Officiating*) ..	1885
Sir Steuart C. Bayley, K.C.S.I., C.I.E. ..	1887
Sir Charles Alfred Elliott, K.C.S.I. ..	1890
Sir A. P. MacDonnell, K.C.S.I. (*Offig.*) ..	1893
Sir Alexander Mackenzie, K.C.S.I. .. Retired 6th April 1898.	1895
Charles Cecil Stevens, C.S.I. (*Officiating*) .	1897
Sir John Woodburn, K.C.S.I. .. .. Died, 21st Nov. 1902.	1898
J. A. Bourdillon, C.S.I. (*Officiating*) ..	1902
Sir A. H. Leith Fraser, K.C.S.I.	1903
Lancelot Hare, C.S.I., C.I.E. (*Offig.*) ..	1906
F. A. Slacke (*Officiating*)	1906
Sir E. N. Baker, K.C.S.I. .. .. .. Retired 21st Sept. 1911.	1908
F. W. Duke, C.S.I. (*Officiating*)	1911

The office of Lieutenant-Governor of Bengal was abolished on April 1st, 1912, when Bengal was raised to a Governorship.

GOVERNORS OF THE PRESIDENCY OF FORT WILLIAM IN BENGAL.

The Rt. Hon. Baron Carmichael of Skirling, G.C.I.E., K.C.M.G.	1912
The Rt. Hon. Earl of Ronaldshay, G.C.I.E.	1917
The Rt. Hon. Lord Lytton	1922

BENGAL LEGISLATIVE COUNCIL.

The Hon'ble Mr. H. E. A. Cotton, C.I.E., *President.*
Major Hassan Suhrawardy, M.D., F.R.C.S., *Deputy President.*

Ex-officio—

The Hon'ble Sir Bijay Chand Mahtab, G.C.I.E., K.C.S.I., .O.M., Maharajadhiraja Bahadur of Burdwan.
The Hon'ble Sir Abd-ur-Rahim, Kt.
The Hon'ble Sir Hugh Stephenson, K.C.I.E., C.S.I.
The Hon'ble Mr. J. Donald, C.S.I., C.I.E.

Elected—

The Hon'ble Maulvi A. K. Fazl-ul-Huq.
The Hon'ble Hadji Mr. A. K. Abu Ahmed Khan Ghuznavi.

Official Nominated Members—

Mr. A. N. Moberly.
Major-General B. H. Deare, C.S.I., I.M.S.
Mr. D. H. Lees
,, M. C. McAlpin, C.I.E.
,, N. B. Gupta, C.I.E.
,, A. Marr, C.I.E.
,, J. A. L. Swan.
,, G. S. Dutt.
,, G. T. Hunningford.
,, G. G. Dey.
,, J. T. Donovan.
Dr. T. O. D. Dunn, M.A.
Mr. T. Emerson, C.I.E.
,, S. C. Stuart-Williams.

Nominated Non-Officials—

Mr. S. C. Mukerji.
Babu Charu Chandra Das.
Mr. K. C. Ray Chaudhury.
Mr. M. Daud.
Babu Debi Prosad Khaitan.
Rai Abinash Ch. Banerjee Bahadur, M.A.
Mr. D. J. Cohen.
Mr. P. N. Guha.

Elected Members

Name of Members.	Name of Constituency.
Babu Jatindra Nath Basu	Calcutta North (Non-Muhammadan).
Mr. Satcowripati Roy	Calcutta North-West (Non-Muhammadan).
Dr. Pramathanath Banerjea	Calcutta East (Non-Muhammadan.)
Mr. Nirmal Chandra Chunder.	Calcutta North Central (Non-Muhammadan.
Mr. Ashiny Coomar Banerjee	Calcutta South Central(Non-Muhammadan).
Vacant]	Calcutta. South (Non-Muhammadan.)
Babu Boroda Prosad Dey, B.L.	Hooghly Municipal (Non-Muhammadan.)
Babu Khagendra Nath Ganguly, Vakil.. ..	Howrah Municipal (Non-Muhammadan.)
Dr. Bidhan Chandra Roy	24-Parganas Municipal North (Non-Muhammadan.)

Name of Members.	Name of Constituency.
Babu Surendra Nath Ray	24-Parganas Municipal South (Non-Muhammadan.)
Rai Pyari Lal Doss Bahadur, M.B.E.	Dacca City (Non-Muhammadan.)
Babu Sarat Ch. Basu	Burdwan (Non-Muhammadan.)
Raja Manilall Singh Roy, C.I.E...	Do.
Babu Abanish Chandra Ray	Birbhum (Non-Muhammadan.)
Babu Anilbaran Roy	Bankura West (Non-Muhammadan.
Babu Umes Chandra Chatterjee, B.L.	Bankura East (Non-Muhammadan.)
Babu Debendra Lal Khan	Midnapore North (Non-Muhamamdan.)
Mr. C. R. Das	Midnapore South (Non-Muhammadan.)
Babu Mahendra Nath Maity	Do.
Babu Taraknath Mukerjea	Hooghly Rural (Non-Muhammadan.)
Babu Manmatha Nath Roy	Howrah Rural (Non-Muhammadan.)
Babu Hem Chandra Nasker	24-Parganas Rural Central (Non-Muhammadan
Mr. Birendra Nath Sasma	24-Parganas Rural South (Non-Muhammadan.)
Rai Harendranath Chaudhuri, M.A., B.L. ..	24-Parganas Rural North (Non-Muhammadan.
Babu Hemanta Kumar Sarker.	Nadia (Non-Muhammadan.)
Maharaj Kumar Sris Chandra Nandy	Murshidabad (Non-Muhammadan.)
(Vacant.)	Jessore South (Non-Muhammadan.)
Mr. D. N. Roy, Bar-at-Law.	Jessore North (Non-Muhammadan.)
Babu Sailaja Nath Roy Chaudhuri	Khulna (Non-Muhammadan.)
Mr. Kiran Sankar Roy	Dacca Rural (Non-Muhammadan.)
Babu Manmohon Neogi	Mymensingh West (Non-Muhammadan.)
Babu Naliniranjan Sarkar	Mymensingh East (Non-Muhammadan.)
Dr. Kumud Sankar Ray	Faridpur North (Non-Muhammadan.)
Dr. Mohini Mohon Das	Faridpur South (Non-Muhammadan.)
Mr. Nisith Chandra Sen	Bakarganj North (Non-Muhammadan).
Rai Satyendra Nath Roy Choudhuri Bahadur..	Bakarganj South (Non-Muhammadan.)
Mr. J. M. Sen Gupta, Bar-at-Law.	Chittagong (Non-Muhammadan.)
Babu Akhil Chandra Datta	Tippera (Non-Muhammadan).
Babu Satyendra Chandra Mitra	Noakhali (Non-Muhammadan.)
Babu Sudarsan Chakravorty	Rajshahi (Non-Muhammadan.)
Babu Jogindra Chandra Chakravorti, M.A., B.L.	Dinajpur (Non-Muhammadan).
Rai Sahib Panchanan Barma, M.B.E. ..	Rangpur (Non-Muhammadan.)
Babu Nagendra Narayan Ray, B.L. ..	Do.
Dr. J. M. Das Gupta	Bogra *cum* Pabna (Non-Muhammadan.)

Name of Members.	Name of Constituency.
Babu Romes Chandra Bagchi, B.L.	Malda (Non-Muhammadan).
Mr. Prasanna Deb Raikut	Jalpaiguri (Non-Muhammadan.)
Mr. S. Mahboob Aley	Calcutta North (Muhammadan.)
Mr. H. S. Suhrawardy	Calcutta South (Muhammadan.)
Maulvi Wahed Hossain	Barrackpore Municipal (Muhammadan.)
Maulvi Mahbubul Huq, M.A., B.L.	24-Parganas Municipal (Muhammadan.)
Maulvi Allabaksh Sarkar	Dacca City (Muhammadan.)
Maulvi Muhammad Yas	Burdwan Division North (Muhammadan.)
Maulvi Zannoor Ahmed	Burdwan Division South (Muhammadan).
Dr. A. Suhrawardy	24-Parganas Rural (Muhammadan.)
Maulvi Aftab Hossain Joardar	Nadia (Muhammadan.)
Maulvi Ekramul Huq, B.L.	Murshidabad (Muhammadan).
[Vacant]	Jessore North (Muhammadan.)
Maulvi Abdul Quader	Jessore South (Muhammadan.)
Maulvi Sayyed Sultan Ali	Khulna (Muhammadan.)
Nawab Saiyid Nawab Ali Chandhuri, Khan Bahadur, C.I.E.	Dacca West Rural (Muhammadan).
Khan Bahadur Kazi Zahirul Huq	Dacca East Rural (Muhammadan.)
Maulvi Md. Abdul Jubbar Pahlowan	Mymensingh West (Muhammadan.)
Maulvi Tayebuddin Ahmed, B.L.	Mymensingh East (Muhammadan.)
Mr. Altaf Ali	Do.
Mr. Syed M. Masih, Bar-at-Law	Faridpur North (Muhammadan).
Maulvi Saiyed Abdur Rob Chaudhuri	Faridpur South (Muhammadan.)
Maulvi Fazlal Karim Chowdhury.	Bakarganj North (Muhammadan.)
Khaje Nazimuddin, M.A. (Cantab.), Bar-at-law.	Bakarganj South (Muhammadan.)
Maulvi Md. Nurul Huq Chaudhury.	Chittagong (Muhammadan).
Maulvi Amanat Khan, B. A.	Do.
Shah Syed Emdadul Haq	Tippera (Muhammadan.)
Maulvi Asimuddin Ahamad.	Do.
Maulvi Abdur Rashid Khan	Noakhali (Muhammadan.)
Maulvi Sayedal Hoque, B.A.	Do.
Haji Lal Mahammed	Rajshahi South (Muhammadan.)
Khan Bahadur Maulvi Md. Choinuddin ..	Rajshahi North (Muhammadan.)
Maulvi Kader Baksh, B.L.	Dinajpur (Muhammadan).
Maulvi Basar Mahammad	Rangpur West (Muhammadan.)
Maulvi Mahi Uddin Khan	Rangpur East (Muhammadan.)

Name of Members	Name of Constituency.
Maulvi Rajib Uddin Tarafdar	Bogra (Muhammadan).
Moulvi Abdul Gafur, B.L.	Pabna (Muhammadan.)
Khan Bahadur Maulvi Musharruf Hossain ..	Malda *cum* Jalpaiguri (Muhammadan.)
Mr. J. A. Jones, C.I.E.	Presidency and Burdwan (European.)
,, Edward Villiers	Do.
,, J. Campbell Forrester	Do.
,, J. A. de Lisle	Dacca and Chittagong (European).
,, W. L. Travers, O.B.E.	Rajshahi (European).
,, H. Barton	Anglo-Indian.
Dr. H. W. B. Moreno	Do.
Babu Satya Kishore Banerjee	Burdwan Landholders.
Mr. Provash Chunder Mitter, C.I.E.	Presidency Landholders.
Babu Brajendra Kishore Roy Chaudhury ..	Dacca Landholders.
Mr. Arun Chandra Singha	Chittagong Landholders.
Kumar Shib Shekhareswar Ray	Rajshahi Landholders.
Babu Bejoy Krishna Bose	Calcutta University.
Mr. A. F. Rahman, B.A.	Dacca University.
,, Arthur d'Anyers Willis	Bengal Chamber of Commerce.
,, A. Cochran, C.B.E.	Do.
,, J. Y. Philip	Do.
,, R. B. Wilson, C.I.E.	Do.
Sir George Godfrey, Kt.	Do.
[Vacant]	Do.
Mr. G. F. Rose	Indian Jute Mills Association.
,, C. G. Cooper	Do.
,, T. C. Crawford	Indian Tea Association.
Sir Willoughby Carey, Kt.	Indian Mining Association.
Mr. J. Cottle	Calcutta Trades Association.
,, Byomkes Chakravarti	Bengal National Chamber of Commerce
Raja Reshee Case Law, C.I.E.	Do.
Babu Badridas Goenka	Bengal Marwari Association.
Mr. Tarit Bhusan Roy	Bengal Mahajan Sabha.

Secretary to the Council—C. TINDALL, C.I.E., I.C.S.

Asstt. Secretaries to the Council—J. BARTLEY, I.C.S.; A. M. HUTCHISON.; K. N. MAJUMDAR.

Registrar to the Council—J. W. McKAY.

The United Provinces.

The United Provinces of Agra and Oudh lie in practically the centre of Upper India. They are bounded on the north by Tibet, on the north-east by Nepal, on the south and south-east by Bengal, on the south by two of the Chota Nagpur States of the Central India Agency and the Saugor District of the Central Provinces, and on the west by the States of Gwalior, Dholpur, Bharatpur, Sirmor, and Jubbal, and by the Punjab. Their total area amounts to 107,267 square miles, to which may be added the area of the two Native States of Tehri and Rampur, both of which lie within the United Provinces, 5,079 square miles and the newly-created independent State of Benares with an area of 865 miles, giving a total of 112,346 square miles. The total population is 45,590,946.

The Provinces, originally termed the North-Western Provinces and so amalgamated in 1877, receiving their present designation in 1902, include four distinct tracts of country: portions of the Himalayas, the sub-Himalayan tracts including the Kumaon Division which consists of three hill districts, two of which are entirely in the hills and one is half in the submontane belt, the great Gangetic plain and portions of the hill systems of Central India which include Bundelkhand which now much improved by an extensive Canal system, though somewhat liable to run short of water in extremely dry years, is of great benefit in all ordinary years and years of limited drought. The first two of these tracts are infertile and support a very sparse population and the Central Indian plateau is almost equally infertile, though better populated. The soil of the Gangetic plain, however, possesses an extreme fertility and here the density of population rises from 512 persons per square mile in the west, to 549 in the centre and 718 in the east, which gives the Provinces as a whole a greater population pressure on the soil than any other Provinces in India. In the south there are low rocky hills, broken spurs of the Vindhyan mountains, covered with stunted trees and jungle, and in the North the lower slopes of the Himalayas, clothed with dense forest, affording excellent big and small game shooting, and rising beyond in a tangled mass of ridges, ever higher and higher, until is reached the line of the eternal snows, but the greater part of the provinces consists of level plain, teeming with highly-cultivated fields and watered by three rivers—the Ganges, Jumna, and Gogra.

The People.

The population is mainly Hindu, 85 per cent. ranking as such whilst Mahomedans number 14 per cent., the total of all other religions being less than 0·6 per cent. composed of Christians (Europeans and Indians) Jains, Aryas and Sikhs; the Aryas are the followers of the Arya Samaj sect, which obtains widely in the Punjab and has extended its influence to the United Provinces. The three main physical types are Dravidian, Aryan and Mongoloid, the latter being confined to the Himalayan and sub-Himalayan districts and the former to South Mirzapur and Bundelkhand, whilst the high-caste Aryans frequent the Western Districts of the Province. Most of the people, however, show a mixed Arya-Dravidian origin. Three languages are spoken by the great majority of the people in the plains—Western Hindi, Eastern Hindi and Behari; Urdu, or Hindustani is a dialect of Western Hindi, though it contains a large admixture of Persian and Arabic words, which makes it a *lingua franca*.

Industries.

The principal industry is agriculture, which supports no less than 71·7 of the population. The soils of the Provinces fall into three groups; the valley soils of the Himalayas, the main alluvium and the Central Indian alluvium; the chief characteristic soil of the Central Indian alluvium is the black soil, with a lighter variant, though here also there are light loams and gravel. The Himalayan soils are of local origin and vary with the nature of the rock from which they have been formed, whilst the main alluvium soils are sand, clay and loam, the loam being, naturally, the most productive. The soil generally yields excellent crops of rice, millet, maize, linseed, cotton, wheat; sugarcane, pulses, barley and poppy, rice being grown mostly in low-lying, heavy clays. The greater part of the Provinces is highly cultivated, the rainfall varies from 50 to 60 inches in the Hills, to 40 inches in the Benares and Gorakhpur Divisions, whilst the Agra Division receives about 25 to 30 inches annually only. Drought seriously affected Bundelkhand and the Agra Division, in the past, but improved drainage, and irrigation (a protective system of irrigation works exists and is being extended) have enabled a complete recovery to be made and the agricultural prosperity of the Provinces is now high, though it varies with the rainfall. Land is held mostly on the ryotwari tenure in Bundelkhand and Kumaon, on zemindari tenure in Agra and taluqdari tenure in Oudh. The principal land owners in Oudh are the Taluqdars, some of whom own very large estates. The area held in taluqdari tenure amounts to 51 per cent. of the total area in Oudh.

Manufactures.

The Provinces are not rich in minerals, Coal exists in Southern Mirzapur, iron and copper are found in the Himalayan Districts, and there were mines of importance there formerly, but increased difficulty of working them as veins became exhausted resulted in the closure of most of them. Gold is found in minute quantities by washing in some of the rivers in the Hills. Limestone is found in the Himalayas and stone is largely quarried in the Mirzapur District. Cotton is ginned and spun throughout the provinces, as a home industry, and weaving, by means of hand-looms, is carried on in most districts. In 1901 nearly a million persons were dependent on weaving, 140,000 on spinning and 136,000 on cleaning, pressing, and ginning, but during the last decade these industries have been on the decrease. The largest industry is in Azamgarh district, where there are 130,000 looms. Silk spinning is confined almost entirely to the district of Benares, where the famous *kinkob* brocade is made. Em-

broidery is manufactured in Lucknow, where the noted *chikan* work of silk on cotton or muslin is produced, and in Benares, where gold and silver work on velvet, silk, crepe and sarsenet obtains. The glass industry is important in some districts, Benares and Moradabad are noted for their lacquered brass work, porcelain is manufactured at Ghazipur, and other industries are those of paper-making (Lucknow) dyeing, leather-work and fireworks. The chief centre of European and Indian industry is Cawnpore, which, situated in most advantageous position on the Ganges, possesses tanneries, cotton, woollen, jute and other mills, which have a large and ever increasing output (the woollen mill is the largest in India). There are cotton factories at Aligarh (famous for its locks), Meerut and Bareilly; Mirzapur (which produces also excellent carpets), Hardoi and Hathras have cotton mills. Excellent furniture is made at Bareilly, at Allahabad there are stone works, at Rosa there is a large English distillery, with patent still.

The largest trade centres are Cawnpore, Allahabad, Mirzapur, Benares, Lucknow, Meerut, Aligarh, Hathras, Muttra, Agra, Farukhabad, Moradabad, Chandausi, Bareilly, Saharanpur, Muzufarnagar, Ghaziabad, Khurja, Gorakhpur, Ghazipur, Pilibhit and Shahjahanpur.

Administration.

The Province was until the close of 1920 administered by a Lieutenant-Governor, chosen from the ranks of the Indian Civil Service. Under the Reform Scheme the Province was raised to the status of a Governor-in-Council, the Governor being assisted by two members of the Executive Council in charge of the Reserved Subjects and two Ministers in charge of the Transferred Subjects. The medium for the transaction of public business is the Secretariat, the Staff of which consists of five Secretaries and five Under-Secretaries. The Chief Secretary is in charge of the Revenue, Appointment, General Administration, Political and Forest Departments; another Secretary attends to the Medical, Judicial, Police, Educational and Sanitation Departments; whilst a third looks to the local Self-Government, Financial, Municipal, Miscellaneous and Separate Revenue Departments. The other two Secretaries belong to the Public Works Department, and are also Chief Engineers, one of whom deals with Irrigation, and the other with Roads and Buildings. Government spends the cold weather, October to April, in Lucknow and Allahabad, mostly in Lucknow, where the Secretariat usually remains. The Governor and the Secretariat spend the hot weather in Naini Tal, but during the monsoon the Governor tours the plains, as he does also in the cold weather. The Board of Revenue is the highest court of appeal in revenue and rent cases, and it has important executive duties, being the chief revenue authority in the Provinces. There are forty-eight British districts, thirty-six in Agra and twelve in Oudh, average area 2,000 square miles and average population a million. Each District is in charge of a District Officer, termed a Collector and Magistrate in Agra and a Deputy Commissioner in Oudh and Kumaon, who is an Indian Civilian. The Districts are grouped together in Divisions under a Commissioner. There are ten Divisions, having an average area of nearly 12,000 square miles and a population of from 5 to 6 millions. The Districts are sub-divided into *tahsils*, with an average area of 500 square miles and a population of 220 000. Each *Tahsil* is in charge of a *Tahsildar*, who is responsible for the collection of revenue, and also exercises judicial powers. *Tahsils* are divided into *parganas* which are units of importance in the settlement of land revenue. Subordinate to the *Tahsildars* are *kanungos*, of whom there are, on an average, three to a *tahsil*. These officials supervise the work of the *patwaris*, or village accountants, check their papers and form a link direct between the villagers and Government. For judicial purposes (revenue and criminal), the District Officer assigns a sub-division, consisting of one or more *tahsils*, as the case may be to each of his subordinates, who may be covenanted civilians (Joint and Assistant Magistrates and Collectors), or members of the Provincial Service (Deputy Collectors and Magistrates). The Commissioner of the Bareilly and Kumaon Divisions are Political Agents for the Native States of Rampur and Tehri respectively and the Commissioner of Benares is the Political Agent for Benares State.

Justice.

Justice is administered by the High Court in the Province of Agra, and the Court of the Judicial Commissioner, in Oudh, which are the final appellate authorities in both criminal and civil cases. The former, which consists of a Chief Justice and six premanent and two temporary puisne Judges, three of whom are Indians, sits at Allahabad, and the latter, represented by a Judicial Commissioner and two Additional Commissioners, one of whom is an Indian, sits always in Lucknow. There are 31 posts (24 in Agra and 7 in Oudh) of District and Sessions Judges of which 8 are held by Indians not belonging to the I.C.S. as they have been listed to the provincial service and the bar. They have both original and appellate jurisdiction in civil and criminal cases, and occasional appellate jurisdiction in rent cases, but District Officers and their assistants, including *Tahsildars*, preside in both (in the capacity of Magistrates) criminal and rent and revenue courts, and dispose of a good deal of the work. In Kumaon, the Commissioner is a High Court Judge in Civil cases, and a District Judge in Criminal cases. In the larger Cantonments, the Cantonment Magistrates have limited powers as Judges of a Small Cause Court and also as Magistrates. There are also Subordinate Judges, Judges of Small Cause Courts and Munsifs, who dispose of a large number of small civil suits, being specially empowered in some cases, to decide suits up to Rs. 2,000; but generally they take cases up to Rs. 1,000, whilst Subordinate Judges hear cases up to Rs. 5,000. Appeals from Munsifs and Subordinate Judges go to the District Judges. Small Cause Court Judges try suits to the value of Rs. 500. There are also Honorary Munsifs, limited to Rs. 200 suits, and village Munsifs, whose jurisdiction is fixed at Rs. 20,

Local Self-Government.

Local Self-Government is exercised by means of District and Municipal Boards, the former levying local rates on land-owners; the latter deriving their revenue from octroi and other forms of taxation. The aim was to abolish octroi, but Indian opinion is reacting on this decision, because it interferes with through trade. All the principal Boards now have non-official Chairman, with an Executive Officer who is directly responsible to the Board in all matters.

Public Works.

The Public Works Department is divided into the Roads and Buildings branch and the Irrigation branch, each of which is administered by a Chief Engineer, who is also a Secretary to Government. The Provinces are divided into circles and divisions both for roads and buildings, and for irrigation purposes. Each circle is in charge of a Superintending Engineer, and each division is in charge of an Executive Engineer. The whole of the irrigation works constructed or maintained by Government are in charge of the Irrigation Department, nearly all metalled roads, and also bridges on second-class roads, and generally, all works costing more than Rs. 1,000, except in Municipalities, are in charge of the Buildings and Roads Department. Under Public Works there is now a separate Sarda canal branch of the Irrigation Department under a separate Chief Engineer with a full staff distinct from that of the running canals. The Sarda canal is a project of first rate importance and is under construction. It will introduce irrigation into most of the districts of Oudh.

Police.

The Police Force is divided into District and Railway Police and is administered by an Inspector-General, with five Deputies, one of whom is in charge of Railways, and two Assistants, forty-nine District Superintendents, two Railway Superintendents, and thirty Assistant Superintendents. There is a Police Training School at Moradabad. There is a local C. I. D, forming a separate detective department, under a Deputy Inspector-General, with an assistant. There is an armed police, specially recruited, and armed with the Martini Rifle. The administration of the Jail Department is in charge of an Inspector-General of Prisons, who is a member of the Indian Medical Service.

Education.

Education is in part wholly State-maintained; and partly by means of grants-in-aid. Great advance has been made by the institution of not less than four Universities three of which are new. These are the Benares, Hindu University, the Lucknow University, the Aligarh Moslem University in addition to the old university of Allahadbad. The Muir Central College has been merged in the Allahabad University and the Canning College, Lucknow, has been similarly merged in the Lucknow University. The Queen's College, Benares, has been reduced to the status of an Intermediate College. There is a Government Engineering College at Roorkee (Thomason College). There are aided Colleges in Lucknow (Reid Christian College), and (Isabella Thoburn College), Agra (St. John's), Gorakpur, Cawnpore and Meerut. In Lucknow there is the Martiniere school, an entirely independent institution, for European and Anglo-Indian children, and there is a Girls' Martiniere connected with it, whilst in the Hill-Stations, Naini-Tal and Mussoorie, there are many excellent private scholastic institutions for European boys and girls, which are attended by students from all over India. Government maintain Training Colleges, for teachers in Lucknow and Allahabad, an Art Crafts and an Industrial School in Lucknow, and an Agricultural College at Cawnpore. Public Schools are almost entirely maintained by the District and Municipal Boards and primary education is almost entirely in their hands. The position of the Province in regard to Education is fully described under the head Education and in the tables attached thereto (*q. v.*)

The principal educational institutions are:—

The Mahomedan University, Aligarh.
The Hindu (Benares) University, Benares.
St. John's College, Agra.
Queen's College, Benares.
Agra College.
Reid Christian College, Lucknow.
Meerut College.
Woodstock College, Mussoorie.
Bareilly College
Christian College, Allahabad.
Christ Church College, Cawnpore.
Isabella Thoburn College, Lucknow.
Thomason College, Roorkee.
King George's Medical College, Lucknow.

Medical.

The Medical Department is in charge o an Inspector-General of Civil Hospitals. A Civil Surgeon is in charge and is responsible for the medical work of each district, and in a few of the larger stations he has an assistant. In two stations (Ranikhet and Almora) Medical Officers in military employ hold collateral civil charge. There are eighty-three Assistant Surgeons in charge of important dispensaries and a large number of Indian hospital assistants. Lady doctors and female hospital assistants visit *purda nashin* women in their own homes and much good work is done in this manner.

The best equipped hospitals for Indian tients are the Thomason Hospital at Agra, George's Hospital and the Balrampur Ho at Lucknow. The Ramsay Hospital for peans at Naini Tal is a first class institution and there are also the Lady Dufferin Hospitals King George's Medical College is one of the best equipped in the country, with a staff of highly efficient professors, and the hospital is the first in the Provinces. There is an X-Ray Institute at Dehra Dun, where valuable research work has been carried out and there are sanatoria for British soldier in the Hills.

THE FINANCES OF THE UNITED PROVINCES.

As explained in the chapters on the new constitution of India, under the Reform Act of 1919, the financial position of the Provinces underwent a remarkable change. The Provinces are for all practical purposes financially independent of the Government of India, subject to a fixed annual contribution, which it is intended shall be gradually reduced to vanishing point when the position of the Central Government permits. As the finances of the Provinces thus become of greater importance, the position is set out in some detail in the following pages:—

ESTIMATED REVENUE FOR 1923-24.

Principal Heads of Revenue.

	Rs.
Taxes on Income	....
Land Revenue	6,88,77,000
Excise	1,50,00,000
Stamps	2,01,50,000
Forest	81,31,000
Registration	13,00,000
Total ..	11,34,58,000

Railways.

Subsidised Companies	65,000

Irrigation.

Works for which capital accounts are kept—	
(1) Productive Works— Net receipts	94,64,500
(2) Un-productive Works— Net receipts	1,22,500
Total, net receipts ..	95,87,000
Works for which no capital accounts are kept	23,000
Total Irrigation ..	96,10,000

Debt Services.

Interest	16,49,000
Total ..	16,49,000

Civil Administration.

Administration of Justice	10,10,000
Jails and Convict Settlements	5,36,800
Police	1,91,000
Education	9,20,000
Medical	67,000
Public Health	1,48,600
Agriculture	5,94,000
Industries	1,89,000
Miscellaneous Departments	47,000
Total ..	37,03,100

Buildings, Roads and Miscellaneous Public Improvements— Civil Works	9,15,000
	9,15,000

Miscellaneous.

	Rs.
Transfers from Famine Insurance Fund	*Nil.*
Receipts in aid of superannuation	4,47,000
Stationery and Printing	2,85,000
Miscellaneous	11,31,000
Total	18,63,000
Miscellaneous adjustments between the Central and Provincial Governments	*Nil*
Total Revenue	13,12,63,400
Debt, deposits and advances :—	
(*a*) Loans between the Central and Provincial Governments	1,01,39,700
(*b*) Loans and advances by the Provincial Government	31,89,000
(*c*) Famine Insurance Fund	52,12,300
(*d*) Deposits of Sinking Funds for Provincial Loans	3,18,000
Total	1,88,59,000
Total receipts	15,01,22,400
Opening Balance	94,04,054
Grand Tota	15,95,26,454

ESTIMATED EXPENDITURE FOR 1923-24.

Direct demands on the Revenues.

Taxes on Income	*Nil.*
Land Revenue	82,29,610
Excise	6,39,000
Stamps	3,13,300
Forests	49,46,590
Registration	4,49,200
Total	1,45,77,700

Railway Revenue Account.

Subsidised companies	5,000
Miscellaneous railway expenditure	7,700
Total	12,700

Irrigation Revenue account.

Works for which capital accounts are kept—	
Interest on debt	55,51,000
Miscellaneous irrigation expenditure	2,45,500
Total	57,96,500

Irrigation Capital account (charged to revenue).

Construction of Irrigation Works—	
A. Financed from Famine Insurance Grant	6,81,000
B. Financed from ordinary revenues	*Nil.*
Total	6,81,000

Debt Services.

Interest on ordinary debt	23,23,100
Sinking Fund	3,00,000
Total	26,23,100

	Rs.
Civil Administration.	
General Administration	1,34,45,200
Administration of Justice	66,09,900
Jails and Convicts Settlements	36,52,600
Police	1,61,92,340
Scientific Departments	23,600
Education	1,64,18,424
Medical	25,15,200
Public Health	13,29,700
Agriculture	24,59,800
Industries	12,72,515
Miscellaneous Departments	2,28,900
Exchange	*Nil.*
Total	6,40,48,179
Buildings, Roads and Miscellaneous Public Improvements.	
Civil Works	74,15,649
Total	74,15,649
Miscellaneous.	
Famine Relief and Insurance—	
A—Famine Relief	25,700
B—Transfers to Famine Insurance Fund	32,43,300
Superannuation allowances and pensions	51,96,500
Stationery and Printing	13,41,800
Miscellaneous	4,63,500
Total	1,02,70,800
Expenditure in England—	
Secretary of State	24,000
High Commissioner	21,02,760
Contributions and assignments.	
Contribution to the Central Government	2,40,00,000
Miscellaneous adjustments between the Central and Provincial Governments.	*Nil.*
Total	2,40,00,000
Irrigation and other capital not charged to revenue.	
(*a*) Construction of irrigation works	98,06,700
(*b*) Forest outlay	*Nil.*
Total	98,06,700
Debt, Deposits and advances—	
(*a*) Loans and advances by the Provincial Government	15,82,000
(*b*) Loans between the Central and Provincial Governments	25,00,000
(*c*) Civil Contingencies Fund	1,00,000
(*d*) Famine Insurance Fund	20,40,000
60 Civil Works	6,57,000
60 A. Other Provincial Works not charged to revenue	7,00,000
Total	76,39,000
Total, disbursements	14,89,98,088
Closing balance	1,05,28,366
Grand Total	**15,95,26,454**

Administration.

Governor.—His Excellency Sir William Marris, K.C.I.E. (1921).

Private Secretary.—Major R. C. B. Williams.

Aides-de-Camp.—Captain K E. Pickering and Captain T. K. Jones.

EXECUTIVE COUNCIL.

The Hon'ble Mr. S. P. O'Donnell, C.S.I., C.I.E., I.C.S.

The Hon'ble Raja Sir Muhammad Ali Muhammad Khan, KHAN BAHADUR K.C.S.I., K.C.I.E.

MINISTERS.

The Hon'ble Rai Rajeshwar Bali, B.A., O.B.E.

The Hon'ble Lieut. Nawab Muhammad Ahmad Sa'id Khan, C.I.E., M.B.E.

SECRETARIAT.

Chief Secretary to Government, G. B. Lambert, I.C.S.

Financial Secretary to Government, E. A. H. Blunt, O.B.E., I.C.S.

Revenue and Judicial Secretary, H. S. Crosthwaite, I.C.S.

Secretary to Government, Public Works Dept. (Buildings & Roads, & Railways), A. C. Verrieres, C.I.E.

MISCELLANEOUS APPOINTMENTS.

Opium Agent, Ghazipur, C. E. Wild.

Chief Conservator of Forests, H. G. Billson, F.C.H.

Director of Public Instruction, Sir C. F. de la Fose.

Inspector-General of Police, L. M. Kaye.

Inspector-General of Civil Hospitals, Lt.-Col. A. W. R. Cochrane, M.B., F.R.C.S., I.M.S.

Sanitary Commissioner, Major Cuthbert Lindsay Dunn.

Inspector-General of Registration, Rai Sahib Brij Lal.

Commissioner of Excise, T. Gibb.

Accountant-General, Dewan Bahadur Jnan Saran Chakrabarti, M.A., Ph.D., F.R.A.S.

Inspector-General of Prisons, Lt.-Col. J. M. Woolley.

Postmaster-General, H. S. R. Pilkington, C.I.E., M.V.O.

Director of Agriculture H. M. Leake, M.A.

LIEUTENANT-GOVERNORS OF THE NORTH-WESTERN PROVINCES.

Sir C. T. Metcalfe, Bart., G.C.B.	1836
The Right Hon. the Governor-General in the North-Western Provinces (Lord Auckland).	1838
T. C. Robertson	1840
The Right Hon. the Governor-Genera in the North-Western Provinces (Lord Ellenborough).	1842
Sir G. R. Clerk, K.C.B.	1843
James Thomson. Died at Bareilly. ..	1843
A. W. Begbie, *In charge*	1853
J. R. Colvin. Died at Agra	1853
E. A. Reade, *In charge*	1857
Colonel H. Fraser, C.B., Chief Commissioner, N.-W. Provinces.	1857
The Right Hon. the Governor-General administering the N.-W. Provinces (Viscount Canning).	1858
Sir G. F. Edmonstone	1859
R. Money, *In charge*	1863
The Hon. Edmund Drummond	1863
Sir William Muir, K.C.S.I.	1868
Sir John Strachey, K.C.S.I...	1874
Sir George Couper, Bart., C.B.	1876

LIEUTENANT-GOVERNORS OF THE NORTH-WESTERN PROVINCES AND CHIEF COMMISSIONERS OF OUDH.

Sir George Couper, Bart., C.B., K.C.S.I.	1877
Sir Alfred Comyns Lyall, K.C.B.	1882
Sir Auckland Colvin, K.C.M.G., C.I.E. ..	1887
Sir Chas. H. T. Crosthwaite, K.C.S.I. ..	1892
Alan Cadell (*Officiating*)	1895
Sir Antony P. MacDonnell, K.C.S.I. (*a*) ..	1895
Sir J. J. D. LaTouche, K.C.S.I.	1901

(*a*) Afterwards (by creation) Baron MacDonnell.

LIEUTENANT-GOVERNORS OF THE UNITED PROVINCES OF AGRA AND OUDH.

Sir J. J. D. LaTouche, K.C.S.I.	1902
Sir J. P. Hewett, K.C.S.I., C.I.E.	1907
L. A. S. Porter, C.S.I. (*Officiating*).. ..	1912
Sir J. S. Meston, K.C.S.I.	1912
Sir Harcourt Butler, K.C.S.I., C.I.E. ..	1918

GOVERNOR OF THE UNITED PROVINCES.

Sir Harcourt Butler, K.C.S.I., C.I.E. ..	1920
Sir William Marris, K.C.I.E.	1921

UNITED PROVINCES LEGISLATIVE COUNCIL.

PRESIDENT:

The Hon'ble Mr. Michael Keane, C.I.E., I.C.S.

DEPUTY PRESIDENT:

Rai Bahadur Pandit Kharagjit Misra, M.A., LL.B.

ELECTED MEMBERS.

Body, Association or Constituency represented.	Name.
Agra City (non-Muhammadan Urban)	Pandit Govind Sahai Sharma, *Bar.-at-Law.*
Cawnpore City (non-Muhammadan Urban) ..	Babu Narayan Prasad Arora, B.A.
Allahabad City (non-Muhammadan Urban) ..	Babu Sangam Lal, M.A., LL.B., *Vakil.*
Lucknow City (non-Muhammadan Urban) ..	Babu Mohan Lal Saksena, B.Sc., LL.B.
Benares City (non-Muhammadan Urban) ..	Babu Damodar Das, B.A.
Bareilly City (non-Muhammadan Urban) ..	Thakur Moti Singh B.A., LL.B.
Meerut-*cum*-Aligarh (non-Muhammadan Urban)	Rai Bahadur Lala Sita Ram, M.A., LL.B.
Moradabad-*cum*-Shahjahanpur (non-Muhammadan Urban)	Babu Bhagwati Sahai Bedar.
Dehra Dun district (non-Muhammadan Rural) .	Thakur Manjit Singh Rathor, B.A.
Saharanpur district (non-Muhammadan Rural)	2nd-Lt. Chaudhri Balwant Singh.
Muzafarnagar district (non-Muhammadan Rural)	Rai Jagdish Prasad Sahib
Meerut district (North) (non-Muhammadan Rural)	Chaudhri Jaswant Singh.
Meerut district (South) (non-Muhammadan Rural)	Chaudhri Sheoraj Singh.
Bulandshahr district (East) (non-Muhammadan Rural)	Pandit Nanak Chand, M.A., LL.B.
Bulandshahr district (West) (non-Muhammadan Rural)	Lala Babu Lal, B.Sc., LL.B.
Aligarh district (East) (non-Muhammadan Rural)	Thakur Raj Kumar Singh.
Aligarh district West) (non-Muhammadan Rural)	Thakur Lakshmi Raj Singh.
Muttra district (non-Muhammadan Rural) ..	Rai Bahadur Babu Ram Nath Bhargava.
Agra district (non-Muhammadan Rural ..	Rai Sahib Munshi Amba Prasad.
Mainpuri district (non-Muhammadan Rural) ..	Rai Bahadur Pandit Kharagjit Misra, M.A., LL.B.
Etah district (non-Muhammadan Rural) ..	Raja Surya Pal Singh
Bareilly district (non-Muhammadan Rural) ..	Lala Dhakan Lal.
Bijnor district (non-Muhammadan Rural) ..	Babu Nemi Saran, B.Sc., LL.B.
Budaun district (non-Muhammadan Rural) ..	Chaudhri Badan Singh
Moradabad district (non-Muhammadan Rural).	Chaudhri Sardar Singh.
Shajahanpur district (non-Muhammadan Rural).	Thakur Sadho Singh, B.A.
Pilibhit district (non-Muhammadan Rural) ..	Pandit Brijnandan Prasad Misra.
Jhansi district (non-Muhammadan Rural) ..	Pandit Bhagwat Narayan Bhargava, B.A.
Jalaun district (non-Muhammadan Rural) ..	Pandit Jhanni Lal Pande, B.A., LL.B.
Hamirpur district (non-Muhammadan Rural) .	Thakur Har Prasad Singh.
Banda district (non-Muhammadan Rural) ..	Thakur Keshava Chandra Singh, Chaudhri, M.Sc., LL. B.
Farrukhabad district (non-Muhammadan Rural)	Lieut. Raja Durga Narayan Singh.
Etawah district (non-Muhammadan Rural) ..	Lieut. Raja Hukm Tej Pratap Singh.
Cawnpore district (non-Muhammadan Rural)..	Rai Bahadur Pandit Bal-Bhadra Prasad Tiwari.

Body, Association or Constituency represented.	Name.
Fatehpur district (non-Muhammadan Rural) ..	Pandit Sri Krishna Dutt Paliwal.
Allahabad district (non-Muhammadan Rura)..	Babu Parsidh Narayan Anad.
Benares district (non-Muhammadan Rural) ..	Pandit Yajna Narayanupadhya, M.A., LL. B., L.T.
Mirzapur district (non-Muhammadan Rural) ..	Pandit Raja Ramji.
Jaunpur district (non-Muhammadan Rural) ..	Raja Sri Krishna Dutt Dube.
Ghazipur district (non-Muhammadan Rural) ..	Babu Deep Narayan Roy, B.A., LL.B.
Ballia district (non-Muhammadan Rural) ..	Thakur Hanuman Singh.
Gorakhpur district (West) (non-Muhammadan Rural).	2nd-Lt. Sahibzada Ravi Pratap Narayan Singh, Rai Bahadur.
Gorakhpur district (East) (non-Muhammadan Rural).	Raja Indrajit Pratab Bahadur Sahi.
Basti district (non-Muhammadan Rural) ..	Bhaya Hanumat Prasad Singh.
Azamgarh district (non-Muhammadan Rural)..	Pandit Baijnath Misra, B.A., LL.B.
Naini Tal district (non-Muhammadan Rural) ..	Pandit Govind Ballabh Pant, B.A., LL.B.
Almora district (non-Muhammadan Rural ..	Pandit Har Govind Pant, B.A. LL.B.
Garhwal district (non-Muhammadan Rural) ..	Mr. Mukandi Lal, B.A. (OXEN.)
Lucknow district (non-Muhammadan Rural) ..	Babu Ram Chandra Sinha, B.Sc.
Unao district (non-Muhammadan Rural) ..	Raja Shankar Sahai.
Rae Bareli district (non-Muhammadan Rural)..	Dr. Jai Karan Nath Misra, M.A., LL.D.
Sitapur district (non-Muhammadan Rural) ..	Kunwar Rajendra Singh.
Hardoi district (non-Muhammadan Rural) ..	Rai Bahadur Thakur Mashal Singh.
Kheri district (non-Muhammadan Rural) ..	Babu Sita Ram, B.A., LL.B.
Fyzabad district (non-Muhammadan Rural) ..	Kunwar Krishna Pratap Singh.
Gonda district (non-Muhammadan Rural) ..	Babu Bindeshri Prasad.
Bahraich district (non-Muhammadan Rural) ..	Thakur Hukum Singh, B A., LL.B.
Sultanpur district (non-Muhammadan Rural) .	Kunwar Surendra Pratap Sahi.
Partabgarh district (non-Muhammadan Rural).	Rai Bahadur Babu Shankar Dayal, B.A., LL.B.
Allahabad-*cum*-Benares (Muhammadan Urban).	Mr. Muhammad Zahur Ahmad.
Lucknow-*cum*-Cawnpore (Muhammadan Urban)	Dr. Muhammad Naim Ansari, L.M.S.
Agra and Meerut-*cum*-Aligarh (Muhammadan Urban).	Mr. Muhammad Aslam Saifi.
Bareilly and Shahjahanpur-*cum*-Moradabad (Muhammadan Urban)	Maulvi Zahur-ud-Din, B.A., LL.B.
Dehra Dun district (Muhammadan Rural) ..	Rao Abdul Hameed Khan.
Saharanpur district (Muhammadan Rural) ..	Maulvi Shahab-ud-Din, B.A., LL.B.
Meerut district (Muhammadan Rural)	Lieut. Nawab Jamshed Ali Khan.
Muzafarnagar district (Muhammadan Rural)..	Khan Bahadur Kunwar Inayat Ali Khan.
Bijnor district (Muhammadan Rural)	Khan Bahadur Chaudhri Amir Hasan Khan.
Aligarh, Muttra and Agra districts (Muhammadan Rural).	Maulvi Obaidul Rahman Khan.
Mainpuri, Etah and Farrukhabad districts (Muhammadan Rural).	Dr. Zia-ud-Din Ahmad, C.I.E., M.A. (Cantab), Ph. D. (Cottingen), D.Sc.
Etawah, Cawnpore and Fatehpur districts (Muhammadan Rural).	Hafiz Hidayat Husain, B.A.
Jhansi division (Muhammadan Rural)	Mr. Masud-uz-Zaman.
Allahabad, Jaunpur and Mirzapur districts (Muhammadan Rural).	Nawabzada Muhammad Yusuf.
Benares, Ghazipur, Ballia and Azamgarh districts (Muhammadan Rural).	Khan Bahadur Shah Badre Alam.
Gorakhpur district (Muhammadan Rural) ..	Khan Bahadur Muhammad Ismail.
Basti district (Muhammadan Rural)	Maulvi Abdul Hakim, M.A., B.Sc., LL.B.

Body, Association or Constituency represented.	Name.
Moradabad (North) (Muhammadan Rural) ..	Dr. Shafaat Ahmad Khan.
Moradabad (South) (Muhammadan Rural) ..	Saiyed Muhammad Ashiq Husain.
Budaun district (Muhammadan Rural) ..	Khan Bahadur Maulvi Fasrcih-ud-Din.
Shahjahanpur district (Muhammadan Rural) ..	Khan Bahadur Maulvi Muhammad Fazl-ur-Rahman Khan, B.A., LL.B.
Bareilly district (Muhammadan Rural) ..	Khan Bahadur Hakim Mahbub Ali Khan.
Kumaun division-*cum*-Pilibhit (Muhammadan Rural).	Mr. Ashiq Husain Mirza.
Gonda and Bahraich districts (Muhammadan Rural).	Khan Sahib Munshi Siddiq Ahmad.
Kheri and Sitapur districts (Muhammadan Rural).	Qazi Habib Ashraf.
Hardoi, Lucknow and Unao districts (Muhammadan Rural).	Lieut. Shaikh Sahhid Husain, M.A., LL.B., O.B.E.
Fyzabad and Bara Banki districts (Muhammadan Rural).	Khan Bahadur Chaudhri Muhammad Rashid-ud- Din Ashraf.
Sultanpur, Partabgarh and Rae Bareli districts (Muhammadan Rural).	Shaikh Abdus Samad Ansari.
European	Mr. St. George H. S. Jackson.
Agra Landholders (North)	*Vacant.*
Agra Landholders (South)	Raja Ragho Prasad Narayan Singh, Rai Bahadur.
Taluqdars	Lala Mathura Prasad-Mehrotra, B.A. Raja Shambhu Dayal. Lieut. Shaikh Imtiaz Rasul Khan. Thakur Jagannath Bakhsh Singh.
Upper India Chamber of Commerce	Sir Thomas Smith, Kt., V.D. Mr. Tracy Gavin Jones.
United Provinces Chamber of Commerce ..	Rai Bahadur Babu Vikramajit Singh, B.A., LL.B.
Allahabad University	Dr. Ganesh Prasad, D.Sc.

NOMINATED MEMBERS.

Mr. G. B. Lambert, C.S.I., I.C.S.
Mr. E. A. H. Blunt, C.I.E., O.B.E., I.C.S.
Kunwar Jagdish Prasad, C.I.E., O.B.E., I.C.S.
Mr. G. B. F. Muir, I.C.S.
Mr. A. C. Verrieres, C.I.E.
Mr. C. E. D. Peters, I.C.S.
Mr. J. R. W. Bennett, I.C.S.
Mr. S. H. Fremantle, C.S.I., C.I.E., V.D., I.C.S.
Mr. R. Burn, C.S.I., I.C.S.
Mr. W. S. Cassels, O.B.E., I.C.S.
Mr. A. G. P Pullan, I.C.S.
Mr. H. G. Billson.
Mr. A. D. Ashdown, I.P.S.
Lieut.-Col. R. F. Baird, I.M.S.
Mr. A. H. Mackenzie, M.A., B.Sc.
Mr. G. Clarke, F.I.C., F.C.S.
Raja Muhammad E'Jaz Rasul Khan, C.S.I.
Raja Brij Narayan Bahadur, Rai.
Mr. H. C. Desanges, *Barrister-at-Law.*
Mr. H. David.
Babu Khsem Chand.

The Punjab.

The Punjab, or land of the five rivers, is so called from the five rivers by which it is enclosed, namely, the Jhelum, Chenab, Ravi, Beas and Sutlej. Together with the North-West Frontier Province and the Native State of Jammu and Kashmir which lie to the north, the Punjab occupies the extreme north-western corner of the Indian Empire, and with the exception of the above-mentioned province comprises all of British India north of Sind and Rajputana and west of the river Jumna. Previous to October 1912, the Punjab with its feudatories embraced an area of 136,330 square miles and a population at the Census of 1911 of 24,187,750 (inclusive of 28,587 trans-frontier Baluchis) that is to say, about one-thirteenth of the area and population of the Indian Empire. But the formation of a separate province of Delhi reduced the area and population of the Punjab by about 450 square miles and 380,000 souls respectively. The total population of the Province in 1921, including Delra and the Baloch tribes on the border of the Dehra Ghazi Khan District was 25,101,060 of whom 4,416,036 were in the Indian States.

Physical Features.

The greater part of the Punjab consists of one vast alluvial plain, stretching from the Jumna in the east to the Suleman Range in the west. The north-east is occupied by a section of the Himalayas and the Salt Range forms its north-western angle. A few small spurs of the Aravalli mountain system traverse the extreme south-east and terminate in the Ridge at Delhi. The Punjab may be divided into five natural divisions. The Himalayan tract includes an area of 22,000 square miles, with a scanty population living scattered in tiny mountain hamlets. The Salt Range tract includes the districts of Attock, Rawalpindi and Jhelum and part of Shahpur district. Its physical configuration is broken and confused and the mountainous tracts of Murree and Kahuta approximate closely in characteristics to the Himalayan tract. Except in the hills, the rainfall leaves little margin for protection against distress in unfavourable seasons and irrigation is almost unknown. Skirting the base of the hills and including the low range of the Siwaliks, runs the narrow sub-montane tract. This tract, secure in an ample rainfall, and traversed by streams from the hills, comprises some of the most fertile and thickly populated portions of the province. Its population of over four millions is almost wholly agricultural and pastoral but it includes one large town in Sialkot. Of the plains of the Punjab, the eastern portion covers an area of some 36,000 square miles with a population of 10¼ millions. East of Lahore, the rainfall is everywhere so far sufficient that cultivation is possible without irrigation in fairly favourable seasons, but over the greater part of the area the margin is so slight that, except where irrigation is employed, any material reduction in the rainfall involves distress, if not actual famine. Within the eastern plains lie the large cities of Lahore and Amritsar, and the population in comparison with the western Punjab is largely urban. The western plains cover an area of 59,000 square miles, with a population of a little over six millions. The rainfall in this area, heaviest in the north and east and decreasing towards the west and south; is everywhere so scanty that cultivation is only possible with the aid of artificial irrigation or upon the low-lying river-banks left moist by the retreating floods. In this very circumstance, these tracts find their scarcity against famine, for there cultivation is almost independent of rain; a failure of which means nothing worse than a scarcity of grass. So little rain is sufficient, and absolute drought occurs so seldom that the crops may be said never to fail from this cause. The western plains embrace the great colony areas on the Chenab and Jhelum Canals which now challenge the title of the eastern plains as the most fertile, wealthy and populous portions of the province. Multan and Lyallpur are the largest towns in the western area. Owing to its geographical position, its scanty rainfall and cloudless skies, and perhaps to its wide expanse of untilled plains, the climate of the Punjab presents greater extremes of both heat and cold than any other portion of India. The summer, from April to September, is scorchingly hot, and in the winter; sharp frosts are common. But the bright sun and invigorating air make the climate of the Punjab in the cold weather almost ideal.

States.

The Indian States of the Punjab were formerly in the Political charge of the Punjab Government. In 1921, however, the thirteen most important States, including Patiala, Bahawalpur, Tind and Nabha, were formed into a separate "Punjab States Agency" under the control of the Agent to the Governor-General, Punjab States. The only States remaining in the charge of the Punjab Government, are the Simla Hill States, for which the Deputy Commissioner of Simla is Political Officer, and three small States in the Ambala Division, Kalsia, Palandi and Dujana, which are supervised by the Commissioner of Ambala.

The People.

Of the population roughly one half is Mahomedan, three-eighths Hindu and one-eighth Sikh. Socially the landed classes stand high and of these the Jats, numbering nearly five millions, are the most important. Roughly speaking, one half the Jats are Mahomedan; one-third Sikh and one-sixth Hindu. In distribution they are ubiquitous and are equally divided over the five divisions of the province. Next in importance come the Rajputs, who number over a million and a half. The majority of them are Mahomedans by religion, about a fourth are Hindus and a very few Sikhs. They are widely distributed over the province. Both Jats and Rajputs of the Punjab provide many of the best recruits for the Indian Army. In fact all the agricultural classes of the Punjab, except in the south-western districts, made a magnificent response to the appeal for recruits in the great war and the province's contribution of upwards of 400,000 men to the main power of the Empire speaks for itself. The Gujars are an important agricultural and pastoral tribe, chiefly found in the eastern half of the province and in the extreme north-west. In organisation they closely resemble the Jats and are often absorbed

into that tribe. There are many minor agricultural tribes, priestly and religious castes (Brahmans, Sayads and Kureshis), most of whom are landholders, the trading castes of the Hindus (Khatris, Aroras and Banias) and trading castes of the Mahomedans (Khojas, Parachas and Khakhas), and the numerous artisan and menial castes. There are also vagrant and criminal tribes, and foreign elements in the population are represented by the Baluchis of Dera Ghazi Khan and neighbouring districts in the west, who number about half a million and maintain their tribal system, and the Pathans of the Attock and Mianwali districts. Pathans are also found scattered all over the province engaged in horse-dealing, labour and trade. A small Tibetan element is found in the Himalayan districts.

Languages.

The main language of the province is Punjabi, which is spoken by more than half the population. Western Punjabi may be classed as a separate language, sometimes called Lahndi, and is spoken in the north and west. The next most important languages are Western Hindi, which includes Hindustani, Urdu (the polished language of the towns) and other Hindi; Western Pahari, which is spoken in the hill tracts; and Rajasthani, the language of Rajputana. Baluchi, Pushto, Sindhi and Tibeto-Burman languages are used by small proportions of the population.

Agriculture.

Agriculture is the staple industry of the province, affording the main means of subsistence to 56 per cent. of the population. It is essentially a country of peasant proprietors. About one-sixth of the total area in British districts is Government property, the remaining five-sixths belonging to private owners. But a large part of the Government land is so situated that it cannot be brought under cultivation without extensive irrigation. Thus the Lower Chenab Canal irrigates nearly 2,000,000 acres of what was formerly waste land and the Lower Jhelum Canal, 400,000 acres, and the Lower Bari Doab Canal, when the colonisation scheme is completed, will add 1,580,000 acres to this total. Large areas in the hills and elsewhere which are unsuited to cultivation are preserved as forest lands, the total extent of which is about 8,700 square miles. Of the crops grown, wheat is the most important and the development of irrigation has led to a great expansion of the wheat area. Next in importance to wheat is gram. Other important staples are barley, rice, millets, maize, oilseeds (rape, toria and sesamum), cotton and sugarcane. Cotton is grown generally throughout the province. On the Canal irrigated areas the Cotton grown is chiefly American but elsewhere it is the short stapled variety, known as 'Bengals.' The country being preponderantly agricultural, a considerable proportion of the wealth of the people lies in its live-stock. Large profits are derived from the cattle and dairy trades and wool is a staple product in the south-west in Kulu and Kangra and throughout the plains generally. The production of hides and skins is also an important industry

Industries.

The mineral wealth of the Punjab is small, rock salt, saltpetre and limestone for road building being the most important products. There are some small coal mines in the Jhelum, Shahpur and Mianwali districts with an output of about 75,000 tons a year, and gold washing is carried on in most of the rivers not without remunerative results. Iron and copper ores are plentiful but difficulties of carriage and the absence of fuel have hitherto prevented smelting on a large scale. The Punjab is not a large manufacturing country, the total number factories being only 429 (*viz.*, 257 cotton ginning, cleaning and pressing factories, 25 rice and flour mills, 25 iron works, 16 ice factories, 6 tea plantation works, 83 miscellaneous factories and mills, 12 railway workshops, 4 cotton spinning and weaving mills, and one woollen mill). These cotton spinning and weaving mills and the woollen mill were only recently established. Cotton weaving as a domestic industry is carried on by means of hand looms in nearly every village. The Salvation Army and the five Government Weaving Schools have shown considerable enterprise in improving the hand-weaving industry. Blankets and woollen rugs are also produced in considerable quantities and the carpets of Amritsar are famous. Silk weaving is also carried on and the workers in gold, silver, brass, copper and earthenware are fairly numerous and ivory carving is carried on at Amritsar and in the Patiala State and Muzaffargarh District. Mineral Oil is being extracted and refined in the Attock District and a cement industry has been started

Administration.

Prior to the passing of the Indian Reform Act of 1919 the system of administration was that of a Lieutenant-Governor, drawn from the ranks of the Indian Civil Service. Under that Act the Province was raised to the status of a Governorship, with an Executive Council and Ministers, the Governor in Council being in charge of the Reserved Subjects and the Governor with his Ministers of the Transferred Subjects. The general system of provincial administration under this scheme is sketched in the section Provincial Governments (*q. v.*) where is also given a list of the Reserved and Transferred Subjects. Associated with the Governor and the Council and Ministers is an enlarged Legislative Council, with wide powers, whose scope and authority are given under the Legislative Councils (*q. v.*), the system being common to all the major Provinces. The business of Government is carried on through the usual Secretariat which consists of four Secretaries, designated (1) Chief, (2) Home, (3) Financial Secretaries and Secretary, Transferred Departments and three Under-Secretaries. The post of Revenue Secretary has been held in abeyance temporarily and the work hitherto done by that officer has been transferred to the Financial Commissioners who have been designated Secretaries to Government in the Revenue and Development Departments. In the Public Works Department, there are also three Secretaries (Chief Engineers), one in the Buildings and Roads Branch and two in the Irrigation Branch. The heads of the Police and Educational Departments

are also Under-Secretaries to Government. The Government spends the winter in Lahore and the summer (from the middle of May to the middle of October) in Simla. Under the Governor, the province is administered by five Commissioners (for Ambala, Jullunder, Lahore, Rawalpindi and Multan) who exercise general control over the Deputy Commissioners—29 in number—each of whom is in charge of a district.

The principal heads of Department in the province are the two Financial Commissioners (who are the highest Court of Revenue jurisdiction, and heads of the departments of Land and Separate Revenue and of Agriculture and the Court of Wards), the three Chief Engineers, the Inspector-General of Police, the Director of Public Instruction, the Inspector-General of Prisons, the Inspector-General of Civil Hospitals, the Sanitary Commissioner, the Conservator of Forests, the Director of Agriculture and Industries, the Inspector-General of Registration, the Registrar of Co-operative Credit Societies and Joint Stock Companies and the Legal Remembrancer.

Justice.

The administration of justice is entrusted to a High Court, which is the final appellate authority in civil and criminal cases, and has powers of original criminal jurisdiction in cases where European British subjects are charged with serious offences and original civil jurisdiction in special cases. The Court sits at Lahore and is composed of a Chief Justice and six puisne judges (either Civilians or barristers), and four additional judges. Subordinate to the High Court are the District and Sessions Judges (22 in number) each of whom exercises civil and criminal jurisdiction in a civil and sessions division comprising one or more districts. In districts in which the Frontier Crimes Regulation is in force the Deputy Commissioner on the finding of a Council of Elder Jirga) may pass sentence up to four years' imprisonment.

Local Self-Government.

Local Self-Government is secured in certain branches of the administration by the constitution of District Boards, each exercising authority over a district; of Municipalities, Small Towns and Notified Areas, each exercising authority over an Urban area, and of Panchayats, each exercising authority over a revenue estate or a compact group of revenue estates. The funds of District Boards are derived from a cess on the land revenue of the district supplemented by Government grants, profession taxes and miscellaneous fees, and those of Municipalities, Small Towns, and Notified Areas from octroi and in some cases other forms of taxation and Government grants. The Panchayat is an attempt to revive the traditional village community, the elected committee or Panchayat possessing certain powers in respect of taxation, local option, civil and criminal justice and other matters. The elective principle is now practically universal in all claims of local self-governing bodies. Under the reformed system of Government the public has begun to show considerable interest in elections.

Police.

The Police force is divided into District and Railway Police. The combined force is under the control of the Inspector-General, who is a member of the Gazetted force and has under him three Deputy Inspector-Generals and a fourth Deputy Inspector-General in charge of Criminal Investigation Department and Finger Print Bureau at Phillaur. There is a Police Training School at Phillaur controlled by a Principal of the rank of Superintendent of Police. The Railway Police are under an Assistant Inspector-General. The District Police are controlled by Superintendents, each of whom is in charge of a district and has under him one or more Assistant Superintendents or Deputy Superintendents.

Education.

The strides which have been made in the past ten years especially in the concluding years of the period have brought the Punjab in line with the older and more forward provinces. What is still more noteworthy is that the advance is not confined to any one form of education but is spread over all grades and varieties. In addition to institution scattered over the entire province through private liberality, Government maintains three arts colleges, one central training college, one arts college for women, and the Government Training Class for Europeans at Ghoragali, 26 normal schools for teachers of both sexes, 55 secondary schools for boys and girls, a reformatory school and 13 centres for vocational training. Apart from these institutions for general education, Government maintains seven higher grade professional institutions, *viz.*, the Lyallpur Agricultural College, the medical and veterinary colleges at Lahore, the school of engineering at Rasul, the Mayo school of arts and the Railway technical school, Lahore, and the College of Mechanical Engineers, Moghalpura.

The Department of Education is in charge of the Minister for Education who is assisted in the work of administration by the Director of Public Instruction. The Punjab University controls higher education.

Irrigation.

But a large part of the Government land is so situated that it cannot be brought under cultivation without extensive irrigation. Thus the Lower Chenab Canal has rendered cultivation possible in nearly 2,000,000 acres of what was formerly waste land and the Lower Jhelum Canal, 400,000 acres, and the Triple Canal Project, when the colonisation scheme is completed, will add 1,580,000 acres to the total.

orests.

Large areas in the hills and elsewhere which are unsuited to cultivation are preserved as forest lands, the total extent of which is about 8,700 square miles.

Medical.

The Medical Department is controlled the Inspector-General of Civil Hospitals (a member of the Indian Medical Service). The Department of Public Health is controlled by Director of Public Health (also a member of the Indian Medical Service) who for the present has under him three Assistant Directors of Public Health and is advised by the Sanitary Board, with the Sanitary Engineer as Technical Adviser.

Heads of Account.	Budget Estimate, 1923-24.	Heads of Account.	Budget Estimate, 1923-24.
	Rs.		Rs.
Revenue Receipts.		*Buildings and Roads.*	
Principal Heads of Revenue.		XXX—Civil Works	3,65,000
II—Taxes on Income ..	3,06,000	*Miscellaneous.*	
V—Land Revenue	3,11,80,000	XXXII—Transfers from Insurance Fund.	....
Deduct—Sale of waste lands and Government estates.	—30,00,000	XXXIII—Receipts in aid of Superannuation.	5,29,000
		XXXIV—Stationery and Printing	46,000
VI—Excise	1,02,00,000	XXXV—Miscellaneous ..	31,85,000
VII—Stamps	1,13,84,000	*Deduct*—Sale of town sites	— 3,68,000
VIII—Forest	50,00,000	Total ..	33,92,000
IX—Registration	7,47,000	*Contributions and Assignments to Central and Provincial Governments.*	
Total ..	5,57,67,000		
Irrigation.		XL Miscellaneous adjustments between the Central and Provincial Governments.	....
XIII—Irrigation—Works for which capital accounts are kept.	5,16,27,000		
Deduct—Working Expenses.	1,50,79,000	Total Revenue Receipts .	9,94,12,000
XIV—Irrigation—Works for which no capital accounts are kept.	3,50,000	Revenue deficit met from Balance	....
		Revenue deficit met from Advance from Government of India.	62,84,000
Total ..	3,59,98,000	Total ..	10,56,96,000
Debt Services.			
XVI—Interest	4,13,000	Capital Receipts.	
Civil Administration.		Sale of waste lands and Government estates.	30,00,000
XVII—Administration of Justice	8,90,000	Sale of town sites	368,000
XVIII—Jails and Convict Settlements.	4,08,000	Permanent debt incurred ..	1,00,00,000
		Temporary debt incurred	....
XIX—Police	3,98,000	Famine Insurance Fund	....
XXVI—Miscellaneous Departments	30,000	Loans and Advances	23,35,000
Total ..	17,26,000	Total Capital Receipts ..	1,57,03,000
Beneficent Departments.			
		Capital deficit met from Balance ..	....
XXI—Education	7,30,000	Capital deficit met from Loan from Government of India.	50,72,000
XXII—Medical	1,29,000		
XXIII—Public Health	1,25,000	Total ..	2,07,75,000
XXIV—Agriculture ..	7,52,000	Total Receipts	12,64,71,000
XXV—Industries	15,000	Opening Balance	....
Total ..	17,51,000	Grand Total	....

Heads of Account.	Budget Estimate, 1923-24.	Heads of Account.	Budget Estimate, 1923-24.
	Rs.		Rs.
Expenditure Charged to Revenue.		*Buildings and Roads.*	
		41—Civil Works { Reserved ..	93,000
Direct demands on the Revenue.		41—Civil Works { Transferred ..	97,50,000
5—Land Revenue	42,81,000	Total ..	98,43,000
6—Excise	3,81,000	*Miscellaneous.*	
7—Stamps	2,74,000	43—Famine Relief and Insurance	3,81,000
8—Forests	35,98,000	45—Superannuation and Pensions	41,79,000
9—Registration	1,31,000	46—Stationery and Printing ..	19,30,000
		47—Miscellaneous	22,68,000
Total ..	86,65,000	Total	78,58,000
Irrigation Revenue Accounts.		*Contributions and Assignments to Central and Provincial Governments.*	
14—Irrigation Works for which capital accounts are kept (Interest on debt.)	87,87,000	51—Contribution and Assignment to Central Government.	1,75,00,000
15—Miscellaneous Irrigation Expenditure.	10,71,000	52—Miscellaneous adjustments between Central and Provincial Governments.	30,000
Total ..	98,58,000	Total ..	1,75,30,000
Irrigation Capital Account charged to Revenue.		Civil Contingencies Fund	1,50,000
16—Irrigation Works	....	Total Expenditure charged to Revenue.	10,56,96,000
Debt Services.			
19—Interest on Ordinary Debt ..	6,90,000		
21—Sinking Funds	25,00,000		
Total ..	31,90,000		
Civil Administration.			
22—General Administration ..	1,05,90,000		
24—Administration of Justice ..	44,31,000		
25—Jails and Convict Settlements	32,73,000		
26—Police	1,07,25,000		
37—Miscellaneous Departments ..	91,000		
Total ..	2,91,10,000		
Beneficent Departments.			
30—Scientific Departments ..	93,000		
31—Education (Transferred) ..	1,01,50,000		
31—Education (Reserved) ..	6,22,000		
32—Medical	33,94,000		
33—Public Health	11,73,000		
34—Agriculture	30,96,000		
35—Industries	9,64,000		
Total ..	1,94,92,000		
		Capital Expenditure not charged to Revenue.	
		52-A.—Forest Capital Expenditure	54,000
		55—Construction of Irrigation, Navigation, Embankment and Drainage Works.	1,78,20,000
		56-C—Industrial Development—Capital Expenditure.	3,88,000
		56-D.—Hydro-Electric Scheme—Capital Expenditure.	69,000
		60—Civil Works—Capital Expenditure.	2,30,000
		60-A.—Other Provincial Works—Capital Expenditure.	....
		Permanent debt discharged ..	....
		Temporary debt discharged ..	....
		Loans and Advances	22,14,000
		Payment made to Central Government on account of balance of Provincial Loan Account.	....
		Loans between Central and Provincial Governments.	....
		Deposits, Advances, Suspense ..	....
		Total Capital Expenditure not charged to Revenue.	2,07,75,000
		Balance over Capital Account .	....
		Total	....
		Total Disbursements	12,64,71,000

Administration.

Governor, Sir Edward Maclagan, K.C.I.E., C.S.I., I.C.S. (Assumed Charge 3rd January 1921.)

PERSONAL STAFF.

Private Secretary, Major G. C. S. Black, O.B.E.
Aide-de-Camp, Capt. K. O'Brien Harding, O.B.E
Honorary Aides-de-Camp, Hon. Lieut. Subedar-Major Sheo Lal Bahadur and Hon. Captain Risaldar Major Gul Nawaz Khan Haji Sardar Bahadur.

MEMBERS OF COUNCIL.

The Hon. Sir John Maynard, (*on leave.*)
The Hon. Mr. R. A. Mant, C.S.I., I.C.S.. (*Acting.*)
The Hon. Sardar Bahadur Sardar Sunder Singh Majithia.

MINISTERS.

The Hon. Khan Bahadur Mian Fazi-i-Husain-Minister for Edn.
The Hon. Rao Bahadur Honorary Lieut. Chawdhri Lalchand, O.B.E. Minister of Agriculture.

SECRETARIAT.

Chief Secretary, (*offg.*) H. D. Craik, I.C.S.
Home Secretary, D. J. Boyd, I.C.S.
Financial Secretary, Miles Irving, B.A., O.B.E., I.C.S.

PUBLIC WORKS DEPARTMENT

Irrigation Branch

Secretary, W. P. Sangster, C.I.E., M.I.C.E

Buildings and Roads Branch.

Secretary, A. S. Montgomery.

REVENUE DEPARTMENT.

Financial Commissioner, Sir P. J. Fagan, K.C.I.E., C.S.I., I.C.S.
Director of Industries, E. A. Scott, O.B.E.
Director of Agriculture, D. Milne, B. Sc.
Inspector-Genl. of Registration, Shaikh Rahim Baksh, Khan Bahadur, M.A.

MISCELLANEOUS APPOINTMENTS.

Director of Public Instruction G. Anderson, M.A., C.I.E.
Inspector-General of Police, L. L. Tomkins, C.I.E.
Inspector-General of Registration, Shaikh Rahim Bakhsh.
Conservator of Forests, J. W. A. Grieve.
Inspector-General of Civil Hospitals, Colone Richard Heard, M.D., I.M.S.
Director of Public Health, Lt.-Col. W. H. C. Forster, M.B., D.P.H., I.M.S.
Inspector-General of Prisons, Lt.-Col. E. L. Ward.
Accountant-General, Douglas Dewar, B.A., I.C.S.
Postmaster-General, J. R. T. Booth.

LIEUTENANT-GOVERNORS OF THE PUNJAB.

Sir John Lawrence, Bart., G.C.B.	1859
Sir Robert Montgomery, K.C.B.	1859
Donald Friell McLeod, C.B.	1865
Major-General Sir Henry Durand, K.C.S.I., C.B., died at Tonk, January 1871.	1870
R. H. Davies, C.S.I.	1871
R. E. Egerton, C.S.I.	1877
Sir Charles U. Aitchison, K.C.S.I., C.I.E.	1882
James Broadwood Lyall	1887
Sir Dennis Fitzpatrick, K.C.S.I.	1892
William Mackworth Young, C.S.I. ..	1897
Sir C. M. Rivaz, K.C.S.I.	1902
Sir D. C. J. Ibbetson, K.C.S.I., resigned 22nd January 1908.	1907
T. G. Walker, C.S.I. (offg.)	1907
Sir Louis W. Dane, K.C.I.E., C.S.I. ..	1908
James McCrone Doule (offg.)	1911
Sir M. F. O'Dwyer, K.C.S.I.	1913
Sir Edward Maclagan, K.C.I.E., C.S.I. ..	1918

GOVERNOR OF THE PUNJAB.

Sir Edward Maclagan, K.C.I.E., C.S.I. ..	1920

PUNJAB LEGISLATIVE COUNCIL.

The Hon. Mr. H. A. Casson, C.S.I., President.

EX-OFFICIO MEMBERS AND MINISTERS.

The Hon. Sir John Maynard, K.C.I.E., C.S.I., Finance Member.

The Hon. Sardar Bahadur Sardar Sundar Singh, Majithia, C.I.E., Revenue Member.

The Hon. Khan Bahadur Mian Fazl-i-Husain, Minister for Education (Muhammadan Landholders).

The Hon. Rao Bahadur Honorary Lieutenant Chaudhri Lal Chand, O.B.E., Minister for Agriculture, North-West Rohtak (Non-Muhammadan), Rural.

OFFICIALS NOMINATED.

Anderson, Sir G., Kt., C.I.E., Director of Public Instruction, Punjab.

Boyd, Mr. D. J., Home Secretary to Government, Punjab.

Coldstream, Mr. J., Legal Remembrancer and Secretary to Government, Punjab Legislative Department.

Craik, Mr. H. D., C.S.I., Chief Secretary to Government, Punjab.

Forster, Lt.-Col. W. C. H., I.M.S., Director of Public Health, Punjab.

Blascheck, Mr. A. D., F.C.H., F.L.S., I.F.S., Chief Conservator of Forests, Punjab.

Heard, Colonel R., I.M.S., Inspector-General of Civil Hospitals, Punjab.

Irving, Mr. Miles, Secretary to Government, Punjab, Finance Department.

King, Mr. C. M. C.I.E., C.S.I., Financial Commissioner and Secretary to Government, Punjab, Revenue Department.

Latiff, Mr. A., O.B.E., Secretary to Government, Punjab, Transferred Departments.

Sangster, Mr. W. P., C.I.E., M.I.C.E., Chief Engineer, Irrigation.

Scott, Mr. E. A., Director of Industries.

Tollinton, Mr. H. P., C.I.E., Financial Commissioner and Secretary to Government Punjab, Development Department.

NON-OFFICIALS NOMINATED.

Ajab Khan, Honorary Captain, O.B.E., I.O.M., Representative of Indian Army.

Davidson, Lieut.-Col. D. M., C.I.E, I.M.S., (Retired), Representative of European and Anglo-Indian Communities.

Gopal Das, Bhandari, Rai Bahadur, Sir Kt., C.I.E., M.B.E.

Jawahir Singh, Sardar Bahadur Sardar.

Maya Das, Mr. Ernest, Representative of Indian Christians.

Mehdi Shah, Khan Bahadur Sayad, C.I.E., O.B.E.

Owen, Dr. C. A., Representative of Anglo-Indian Community.

ELECTED.

Name of member.	Constituency.
Abdul Aziz, Mian	Lahore City (Muhammadan), Urban.
Abdul Qadir, Khan Bahadur Shaikh	West Punjab Towns (Muhammadan), Urban.
Afzal Haq, Chaudhri	Hoshiarpur-*cum*-Ludhiana, Rural.
Ali Akbar, Chaudhri	Kangra-*cum*-Gurdaspur (Muhammadan), Rural.
Bakhtawar Singh, Sardar	Hoshiarpur and Kangra (Sikh), Rural.
Banke Rai, Lala, B.A., LL.B.	South-East Towns (Non-Muhammadan), Urban.
Bhagat Ram, Raizada	Jullundur-*cum*-Ludhiana (Non-Muhammadan), Rural.
Bodh Raj, Lala, M.A., LL.B.	West Punjab Towns (Non-Muhammadan), Urban.
Buta Singh, Sardar, B.A., LL.B.	Multan Division and Sheikhupura (Sikh), Rural.
Chhotu Ram, Rai Sahib Chaudhri, B.A., LL.B...	South-East Rohtak (Non-Muhammadan) Rural.

Name of member.	Constituency.
Dan Singh, Sardar	Amritsar (Sikh), Rural.
Dhanpat Rai, Rai Bahadur, Lala	Chairman, Punjab National Bank, Ltd. (Punjab Industries.)
Dhan Raj, Bhasin, Captain, M.B., B.S... ..	East and West Central Towns (Non-Muhammadan), Urban.
Diwan Chand, Lala	Amritsar City (Non-Muhammadan
Duli Chand, Chaudhri	Karnal (Non-Muhammadan), Rural.
Faiz Muhammad, Shaikh, B.A., LL.B.	Dera Ghazi Khan (Muhammadan), Rural.
Farman Ali Khan, Subedar-Major	Rawalpindi (Muhammadan), Rural.
Fazl Ali, Khan Bahadur Chaudhri, M.B.E...	Gujrat East (Muhammadan), Urban.
Firoz Khan, Noon, Malik	Shahpur East (Muhammadan), Rural.
Firoz-ud-din Khan, Rana, B.A., LL.B. ..	South-East Towns (Muhammadan), Urban.
Ganga Ram, Rai Sahib Lala, B.A., LL.B. ..	Ambala-*cum*-Simla (Non-Muhammadan), Rura
Ghulam Muhammad, Chaudhri	Gujrat West (Muhammadan), Rural.
Gokul Chand Narang, Dr., M.A., Ph. D. ..	North-West Towns (Non-Muhammadan), Urban.
Gray, Mr. V. F.	Punjab Chamber of Commerce and Trades Association, Commerce.
Gurbaksh Singh, Sardar	Ambala Division (Sikh), Rural.
Haibat Khan, Daha, M.	Multan East (Muhammadan), Rural.
Har Chand Singh, Sardar	Lyallpur (Sikh), Rural.
Husain Shah, Sayad	Jhang (Muhammadan), Rural.
Jodh Singh, Sardar	(Sikh), Urban
Karam Ilahi, Khan Bahadur Chaudhri, M.B.E...	Gujranwala (Muhammadan), Rural.
Kesar Singh, Chaudhri	Amritsar-*cum*-Gurdaspur, Rural.
Khan Muhammad, Khan, Wagha, Malik ..	Sheikhpura (Muhammadan), Rural.
Mangal Singh, Sardar	Sikh Landholders.
Maqbool Mahmood, Mir	Amritsar (Muhammdan), Rural.
Mazhar Ali Azhar, M., B.A., LL.B.	East and West Central Town (Muhammadan), Urban.
Mohan Lal, Lala, B.A., LL.B.	North-East Towns (Non-Muhammadan), Urban.
Mohan Lal Bhatnagar, Lala, B.A., LL.B. ..	Lahore and Ferozepore-*cum*-Sheikhupura (Non-Muhammadan),
Mohindar Singh, Sardar	Ludhiana (Sikh), Rural.
Muhammad Abdullah Khan, Khan	Muzaffargarh, (Muhammadan), Rural.
Muhammad Husain, Sayad	Montgomery (Muhammadan), Rural.
Muhammad Jamal Khan, Khan Bahadur Sardar	Baloch Tumandar (Landholders)
Muhammad Mehr Shah, Nawab Sayad ..	Jhelum (Muhammadan), Rural.
Muhammad Raza Shah, Gilani, Makhdumzada.	Multan West (Muhammadan), Rural.
Muhammad Saif Ullah Khan, Khan	Mianwali (Muhammadan), Rural.
Muhammad Shafi Ali Khan, Chaudhri	Ambala Division North-East (Muhammadan), Rural.
Muhammad Shah Nawaz, Mian	Lahore (Muhammadan), Rural.
Muhammad Sharif, Mian	Amritsar City (Muhammadan), Urban.
Mumtaz Muhammad, Khan, Tiwana, Captain..	Shahpur West (Muhammadan), Rural.
Najib-ud-Din Khan, Chaudhri	Ferozepore (Muhammadan), Rural.
Nanak Chand, Pandit, M.A.	Hoshiarpur (Non-Muhammadan), Rural.
Narain Singh, Sardar, B.A., LL.B.	Rawalpindi Division and Gujranwala (Sikh Rural.
Narendra Nath, Diwan Bahadur Raja	Punjab Landholders (General).

Name of member.	Constituency.
Niranjan Das, Diwan	Rawalpindi Division and Lahore Division North (Non-Muhammadan), Rural.
Nihal Chand, Sikri, Lala, L.M. & S.	Lahore City (Non-Muhammadan).
Nur Din, Chaudhri	Lyallpur South (Muhammadan), Rural.
Partap Singh, Jamadar	Jullunder (Sikh), Rural.
Pohap Singh, Rao, M.A., LL.B.	Gurgaon (Non-Muhammadan), Rural.
Ram Singh, Chaudhri	Kangra (Non-Muhammadan), Rural.
Randhir Singh, Sardar, Kalaswala	Sialkot-*cum*-Gurdaspur (Sikh), Rural.
Ruchi Ram Sahni, Lala, M.A.	Punjab University.
Saadullah Khan, Chaudhri, B.A.	Jullundur (Muhammadan), Rural.
Sahib Dad Khan, Chaudhri	Gurgaon-*cum*-Hissar (Muhammadan), Rural.
Sangat Singh, Sardar, Kulla	Lahore (Sikh), Rural.
Sewak Ram, Rai Bahadur Lala	Multan Division (Non-Muhammadan), Rural.
Shahab-ud-din, Chaudhri, B.A., LL.B.	Sialkot (Muhammadan), Rural.
Shahadat Khan Rai	Lyallpur North (Muhammaddan), Rural.
Sham Lal, Lala	Hissar (Non-Muhammadan), Rural.
Sikander Hayat Khan, Lieut. Sardar, M.B.E. ..	Artock (Muhammadan), Rural.
Tara Singh, Sardar, B.A., LL.B.	Ferozepore (Sikh), Rural.
Sardar Abnasha Singh, Secretary, Legislative ..	Council.
Hakim Ahmed Shuja, Assistant Secretary ..	Legislative Council.

Burma.

The Province of Burma lies between Assam on the North-West and China on the North-East, and between the Bay of Bengal on the West and South-West and Siam on the South-East. Its area, including the district of Putao constituted in February 1914, is approximately 263,000 square miles, of which 184,000 are under direct British Administration, 16,000 are unadministered and 63,000 belong to semi-independent Native States. The main geographical feature of the country is the series of rivers and hills running fan-like from North to South with fertile valleys in between, widening and flattening out as they approach the Delta. Differences of elevation and rainfall produce great variations in climate. The coastal tracts of Arakan and Tenasserim have a rainfall of about 200 inches, the Delta less than half that amount. The hot season is short and the monsoon breaks early. The maximum shade temperature is about 96°, the minimum about 60°. North of the Delta the rainfall decreases rapidly to 30 inches in the central dry zone which lies in a "rain shadow" and has a climate resembling that of Bihar. The maximum temperature is twenty degrees higher than in the wet zone, but this is compensated by a bracing cold season. To the north and east of the dry zone lie the Kachin hills and the Shan plateau. The average elevation of this tableland is 3,000 feet with peaks rising to 9,000. Consequently it enjoys a temperate climate with a rainfall of about 70 inches on the average. Its area is over 50,000 square miles. There is no other region of similar area in the Indian Empire so well adapted for European colonization. The magnificent rivers, the number of hilly ranges (Yomas) and the abundance of forests, all combine to make the scenery of Burma exceedingly varied and picturesque.

The People.

The total population of Burma at the census of 1921 was 13,169,099. There were 8,382,335 Burmans, 1,017,987 Shans, 1,220,356 Karens, 146,845 Kachins, 288,847 Chins, 300,700 Arakanese and 323,599 Talaings. There is also a large alien population of 149,060 Chinese and 887,077 Indians, while the European and Anglo-Indian population numbered 25,005.

The Burmans, who form the bulk of the population, belong to the Tibetan group and their language to the Tibeto-Chinese family. They are essentially an agricultural people, 80 per cent. of the agriculture of the country being in their hands. The Burmese, and most of the hill tribes also, profess Buddhism, but Animism, or the worship of nature spirits, is almost universal. The interest taken by the Burmese in the course of the war, their response to the call for recruits and their generous contributions to war loans and charitable funds seem to show that their apathy towards the government of the country is giving way to an intelligent loyalty to British rule.

In appearance the Burman is usually somewhat short and thick set with Mongolian feature. His dress is most distinctive and exceedingly comfortable. It consists of a silk handkerchief bound round his forehead, a loose jacket on his body and a long skirt or loongi tied round his waist, reaching to his ankles. The Burman women, perhaps the most pleasing type of womanhood in the East, lead a free and open life, playing a large part in the household economy and in petty trading. Their dress is somewhat similar to the man's minus the silk kerchief on the head, and the loongi is tucked in at the side instead of being tied in front. A well dressed and well groomed Burmese lady would, for grace and neatness, challenge comparison with any woman in the world.

Communications.

The Irrawaddy, and to a less extent the Chindwin, afford great natural thoroughfares to the country. At all seasons of the year these rivers, especially the Irrawaddy, are full of sailing and steam craft. In the Delta the net-work of waterways is indeed practically the only means of communication. The Irrawaddy Flotilla Company, with a fine fleet of mail, cargo and ferry boats, gives the Irrawaddy and the Delta rivers and creeks a splendid river service.

The Burma Railways Company has a length of 1,668 miles open line. The principal lines are from Rangoon to Mandalay; from Sagaing to Myitkyina, the most northern point in the system; the Rangoon-Prome line; and the Pegu-Martaban line, which serves Moulmein on the further bank of the Salween River.

Industry.

Agriculture is the chief industry of the province and supports nearly three-fourths of the population. The nett total cropped area is 15½ million acres of which more than half a million acres are cropped twice. Irrigation works supply water to 1⅞ million acres. India is very largely dependent on Burma for her supplies of kerosene, benzine and petrol which rank second to rice in order of importance. Teak wood is exported in large quantities from Burma to India.

Forests play an important part in the industrial life of the Province. The forest reserves cover 30,000 square miles, while unclassed forests are estimated at about 115,000 square miles. Government extracts some 125,000 tons of teak annually, private firms, of whom the Bombay Burma Trading Corporation and Steel Brothers are the chief extract over 454,000 tons. Other timber extracted by licensees amounts to over 600,000 tons and firewood over 900,000 tons.

The war gave a great impetus to the exploitation of the mineral resources of the country and there has been a rapid increase in the number of mines. Wolfram and tin mines in Tenasserim have especially developed. Government has aided their development by the appointment of special officers, the importation of labour and the construction of roads. Silver, lead and zinc are extracted by the Burma Mines Company at Badwin in the Northern Shan States. Copper in small quantities is also found there. There are small deposits of

Molybdenite in Tavoy and Mergui and of platinum in Myitkyina. Antimony is found in large quantities in Amherst district in an area at present too difficult of access for profitable working. The output of precious stones from the ruby mines has declined. Gold dredging in the Myitkyina District has proved unprofitable and the company has been wound up. From the mines in the Hukong valley jade and amber is won. The oldest and largest oil field in the province is at Yenangyaung in Magwe district where the Burma Oil Company has its chief wells. But borings in other districts have shown that the oil-bearing strata extend over the whole of the dry zone, and the output from the smaller fields in Myingyan, Pakokku and Minbu districts is now considerable, while the wells sunk in Thayetmyo and Prome districts are also showing satisfactory returns. Two-thirds of the total production comes from the Yenangyaung field, whence it is carried 300 miles in pipes to the oil refineries at Syriam on the Rangoon river. The area under rubber is 76,000 acres.

Manufactures.

There are 797 factories, over three-fifths of which are engaged in milling rice and over one-sixth are sawmills. The remainder are chiefly cotton ginning mills, oil mills for the extraction of oil from groundnuts, and oil refineries connected with the petroleum industry. The average daily number of operatives is nearly 89,000. At the Census of 1921, 1,935,729 or 28·48 of the total population were engaged outside agriculture and production.

As is the case in other parts of the Indian Empire, the imported and factory made article is rapidly ousting the home-made and indigenous. But at Amarapura in the Mandalay District a revival has taken place of hand silk-weaving. Burmese wood-carving is still famous and many artists in silver still remain, the finish of whose work is sometimes very fine. Bassein and Mandalay parasols are well known and much admired in Burma. But perhaps the most famous of all hand-made and indigenous industries is the lacquer work of Pagan with its delicate patterns in black, green and yellow traced on a ground-work of red lacquer over bamboo. A new art is the making of bronze figures. The artists have gone back to nature for their models, breaking away from the conventionalized forms into which their silver work had crystallized, and the new figures display a vigour and life that make them by far the finest examples of art the province can produce.

Administration.

Burma, which was at that time administered as a Lieutenant-Governorship, was deliberately excluded from the operation of the Reform Act of 1919. It was felt that the Province differed so markedly from the other Provinces in the Indian Empire that its requirements should be separately considered. After repeated discussions the question was referred to a special Burma Reforms Committee, which in 1922 recommended that all the essential provisions of the Reform Act should be applied to the Province. This recommendation was accepted and its proposals became law. Under this Act Burma became a Governor's Province, with an executive council and ministers, and conforms to the provinces recreated under the Act of 1919 (q.v.). The main difference is in the size of the electorate. Under the franchise accepted, the rural electorate is estimated at 1,500,000 and the urban electorate has been put as high as a million, though that is probably an exaggeration. The Legislative Council consists of 104 members, of which 79 are elected and the balance nominated. Owing to the special status of women in Burma, female franchise is adopted from the beginning.

Burma is divided administratively into Upper Burma (including the Shan States and Chin Hills) and Lower Burma. The Shan States are administered by the Chiefs of the States, subject to the supervision of the Commissioner, N. E. F. Division and the Superintendents in the case of the Northern and Southern Shan States, which were formed into a Federation on the 1st October 1922, and are designated the F. S. States; and to the supervision of the Commissioners of the adjoining Divisions in the case of the other States. The Civil, Criminal and Revenue administration is vested in the Chief of the State, subject to the restrictions contained in the sanad. The law administered is the customary law of the State.

Under the Governor are eight Commissioners of divisions, three in Upper and five in Lower Burma.

Justice.

The administration of Civil and Criminal Justice is under the control of the High Court of Judicature at Rangoon, which consists of a Chief Justice and seven other Judges. The Superior Judicial Service consists of District and Sessions Judges; there are also separate Provincial and Subordinate Judicial Services.

All village headmen have limited magisterial powers and a considerable number are also invested with civil jurisdiction to a limited extent.

In pursuance of the policy of decentralization steps were taken in 1917 to restore to the village headmen the power and influence which they possessed in Burmese times before the centralizing tendencies of British rule made them practically subordinate officers of the administration.

Public Works.

This Department is administered by two Chief Engineers who are also Secretaries to Government in the Public Works Department. There are eight Superintending Engineers (including one for Irrigation and a Sanitary Engineer), 83 Executive Engineers and Assistant Engineers. A Consulting Architect is attached to Head Quarters.

Police.

The Police Force is divided into Civil, Military and Rangoon Town Police. The first two are under the control of the Inspector-General of Police, the latter is under the orders of the Commissioner of Police, Rangoon, an officer of the rank of Deputy Inspector-General

There are five other Deputy Inspectors-General, one each for the Eastern, Western and Northern Range, one for the Railway and Criminal Investigation Department and one for the Military Police.

A special feature of Burma is the Military Police. Its officers are deputed from the Indian Army. The rank and file are recruited from natives of India with a few Kachins, Karens and Shans. The experiment of recruiting Burmese on a small scale has been successful. The organisation is military, the force being divided into battalions. The object of the force is to supplement the regular troops in Burma. Their duties, apart from their military work, is to provide escorts for specie, prisoners, etc., and guards for Treasuries, Jails and Courts.

Education

At the head is the Director of Public Instruction with a Deputy Director. There are 6 Inspectors of Schools belonging to the Imperial and 3 belonging to the Provincial Service, and 7 Assistant Inspectors and one Assistant Inspectress belonging to the Provincial Service. A University for Burma has been established in Rangoon.

A remarkable feature of education in Burma is the system of elementary education evolved, generations ago, by the genius of the people. Nearly every village has a monastery (hpoongyi-kyaung); every monastery is a village school and every Burman boy must, in accordance with his religion, attend that school, shaving his head and for the time wearing the yellow robe. At the hpoongyi-kyaungs the boys are taught reading and writing and an elementary native system of arithmetic. The result is that there are very few boys in Burma who are not able to read and write and the literacy of Burman men is 449 per mille.

Medical.

The control of the Medical Department is vested in an Inspector-General of Civil Hospitals. Under him are 41 Civil Surgeons. There is also a Sanitary Commissioner, two Deputy Sanitary Commissioners, an Inspector-General of Prisons, three whole time Superintendents of Prisons, a Chemical Examiner and Bacteriologist and a Superintendent of the Lunatic Asylum.

The Pasteur Institute was opened in Rangoon in July 1915. The Director is a senior member of the Indian Medical Service.

THE FINANCES OF BURMA.

In common with the other Provinces of India, the financial arrangements between the Government of India and the Government of Burma underwent a remodelling in consequence of the reconstitution of the Province on the lines of the other Indian Provinces. The Provinces obtained substantial financial independence. The present position is set out in the following statement:—

ESTIMATED REVENUE FOR 1923-24.

Principal Heads of Revenue.	Rs.
Taxes on Income	3,00,000
Land Revenue	5,35,62,000
Excise	1,10,00,000
Stamps	52,29,000
Forest	2,25,40,000
Registration	6,00,000
Total ..	9,32,31,000
State Railways	55,000
Irrigation, Navigation, Embankments, etc.	
Works for which Capital Accounts are kept	19,10 000
Works for which no Capital Accounts are kept	19,61,000
Total ..	38,71,000
Interest ..	8,41,000

Civil Administration.	Rs.
Administration of Justice	8,65,000
Jails and Convict Settlements	4,50,000
Police	5,38,000
Ports and Pilotage	1,00,000
Education	3,75,000
Medical	1,64,000
Public Health	37,000
Agriculture	45,000
Industries	1,000
Miscellaneous Departments	1,000
Total	25,76,000
Civil Works	7,35,000
Miscellaneous.	
Receipts in aid of Superannuation	55,000
Stationery and Printing	1,10,000
Miscellaneous	1,25,000
Total	2,90,000
XL. Miscellaneous adjustments between Central and Provincial Government.	....
Total Revenue	10,15,99,000
Debt Heads.	
Famine Insurance Fund	70,000
Loans and Advances by Provincial Governments	31,37,000
Total Deposit and Advances	32,07,000
Opening Balance	4,16,79,000
Grand Total	14,64,85,000

ESTIMATED EXPENDITURE FOR 1922-23.

Direct Demands on the Revenue.	
Taxes on Income	....
Land Revenue	58,35,000
Excise	18,19,000
Stamps	1,69,000
Forest	1,10,00,000
Registration	1,41,000
Total	1,89,64,000
Miscellaneous Railway Expenditure	87,000
Construction of Railways	90,98,000
Irrigation, Embankment, etc., Revenue Accounts.	
Other Revenue Expenditure financed from Ordinary Revenue	33,10,000
Irrigation, Embankment, etc., Capital Account (Charged to Revenue).	
Construction of Irrigation, Navigation, Embankment and Drainage Works	23,30,000
	3,37,89,000

	Rs.
Civil Administration.	
General Administration	98,86,000
Administration of Justice	51,00,000
Jail and Convict Settlements	26,00,000
Police	1,38,00,000
Ports and Pilotage	35,05,000
Scientific Departments	95,000
Education	71,82,000
Medical	37,00,000
Public Health	18,49,000
Agriculture	24,25,000
Industries	2,40,000
Miscellaneous Departments	1,48,000
Total	5,05,30,000
Currency, Mint and Exchange.	
Exchange on Transactions with London	.....
Civil Works.	
Civil Works	2,23,33,000
Miscellaneous.	
Famine Relief and Insurance	67,000
Superannuation allowance and Pensions	30,59,000
Stationery and Printing	12,17,000
Miscellaneous	22,87,000
	66,30,000
Contributions and assignments to the Central Government by Provincial Governments	64,00,000
Debt Heads.	
Loans and Advances by Provincial Governments	47,15,000
Total	12,43,97,000
Closing balance	2,20 88,000
Grand Total	14,64,85,000

Administration.

Governor, Sir Harcourt Butler, G.C.I.E., K.C.S.I.

Private Secretary, Capt. Victor F. Gamble.

Aides-de-Camp, Capt. A.D.C.S. Batty, M.V.O.

Honorary Aides-de-Camp, Lt.-Col. A. W. H. Lee, Capt. A. St. Clair Bowden, R. I. M. and Lt.-Col. B. H. Heald, V.D.

Indian Aides-de-Camp, Subadar-Major and Hon. Lt. Bhagbir Yakha, Bahadur, Naib Commandant Sarran Singh, Sardar Bahadur, and Naib Commandant Jalal Din, Khan Bahadur.

SECRETARIAT.

Chief Secretary, C. F. Grant, M.A., I.C.S.

Revenue Secretary, (*Offg.*) A. E. Gilliat, I.C.S.

Secretary, P. W. D. (*Irrigation Branch*), C. E. Rushton.

Secretary, P.W.D. (*Buildings and Roads Branch*), A. J. R. Hope, C.I.E.

Financial Commissioner, H. Clayton, M.A., C.I.E., I.C.S.

Registrar K. M. Basu, B.A.

Miscellaneous Appointments.

Settlement Commissioner and Director of Land Records, J. S. Furnivall, B.A., I.C.S.

Director of Agriculture, John Clague, I.C.S.

Consulting Architect, E. J. Pullar.

Superintendent and Political Officer, Southern Shan States, W. F. Grahame, I.C.S.

Superintendent and Political Officer, Northern Shan States, Major H. H. Batten, I.A.

Director of Public Instruction, Sir John Mark Hunter, M.A.

Inspector-General of Police, E. C. S. Shuttleworth, C.I.E.

Chief Conservator of Forests, F. A. Leete, F.C.H.

Inspector-General of Civil Hospitals, Col. Peter Dee, M.D., I.M.S.

Director of Public Health, Lt.-Col. C. E. Williams,

Inspector-General of Prisons, Lt.-Col. H. H. G. Knapp.

Commissioner of Excise, J. B. Marshall, M.A., C.I.E., I.C.S.

Accountant-General, Mohini Kanta Ghatak, M.A.

Postmaster-General, G. P. Roy, M.I.M.E. (on deputation); F. T. de Monte. (*offg.*).

Chief Commissioners of Burma.

Lieut.-Colonel A. P. Phayre, C.B.	1862
Colonel A. Fytche, C.S.I.	1867
Lieut.-Colonel R. D. Ardagh	1870
The Hon. Ashley Eden, C.S.I.	1871
A. R. Thompson, C.S.I.	1875
C. U. Aitchison, C.S.I.	1878
C. E. Bernard, C.S.I.	1880
C. H. T. Crosthwaite	1883
Sir C. E. Bernard, K.C.S.I.	1886
C. H. T. Crosthwaite, C.S.I.	1887
A. P. MacDonnell, C.S.I. (*a*)	1889
Alexander Mackenzie, C.S.I.	1890
D. M. Smeaton	1892
Sir F. W. R. Fryer, K.C.S.I.	1895

(*a*) Afterwards (by creation) Baron MacDonnell.

Lieutenant-Governors of Burma.

Sir F. W. R. Fryer, K.C.S.I.	1897
Sir H. S. Barnes, K.C.S.I., K.C.V.O.	1903
Sir H. T. White, K.C.I.E.	1905
Sir Harvey Adamson, Kt., K.C.S.I., LL.D.	1910
Sir Harcourt Butler, K.C.S.I., C.I.E.	1915
Sir Reginald Craddock, K.C.S.I.	1917
Sir Harcourt Butler, G.C.I.E., K.C.S.I.	1922

SECRETARIES, UNDER-SECRETARIES, ASSISTANT SECRETARIES, ETC., TO GOVERNMENT.

F. Lewisohn, M.A., I.C.S.	Chief Secretary.
C. E. Rushton	Secretary, Irrigation Branch, P.W. Department.
A. J. R. Hope, C.I.E.	Secretary (Buildings and Roads Branch), P.W.D.
W. Booth-gravely, M.A., I.C.S.	Officiating Revenue Secretary.
W. B. Brander, M.A., C.B.E., I.C.S.	Officiating Secretary.
H. O. Reynolds, B.A., I.C.S.	Secretary, Reforms Office.
R. Mac I MacDougall, M.A., I.C.S.	Under Secretary, Chief Secretary's Department.
W. H. Payton, B.A., I.C.S.	Under Secretary, Revenue Secretary's Department.
J. H. Wise, I.C.S.	Offg. Under Secretary, Secretary's Department.
J. M. B. Stuart, B.A.	Under Secretary, Public Works Department.
C. Innes, B.S.C, O.B.E.	Under Secretary, P.W. Department.
D. D. Nanavati, B.A., I.C.S.	Official Legal Remembrancer and Secretary, Legislative and Judicial Departments.
Maung May Oung, M.A., LL.B.	Offg. Deputy Legal Remembrancer and Secretary, Legislative and Judicial Departments.
W. J. Peters	Asstt. Secretary, Public Works Department.
K. M. Basu, B.A.	Registrar, Chief Secretary's Office.
A. P. G. Benemy	Registrar, Revenue Secretary's Office.
W. Pilcher	Registrar, Secretary's Office.
A. Simeons	Officiating Registrar, Public Works Department.

BURMA LEGISLATIVE COUNCIL.

PRESIDENT.

Vacant.

DEPUTY PRESIDENT.

Maung Ba Pe, B.A.

Nominated Members.

OFFICIALS.

The Hon'ble Mr. William John Keith, M.A., C.I.E., I.C.S. (ex-officio).
The Hon'ble Mr. Maung Kin, Barrister-at-Law (ex-officio).
James MacKenna, M.A., C.I.E., I.C.S.
Charles Frederick Grant, M.A., I.C.S.
Elias Henry Jones, M.A., I.C.S.
Henry Osborne Reynolds, B.A., I.C.S.
Colonel Peter Dee, M.B., I.M.S.
Frederick Alexander Leete, C.I.E., F.C.H.
Edward Higinbotham, Barrister-at-Law.
Charles Alfred Snow, M.A.
Charles Morgan Webb, M.A., C.I.E., I.C.S.
Algernon Earle Gilliat, I.C.S.
Major Roderick William Macdonald, D.S.O., I.A.
John Emeris Houldey, B.A., I.C.S.
James Douglas Stuart, A.M.I.E., M.I.E.

ADDITIONAL MEMBERS.

Duncan John Sloss, M.A.
Daniel George Edward Hall.
Dr. A. M. Murray.

NON-OFFICIALS.

Hosain Hamadanee, Merchant.
Abdool Baree Chowdhury, Merchant.
Francis Foster Goodliffe, Merchant.
Dr. Nasarwanji Nawroji Parakh, L.F.P. & L.M.S. (Glass.) L.S.A. (Lon.), Medical Practitioner,
U. Shwe Llay, Merchant.
U. Ba Too, C.I.E., K.S.M.
Taw Sein Ko, C.I.E., I.S.O.M., R.A.S.
F. L. Bigg-wither, Agent, B.R.

ELECTED MEMBERS.

Name of Member.	Name and class of constituency represented.
Maung Shwe Tha, Bar.-at-Law	Akyab Town (General Urban).
Maung Po Hla, C.I.E., K.S.M., A.T.M., M.R.A.S. ..	Bassein Town (General Urban).
Maung Ba Sein	Henzada Town (General Urban).
Maung E. Maung	Mandalay Town (General Urban).
Maung Suleman	
Maung Ba U.	
Maung Chit Pe	Moulmein (General Urban).
Maung Chit Hla, Bar.-at-Law	

Name of Member.	Name and class of constituency represented.
Maung Myint	Prome Town (General Urban).
The Hon'ble Mr. J. A. Maung Gyi, Bar.-at-Law	East Rangoon (General Urban).
Maung Ba Pe, B.A. (Deputy President) ..	
L. Ah Yain, Bar.-at-Law..	West Rangoon (General Urban).
Maung Ba Dun, Bar.-at-Law	
Saw Ba La	Tavoy Town (General Urban.)
E. Nazumuddin	Akyab Indian Community (Indian Urban).
Promotha Nath Chowdhury	Bassein Indian Community (Indian Urban).
Mahomed Ayub Jan	Mandalay Indian Community (Indian Urban).
Mirza Mahomed Rafi, Bar.-at-Law	Moulmein Indian Community (Indian Urban).
Avatapalli Narayana Rao, M.A.	East Rangoon Indian Community (Indian Urban).
Arumugam Velu Joseph	
Mahomed Auzam, Bar-at-Law	West Rangoon Indian Community (Indian Urban).
J. K. Munshi, Bar.-at-Law	
Saw Pah Dwai, A.T.M., Bar.-at-Law	Amherst Karen Community (Karen Rural).
Maung Nu	Bassein Karen Community (Karen Rural).
Maung Ba Kin, B.A.	Ma-ubin Karen Community (Karen Rural).
Maung Po San	Myaungmya Karen Community (Karen Rural).
Maung Pyu	Thaton Karen Community (Karen Rural).
Maung Po Yin Si, B.A.	Amherst (General Rural).
Maung Saw Hla Aung	Akyab District East (General Rural).
Maung Ah Doe, Bar.-at-Law	Akyab District West (General Rural).
Maung Tha Ban, K.S.M.	South Arakan (General Rural).
Maung Po Hka	Bassein District (General Rural).
Maung Ba Dun	Hanthawaddy East (General Rural).
Maung Thin Maung	Hanthawaddy West (General Rural).
Maung Tun Lin, T.P.S.	Henzada District North (General Rural).
Maung Ba Myin	Henzada District South (General Rural).
Maung Ba Gale	Insein (General Rural).
Maung Nyein	Katha (General Rural).
Maung Po	Kyaukse (General Rural).
Maung Ko Gyi	Lower Chindwin East (General Rural).
Maung Po Pyu	Lower Chindwin West (General Rural).
Maung Htein	Magwe East (General Rural).
W. S. Lamb	Magwe West (General Rural).
Maung Hla	Mandalay District (General Rural).
Maung Sein	Ma-ubin (General Rural).
Maung Po Wun	Meiktila East (General Rural).
Maung Po Thaw	Meiktila West (General Rural).
Ebrahim Ahmed, M.B.E.	Mergui (General Rural).
Maung Ba Thi	Minbu (General Rural).
Maung Po Lu	Mayungmya (General Rural).
Maung Than	Myingyan North (General Rural).
Maung Mya	Myingyan South (General Rural).

Name of Member.	Name and class of constituency represented.
Maung Po Pe	Pakokku East (General Rural).
Maung Me	Pakokku West (General Rural).
Maung Lun Maung, A.T.M.	Pegu North (General Rural).
Maung Po Tha	Pegu South (General Rural).
Maung Thein Maung, B.A.	Prome District (General Rural).
Maung Sein	Pyapon (General Rural).
Maung Thi	Sagaing East (General Rural).
Maung Kyaw	Sagaing West (General Rural).
Maung Ba Pe	Shwebo East (General Rural).
Maung Paw Gywe	Shwebo West (General Rural).
Khoo Hock Chwan	Tavoy District (General Rural).
Maung Thaw	Tharrawaddy North (General Rural).
Maung San Baw	Tharrawaddy South (General Rural).
Maung Tun Pe, A.T.M	Thaton (General Rural).
Maung Ba Thein, B.A., B.Sc., B.L.	Thayetmyo (General Rural).
Maung Ba Cho, B.A.	Toungoo North (General Rural).
The Hon'ble U. Maung Gyee, M.A., Bar-at-Law	Toungoo South (General Rural).
Maung Gyi	Yamethin North (General Rural).
Maung Pu, BA., Bar.-at-Law	Yamethin South (General Rural).
Charles Haswell Campagnac, M.B.E., Bar-at-Law.	Anglo-Indian (Anglo-Indian).
Oscar de Glanville, O.B.E., Bar.-at-Law ..	European (European).
John Hogg	Burma Chamber of Commerce (Commerce).
Alexander James Anderson, C.S.I.	Do. do.
Maung Hla Pe	Burmese Chamber of Commerce (Commerce).
Chan Chor Khine	Chinese Chamber of Commerce (Commerce).
James Donald	Rangoon Trades Association (Chambers).
Sir Robert Sydney Giles, Kt., M.A., Bar.-at-Law.	Rangoon University.

Bihar and Orissa.

Bihar and Orissa lies between 19°-02′ and 27°-30′ N. latitude and between 82°-31′ and 88°-26′ E. longitude and includes the three provinces of Bihar, Orissa and Chota Nagpur, and is bounded on the north by Nepal and the Darjeeling district of Bengal; on the east by Bengal and the Bay of Bengal; on the south by the Bay of Bengal and Madras; and on the west by the United Provinces of Agra and Oudh and the Central Provinces.

The area of the British territories which constitute the Governorship of Bihar and Orissa is 83,181 square miles inclusive of the area of large rivers. In addition to the districts which are directly under British rule, there are two groups of petty States which lie to the south and south-west of the Province and which under the names of the Feudatory States of Orissa and Chota Nagpur are governed each by its own Chief under the superintendence and with the advice of the Political Agent and Commissioner, Orissa Feudatory States. The area of these territories is 28,648 square miles and as it is usual to include them when speaking of Bihar and Orissa the area of the whole Province may be stated at 111,829 square miles. Two of the provinces of the Governorship of Bihar and Orissa, *viz.*, Bihar and Orissa, consist of great river valleys, the third, Chota Nagpur, is a mountainous region which separates them from the Central Indian Plateau. Orissa embraces the rich deltas of the Mahanadi and the neighbouring rivers and is bounded by the Bay of Bengal on the south-east and walled in on the north-west by the hilly country of the Tributary States. Bihar lies on the north of the Province and comprises the valley of the Ganges from the spot where it issues from the territories of the Governor of the United Provinces of Agra and Oudh till it enters Bengal near Rajmahal. Between Bihar and Orissa lies Chota Nagpur. Following the main geographical lines there are five Civil Divisions with head-quarters at Patna, Muzaffarpur (for Tirhut), Bhagalpur, Cuttack (for Orissa) and Ranchi (for Chota Nagpur).

The People.

The head-quarters of Government are at Patna. The new capital which lies between the Military Cantonment of Dinapore and the old civil station of Bankipore is known as "Patna," the old town being called "Patna City."

The Province has a population of 33,998,778 persons which is very little less than that of France and rather more than that of the Bombay Presidency. The province is almost entirely rural, no fewer than 966 per mille of the population living in villages. Even so with 344 persons per square mile, Bihar and Orissa is more thickly populated than Germany. There are only three towns which can be classed as cities, namely, Patna, Gaya and Bhagalpur. During the last thirty years the population of Patna, the capital designate, has been steadily diminishing. Hindus form an overwhelming majority of the population. Though the Muhammadans form less than one-tenth of the total population they constitute more than one-fifth of urban population of the province. Animists account for 7 per cent. These are inhabitants of the Chota Nagpur plateau and the Santal Parganas, the latter district being a continuation of the plateau in a north-easterly direction.

Industries.*

The principal industry is agriculture, Bihar more especially North Bihar, being the "Garden of India." Rice is the staple crop but the spring crops, wheat, barley, and the like are of considerable importance. It is estimated that the normal area cultivated with rice is 15,320,700 acres or 48 per cent. of the cropped area of the Province. Wheat is grown on 1,265,900 acres, barley on 1,406,100 acres, maize or Indian-corn on 1,637,500 acres, the latter being an autumn crop. Oil-seeds are an important crop, the cultivation having been stimulated by the demand for them in Europe. It is estimated that 2,091,400 acres of land are annually cropped with oil-seeds in the Province. There is irrigation in Shahabad, Gaya Champaran and Muzaffarpur districts in Bihar and in Balasore and Cuttack in Orissa. The Indigo industry is steadily on the decline, the total area sown having decreased from 342,000 acres in 1896 to 25,000 acres in 1923. The principal cause of this was the discovery of the possibilities of manufacturing synthetic or chemically prepared indigo on a commercial scale. Its place as a crop manufactured for export has been largely taken by sugarcane, the cultivation of which has been considerably extended owing to the high prices given by sugar factories. In the district of Purnea and in Orissa, and parts of the Tirhut Division jute is grown, but the acreage varies according to the price of jute. The last serious famine was in 1895-96, but there was a serious shortage of foodstuffs in the south of the Province in 1919. In any year in which monsoon currents from either the Bay of Bengal or the Arabian Sea are unduly late in their arrival or cease abruptly before the middle of September the agricultural situation is very grave. It may be said that for Bihar the most important rainfall is that known as the *hatia*, due towards the end of September or up to middle of October. Rain at this time not only contributes materially to an increased outturn of the rice crop, but also provides the moisture necessary for starting the spring or *rabi* crops.

Manufactures.

Opium was formerly, with indigo, the chief manufactured product of Bihar, but in consequence of the agreement with the Chinese Government the Patna Factory has been closed. At Monghyr the Peninsular Tobacco Company have erected one of the largest cigarette factories in the world and as a result tobacco is being grown much more extensively. The Tata Iron and Steel Works at Jamshedpur in Singhbhum district are also one of the largest

* The figures given in this paragraph relate to British territory only.

in the world and numerous subsidiary industries are springing up in their vicinity. The most important of these are the Tinplate Company of India, Agricultural Implements, Ltd., Enfield Cable Company of India, Enamelled Ironware Limited and Indian Steel Wire Products. The population of Jamshedpur is rapidly approaching 100,000 and it consumes 1½ million tons of coal annually. But the raising of coal is still the most important of the mineral industries in the province. The coalfields in the Manbhum District have undergone an extraordinary development in the past twenty years, while valuable new fields are being developed at Ramgarh, Bokaro and Karanpura in Hazaribagh. This same district is the most important mica mining centre in the world both on account of the quality as well as the size of its output. Manbhum, Randir, the Santal Parganas and Gaya are also the chief centres for the production of lac and the manufacture of shellac the latter of which is exported from India to the value of ten crores annually.

Administration.

The Province on first constitution was administered by a Lieutenant-Governor-in-Council, thus being unique in India as the only Lieutenant Governorship with a Council. Under the Reform Act of 1919 it was raised to the status of a Governorship, with an Executive Council and Ministers. The principles of the provincial administration are fully explained in the section The Provincial Governorships, where the division of the administration into Reserved Subjects, in charge of the Governor and his Executive Council, and Transferred Subjects, in charge of the Governor and Ministers chosen from the Legislative Council, is set out in detail. In all these respects Bihar and Orissa is on the same plane as the other Provinces in India.

Public Works.

The Public Works Department in the Province of Bihar and Orissa consists of two branches, *viz.*:—(1) Roads and Buildings, and (2) Irrigation and Marine, which also deals with railways. Each branch has a Chief Engineer, who is also Secretary to the Local Government with an Engineer Officer as Under Secretary under him. There is also a non-professional Assistant Secretary, a Consulting Architect and a Sanitary Engineer, who works under a Sanitary Board. The electrical work of the Province is carried out by an Electrical Inspector and a staff of subordinates.

Justice.

The administration of justice is controlled by the High Court of Judicature at Patna. In the administration of civil justice below the High Court are the District Judges as Courts of Appeal, the Subordinate Judges and the Munsiffs. The jurisdiction of a District Judge or Subordinate Judge extends to all original suits cognizable by the Civil Courts. It does not, however, include the powers of a Small Cause Court, unless these be specially conferred. The ordinary jurisdiction of a Munsif extends to all suits in which the amount or value of the subject matter in dispute does not exceed Rs. 1,000 though the limit may be extended to Rs. 2,000. On the criminal side the Sessions Judge hears appeals from Magistrates exercising first class powers while the District Magistrate is the appellate authority for Magistrates exercising second and third class powers. The District Magistrate can also be, though in point of fact he very rarely is, a court of first instance. It is usual in most districts for a Joint Magistrate or a Deputy Magistrate to receive complaints and police reports, cases of difficulty or importance being referred to the District Magistrate who is responsible for the peace of the district. In the non-regulation districts the Deputy Commissioner and his subordinates exercise civil powers and hear rent suits.

Land Tenures.

Estates in the Province of Bihar and Orissa are of three kinds, namely, those permanently settled from 1793 which are to be found in the Patna, Tirhut and Bhagalpur divisions, those temporarily settled as in Chota Nagpur and parts of Orissa, and estates held direct by Government as proprietor or managed by the Court of Wards. The passing of the Bengal Tenancy Act (VIII of 1885) safeguarded the rights of the cultivators under the Permanent Settlement Act. Further, the Settlement Department under the supervision of the Director of Land Records makes periodical survey and settlement operations in the various districts, both permanently and temporarily settled. In the former, the rights of the undertenants are recorded and attested, while in the latter there is the re-settlement of rents. In the re-settlement proceedings, rents are fixed not only for the landlords but also for all the tenants. A settlement can be ordered by Government on application made by raiyats.

The tenures of Orissa are somewhat different. Under the zamindars, that is, the proprietors who took settlement from Government and pay revenue to Government direct, is a class of subordinate proprietors or proprietary tenure holders, who were originally village headmen dealing more or less direct with the revenue authorities. They have a variety of names, such as *mukadam*, *padhan*, *maurusi*, *sarbarakar*, *pursethi*, *khariddar* and *shikmi* zamindar. These sub-proprietors or proprietary tenure holders pay their revenue through the zamindars of the estates within which their lands lie. In Chota Nagpur, Orissa and the Santal Parganas, the rights of village headmen have been recognised. The headman collects the rents and is responsible for them minus a deduction as remuneration for his trouble.

Both Orissa and Chota Nagpur have their own Tenancy Acts.

Police.

The Departments of Police, Prisons and Registration are each under the general direction of Government, supervised and inspected by an Inspector-General with a staff of assistants. The Commissioner of Excise and Salt is also Inspector-General of Registration.

Under the Inspector-General of Police are four Deputy Inspectors-General and 29 Superintendents. There are also 28 Assistant Superintendents of Police and 38 Deputy Superintendents. The force is divided into the District

Police, the Railway Police and the Military Police. A Criminal Investigation Department has also been formed for the collection and distribution of information relating to professional criminals and criminal tribes whose operations extend beyond a single district and to control, advise, and assist in investigations of crime of this class and other serious cases in which its assistance may be invoked. There are three companies of Military Police which are maintained as reserves to deal with serious and organised disturbances and perform no ordinary civil duties.

Education.

The position of education in the Province, with the numbers attending schools, is set out in the section Education and the tables attached thereto (*q. v.*) showing in great detail the educational status of the administration.

There is a University at Patna, whose functions are described under the Indian Universities. (*q. v.*)

Medical.

The Medical Department is under the control of the Inspector-General of Civil Hospitals who is a Member of the Indian Medical Service. Under him there are 21 Civil Surgeons who are responsible for the medical work of the districts at the head-quarters of which they are stationed. 57 Dispensaries are maintained by Government in addition to 445 Dispensaries maintained by Local bodies, Railways, private persons, etc. 4,156,904 patients including 63,392 in-patients were treated in all the dispensaries in 1922. The total income of the dispensaries maintained by Government and Local Bodies including that of the private aided institutions amounted to Rs. 17,54,636.

A large mental hospital for Europeans has been opened at Ranchi which receives patients from Northern India. A similar institution is under construction for the Indians. At present these are treated at Patna. An institute for radium treatment has also been established at Ranchi.

THE FINANCES OF BIHAR.

As Bihar now enjoys practical financial autonomy, the finances are set out in greater detail.

(In thousands of Rupees.)

Revenues and Receipts.	*Budget Estimate.* 1923-24.
II.—Taxes on Income	5,94
V.—Land Revenue	1,64,07
VI.—Excise	1,65,00
VII.—Stamps	1,00,00
VIII.—Forest	10,73
IX.—Registration	11,60
XIII.—Irrigation, Navigation, Embankment and Drainage Works for which capital accounts are kept	17,86
XIV.—Irrigation, Navigation, Embankment and Drainage Works for which no capital accounts are kept { Civil.. / P.W.D. }	98
XVI.—Interest	4,21
XVII.—Administration of Justice	3,39
XVIII.—Jails and Convict Settlements	4,86
XIX.—Police	85
XX.—Ports and Pilotage	....
XXI.—Education	4,04
XXII.—Medical	3,34
XXIII.—Public Health	20
XXIV.—Agriculture	68
XXV.—Industries	14
XXVI.—Miscellaneous Department	1
XXX.—Civil Works	6,25
XXXIII.—Receipts in aid of Superannuation	3,95
XXXIV.—Stationery and Printing	40
XXXV.—Miscellaneous	4,74
XL.—Miscellaneous adjustments between the Central and Provincial Governments	....
TOTAL REVENUE	5,13,33
Famine Insurance Fund	11,4
Loans and Advances by the Provincial Government	4,71
Loans between Central and Provincial Governments	13,00
Suspense	3,00
TOTAL RECEIPTS	5,45,51
Opening Balance	1,22,32
GRAND TOTAL	6,67,99

(In thousands of Rupees.)

Expenditure.	*Budget Estimate.* 1923-24.
5.—Land Revenue	21,84
6.—Excise	10,03
7.—Stamps	2,81
8.—Forests	8,61
9.—Registration	5,85
14.—Irrigation—Interest on Irrigation Works for which capital accounts are kept	20,50
15.—Irrigation Revenue Account—Other Revenue Expenditure Financed from ordinary Revenue Civil. P.W.D.	3,17
16.—Irrigation Capital Account—Construction of Irrigation, Embankment and Drainage Works	90
19.—Interest on Ordinary Debt	3,27
22.—General Administration	73,83
24.—Administration of Justice	35,93
25.—Jails and Convict Settlements	18,78
26.—Police	82,63
27.—Ports and Pilotage	1
30.—Scientific Departments	33
31.—Education	61,94
32.—Medical	20,87
33.—Public Health	8,56
34.—Agriculture	9,17
35.—Industries	6,76
37.—Miscellaneous Departments	1,23
41.—Civil Works	68,87
43.—Famine Relief and Insurance	11,22
45.—Superannuation Allowances and Pensions	19,89
46.—Stationery and Printing	10,94
47.—Miscellaneous	1,66
51.—Contribution and Assignments to the Central Government by Provincial Government	....
52.—Miscellaneous adjustments between the Central and Provincial Governments	28
Total expenditure charged to Revenue	5,09,88
Famine Insurance Fund	1,05
Loans and Advances by the Provincial Government	21,54
Loans between Central and Provincial Governments	4,93
Suspense	3,50
Total expenditure not charged to revenue	31,07
Total expenditure	5,40,95
Closing balance	1,26,96
GRAND TOTAL	6,67,91
Provincial Surplus	4,57
Deficit	....

Administration.

GOVERNOR.

His Excellency Sir Henry Wheeler, K.C.S.I., K.C.I.E., I.C.S.

PERSONAL STAFF.

Private Secretary, Capt. G. E. R. Edgecombe.
Aide-de-Camp, Capt. M. L. Barrett.
Honorary Aides-de-Camp, Lieut. Muhammad Raza, Khan Bahadur and Major D. Douglas.

EXECUTIVE COUNCIL.

Sachchidanand Sinha.
Hugh McPherson, C.S.I., I.C.S.

Ministers.

Vacant.

SECRETARIAT.

Chief Secretary to Government, Political and Appointment Departments, G. Rainy, C.S.I., C.I.E.
Secretary to Government, Finance Department, E. L. Tanner, I.C.S.
Secretary to Government, Revenue Department, J. R. Dain.
Secretary to Government (P. W. D.), Irrigation Branch, W. S. Bremner.
Buildings and Roads Branch, C. B. Mellor.

BOARD OF REVENUE.

Member, L. F. Morshead.

MISCELLANEOUS APPOINTMENTS.

Director of Public Instruction, G. E. Fawcus.
Inspector-General of Police, Walter Swain, C.I.E.
Conservator of Forests, Albert Reginald Dicks.
Inspector-General of Civil Hospitals, Col. Hugh Ainsworth, M.B., I.M.S.
Director of Public Health, Lt.-Col. William Charles Ross.
Inspector-General of Prisons, Major W. Gillit, C.I.E., I.M.S.
Accountant-General, A. H. Gurney, I.C.S.
Director of Agriculture, A. C. Dobbs.

BIHAR AND ORISSA LEGISLATIVE COUNCIL.

NOMINATED.

Officials.

Mr. Egbert Laurie Lucas Hammond, C.B.E., I.C.S.
Mr. Evelyn Lloyd Tanner, I.C.S.
Mr. John Rutherford Dain, I.C.S.
Mr. Arthur Loveday Inglis, I.C.S.
Mr. Bernard Abdy Collins, I.C.S.
Mr. Walter Sidney Bremner, C.I.E.
Mr. Harry Llewelyn Lyons Allanson, I.C.S.
Mr. John Alfred Saunders, I.C.S.
Mr. Walter Swain, C.I.E.
Mr. Birendra Chandra Sen, I.C.S.
Colonel Hugh Ainsworth, I.M.S.
Mr. Henry Lambert.
Mr. Willam Bissill Heycock, I.C.S.

Non-Officials.

Raja Bahadur Harihar Prasad Narayan Singh, O.B.E.
Khan Bahadur Nawabzada Saiyid Ashraf-ud-din Ahmed.
Babu Devkinandan Prashad Singh.
The Rev. Edward Hamilton Whitley (Aborigines.)
The Rev. Prittam Luther Singh (Aborigines.)
Babu Bishwanath Kar (Depressed Classes.)
The Rev. E. Sukh (Depressed Classes.)
Mr. Dhanjishah Meherjibhai Madan (Industrial interests other than Planting and Mining.)
Mr. Baij Nath (Labouring Classes.)
The Rev. S. K. Tarafdar (Indian Christian Community.)
Rai Bahadur Jyotish Chandra Bhattacharji (Domiciled Bengali Community.)
Mr. Francis Ernest Lopes Morrison (Anglo-Indian Community.)

ELECTED.

Name.	Constituencies.
Patna Division.	
Mr. Muhammad Yunus	Patna Division Muhamma dan Urban.
Maulavi Saiyid Muhammad Husein	East Patna Muhammadan Rural.
The Hon'ble Khan Bahadur Saiyid Muhammad Fakhr-ud-din.	West Patna Muhammadan Rural.
Babu Shyam Narayan Sinha Sharma	Patna Division Non-Muhammadan Urban.
Vacant	Patna Non-Muhammadan Urban.
Babu Gur Sahay Lal	East Patna Non-Muhammadan Rural.
Babu Rajandhari Sinha	West Patna Non-Muhammadan Rural.
Babu Chandipat Sahay	Landholders,' Patna Division.
Khan Bahadur Ashfaq Husain	Gaya Muhammadan Rural.
Babu Gupteshvar Prashad Singh ..	West Gaya Non-Muhammadan Rural.
Babu Bishun Prashad	Central Gaya Non-Muhammadan Rural.
Babu Rameshvar Prashad Singh	East Gaya Non-Muhammadan Rural.
Mr. Saiyid Muhammad Athar Husain	Shahabad Muhammadan Rural.
Babu Sharada Prashad Singh	Central Shahabad Non-Muhammadan Rural.
Babu Rajivaranjan Prashad Sinha	South Shahabad Non-Muhammadan Rural.
Babu Dwarika Prashad Singh	Arrah Non-Muhammadan Rural.

Name.	Constituencies.
Tirhut Division.	
Maulavi Mati-ur-Rahman	Tirhut Division Muhammadan Urban.
Maulavi Saiyid Mehdi Hasan	Muzaffarpur Muhammadan Rural.
Maulavi Said-ul Haqq	Darbhanga Muhammadan Rural.
Maulavi Saiyid Mubarak Ali	Saran Muhammadan Rural.
Maulavi Muhammad Zahurul Haqq	Champaran Muhammadan Rural.
Rai Bahadur Dvarika Nath	Tirhut Division Non-Muhammadan Urban.
Mahanth Ishvar Gir	North-West, Darbhanga Non-Muhammadan Rural.
Babu Shiva Shankar Jha	North-East Darbhanga Non-Muhammadan Rural.
Babu Ram Nihora Singh	South-East Darbhanga Non-Muhammadan Rural.
Babu Ramasray Prashad Chaudhuri	Samastipur Non-Muhammadan Rural.
Babu Shivabachan Sinha	North Muzaffarpur Non-Muhammadan Rural.
Mahanth Darshan Dasji	East Muzaffarpur Non-Muhammadan Rural.
Babu Ganesh Datta Singh	West Muzaffarpur Non-Muhammadan Rural.
Babu Radha Krishna	Hajipur Non-Muhammadan Rural.
Babu Jaleshvar, Prashad	North Saran Non-Muhammadan Rural.
Babu Chandra Ketu Narayan Singh	South Saran Non-Muhammadan Rural.
Babu Lakshmi Mohan Misra	North Champaran Non-Muhammadan, Rural.
Babu Kedar Nath Prashad Sah	South Champaran, Non-Muhammadan Rural.
Rai Bahadur Krishnadeva Narayan Mahtha ..	Landholders,' Tirhut Division.
Bhagalpur Division.	
Mr. Abdul Wahab Khan	Bhagalpur Division Muhammadan Urban.
Khan Bahadur Saiyid Muhammad Naim ..	Bhagalpur Muhammadan Rural.
Mr. Shah Muhammad Yahya	Monghyr Muhammadan Rural.
Maulavi, Mir Faiyaz Ali	Purnea Muhammadan Rural.
Mr. Saiyid Moinuddin Mirza	Kishanganj Muhammadan Rural.
Mulavi Muhammad Umid Ali	Santal Parganas Muhammadan Rural.
Babu Murlidhar Shraff	Bhagalpur Division Non-Muhammadan Urban.
Babu, Rajeira Misra	North Bhagalpur Non-Muhammadan Rural.
Babu Bhuvaneshvari Prashad Mandal	Central Bhagalpur Non-Muhammadan Rural.
Babu Ananta Prashad	South Bhagalpur Non-Muhammadan Rural.
Maharaja Bahadur Chandra Maulcshvar Prasad Singh.	South-West Monghyr Non-Muhammadan Rural.
Rai Sahib Kharag Narayan	North-West Monghyr Non-Muhammadan Rural.
Rai Bahadur Lakshmi Prashad Sinha	East Monghyr Non-Muhammadan Rural.
Rai Bahadur Prithi Chand Lal Chaudhuri ..	Purnea Non-Muhammadan Rural.
Babu Jogendra-Narayan Singh	Santal Parganas North Non-Muhammadan Rural.
Babu Rameshvar Lal Marwari	Santal Parganas South Non-Muhammadan Rural.
Raja Bahadur Kirtyanand Singh	Landholders', Bhagalpur Division.

Name.	Constituencies.
Orissa Division.	
Maulavi Saiyid Tajammul Ali	Orissa Division Muhammadan Rural.
Mr. Madhusudan Das, C.I.E.	Orissa Division Non-Muhammadan Urban.
Babu Birabar Narayan Chandra Dhir Narendra	North Cuttack Non-Muhammadan Rural.
Babu Lakshmidhar Mahanti	South Cuttack Non-Muhammadan Rural.
Babu Radharanjan Das	North Balasore Non-Muhammadan Rural.
Chaudhuri, Bhagavat Samantarai Prasad Mahapatra.	South Balasore Non-Muhammadan Rural.
Babu Godaveris Misra	North Puri Non-Muhammadan Rural.
Babu Jagabandhu Sinha	South Puri Non-Muhammadan Rural.
Babu Ram Narayan Misra	Sambalpur Non-Muhammadan Rural.
Raja Rajendra Narayan Bhanja Deo, O.B.E. ..	Landholders', Orissa Division.
Chota Nagpur Division.	
Maulavi Shaik Muhammad Husain	Chota Nagpur Division Muhammadan Rural
Mr. Jimut Bahan Sen	Chota Nagpur Division Non-Muhammadan Urban.
Rai Bahadur Sharat Chandra Ray	Ranchi Non-Muhammadan Rural.
Babu Krishna Ballabh Sahay	Hazaribagh Non-Muhammadan Rural.
Thakurai Rahmeshvar Dayal Singh	Palamau Non-Muhammadan Rural.
Babu Nilkanta Chattarji	South Manbhum Non-Mahammadan Rural.
Dulu Manki	Singhbhum Non-Muhammadan Rural.
Babu Bakhshi Jagdam Prashad Lal	North Manbhum Non-Muhammadan Rural
Babu Nageshvar Bakhsh Ray	Landholders', Chota Nagpur Division.
Others.	
Mr. Sri Narayan Sahay	Patna University.
Mr. Pringle Kennedy	European Constituency.
Mr. Edward C. Danby	Planting Constituency.
Mr. James Henry Jennaway	Indian Mining Association.
Babu Narendra Nath Mukharji	Indian Mining Federation.

The Central Provinces and Berar.

The Central Provinces and Berar compose a great triangle of country midway between Bombay and Bengal. Their area is 131,052 sq. miles, of which 82,000 are British territory proper, 18,000 (*viz.* Berar) held on perpetual lease from the Nizam and the remainder held by Feudatory Chiefs. The population (1921) is 13,912,760 under British administration, including 3,075,316 in Berar. Various parts of the Central Provinces passed under British control at different times in the wars and tumult in the first half of the 19th century and the several parts were amalgamated after the Mutiny, in 1861, into the Chief Commissionership of the Central Provinces. Berar was, in 1853, assigned to the East India Company as part of a financial arrangement with the Nizam for the maintenance of the Hyderabad contingent, and was leased in perpetuity to the Central provinces in 1903, as the result of a fresh agreement with the Nizam.

The Country.

The Central Provinces may roughly be divided into three tracts of upland, with two intervening ones of plain country. In the northwest, the Vindhyan plateau is broken country, covered with poor and stunted forest. Below its precipitous southern slopes stretches the rich wheat growing country of the Nerbudda valley. Then comes the high Satpura plateau, characterised by forest-covered hills and deep water-cut ravines. Its hills decline into the Nagpur plain, whose broad stretches of "deep" black cotton soil make it one of the more important cotton tracts of India and the wealthiest part of the C. P. proper. The Eastern half of the plain lies in the valley of the Waingánga and is mainly a rice growing country. Its numerous irrigation tanks have given it the name of the "lake country" of Nagpur. Further east is the far-reaching rice country of Chattisgarh, in the Mahanadi basin. The southeast of the C. P. is again mountainous, containing 24,000 square miles of forest and precipitous ravines, and mostly inhabited by jungle tribes. The Feudatory States of Bastar and Kankar lie in this region. Berar lies to the south-west of the C. P. and its chief characteristic is its rich black cotton-soil plains.

The People.

The population of the province is a comparatively new community. Before the advent of the Aryans, the whole of it was peopled by the Gonds and these aboriginal inhabitants fared better from the Aryans than their like in most parts of India because of the rugged nature of their home. But successive waves of immigration flowed into the province from all sides. The early inhabitants were driven into the inaccessible forests and hills, where they now outnumber all the other hill and forest tribes and form nearly a quarter of the whole population of the C. P. being found in large numbers in all parts of the province, particularly in the south-east. The main divisions of the new comers are indicated by the language divisions of the province. Hindi, brought in by the Hindustani-speaking peoples of the North, prevails in the North and East. Marathi in Berar and the west and centre of the C. P. Hindi is spoken by 56 per cent. of the population and is the *lingua franca*. Marathi by 31 per cent. and Gondi by 7 per cent. The effects of invasion are curiously illustrated in Berar, where numbers of Moslems have Hindu names, being descendants of former Hindu officials who on the Mahomedan invasion adopted Islam rather than lose their positions. The last census shows that a gradual Brahmanising of the aboriginal tribes is going on. The tribes are not regarded as impure by the Hindus and the process of absorption is more or less civilising.

Industries.

When Sir Richard Temple became first Chief Commissioner of the C. P. the province was landlocked. The only road was that leading in from Jubbulpore to Nagpur. The British administration has made roads in all directions, the two trunk railways between Bombay and Calcutta run across the province and in the last few years a great impetus has been given to the construction of subsidiary lines. These developments have caused a steady growth of trade and have aroused vigorous progress in every department of life. The prime industry is, of course, agriculture, which is assisted by one of the most admirable agricultural departments in India and is now receiving additional strength by a phenomenal growth of the co-operative credit movement. The land tenure is chiefly on the zemindari, or great landlord system, ranging, with numerous variations, from the great Feudatory chief-ships, which are on this basis, to holdings of small dimensions. A system of land legislation has gradually been built up to protect the individual cultivator. Berar is settled on the Bombay ryotwari system. About 16,000 square miles of the C. P. is Government Reserved forest; in Berar the forest area is about 3,300 square miles, the total forest area being one-fifth of the whole Province. The rugged nature of the greater part of the country makes forest conservation difficult and costly. Excluding forest and waste 55 per cent. of the total land is occupied for cultivation; in the most advanced districts the proportion is 80 per cent. and in Berar the figure is also high. The cultivated area is extending continuously except for the temporary checks caused by bad seasons. Rice is the most important crop of the C. P. Wheat comes next, with 29 per cent., then pulses and cereals used for food and oil seeds, with 45 per cent. and cotton with 14½ per cent. In Berar cotton occupies 47 per cent. of the cropped area, jowar covers 37 per cent. then wheat and oil seeds. In agriculture more than half the working population is female.

Commerce and Manufactures.

Industrial life is only in its earliest development except in one or two centres, where the

introduction of modern enterprise along the railway routes has laid the foundations for great future developments of the natural wealth of the province. Nagpur is the chief centre of a busy cotton spinning industry. The Empress Mills, owned by Parsi manufacturers, were opened there in 1877 and the general prosperity of the cotton trade has led to the addition of many mills here and in other parts of the province. The total amount of spun yarn exported annually from the Province is about 200,000 maunds, valued at nearly 55 lakhs of rupees.

The largest numbers engaged in any of the modern Industrial concerns are employed in manganese mining which in 1922 employed 9,904 persons and raised 424,679 tons. Then follow coal mining with an output of 675,836 tons and 14,487 persons employed, the Jubbulpore marble quarries and allied works, the limestone quarries and the mines for pottery clay, soapstone, &c.

The total number of factories of all kinds legally so described was 544 in 1921, the latest period for which returns are available and the number of people employed in them 59,076. The same economic influences which are operative in every progressive country during its transition stage are at work in the C. P. and Berar, gradually sapping the strength of the old village industries, as communications improve, and concentrating industries in the towns. While the village industries are fading away, a large development of trade has taken place. The last pre-war reports showed an increase in volume by one third in eight years.

Administration.

The administration of the Central Provinces and Berar is conducted by a Governor-in-Council, who is appointed by the Crown. He is assisted by six Secretaries, five under-secretaries, and one financial assistant secretary. Under the Reform Scheme the administration is conducted, in relation to reserved subjects, by a Governor with an Executive Council of two members, one of whom is a non-official, and in relation to transferred subjects by a Governor acting with two Indian ministers.

The local legislature consists of 70 members at least 70 per cent. of whom are elected and not more than 20 per cent. are officials. The Governor (who is not a member of the Council) has the right of nominating two additional members with special knowledge on any subject regarding which legislation is before the Chamber. The C. P. are divided for administrative purposes into four divisions and Berar constitutes another division. Each of these is controlled by a Commissioner. The divisions are sub-divided into districts, each of which is controlled by a Deputy Commissioner, immediately subordinate to the Commissioner. The principal heads of Provincial departments are the Commissioner of Settlements and Director of Land Records, Registrar-General of Births, Deaths and Marriages and Inspector General of Registration, the Chief Conservator of Forests, the Inspector General of Civil Hospitals, the Director of Public Health, the Inspector General of Police, the Inspector General of Prisons, the Director of Public Instruction, the Excise Commissioner, the Director of Agriculture, the Registrar of Co-operative Societies, the Director of Industries, the Legal Remembrancer and the two Chief Engineers, Public Works Department, Buildings and Roads and Irrigation Branches. The Deputy Commissioners of districts are the chief revenue authorities and District Magistrates and they exercise the usual powers and functions of a district officer. The district forests are managed by a forest officer, over whom the deputy Commissioner has certain powers of supervision, particularly in matters affecting the welfare of the people. Each district has a Civil Surgeon, who is generally also Superintendent of the District Jail and whose work is also in various respects supervised by the Deputy Commissioner. The Deputy Commissioner is also Marriage Registrar and manages the estates of his district which are under the Court of Wards. In his revenue and criminal work the Deputy Commissioner is assisted by (a) one or more Assistant Commissioners, or members of the Indian Civil Service; (b) one or more Extra Assistant Commissioners, or members of the Provincial Civil Service, usually natives of India, but including a few Europeans and Anglo-Indians and (c) by Tahsildars and naib Tahsildars, or members of the Subordinate service, who are nearly always natives of India. The district is divided for administrative purposes into tahsils, the average area of which is 1,500 square miles. In each village a lambardar or representative of the proprietary body, is executive headman.

Justice.

The Court of the Judicial Commissioner is the highest court of appeal in civil cases, and also the highest court of criminal appeal and revision for the Central Provinces and Berar including proceedings against European British subjects and persons jointly charged with European British subjects.

The Court sits at Nagpur and consists of a Judicial Commissioner and 3 Additional Judicial Commissioners of whom one at least must be an advocate of the Court or a Barrister or pleader of not less than 10 years' standing.

Subordinate to the Judicial Commissioner's Court are the District and Sessions Judges (11 in number) each of whom exercises civil and criminal jurisdiction in a Civil and Sessions district comprising one or more Revenue districts. The civil staff below the District and Sessions Judge consists of Sub-Judges of the 1st and 2nd class.

Local Self-Government.

Municipal administration was first introduced under the Punjab Municipal Acts and the Municipality of Nagpur dates from 1864. Several revising Acts extend its scope and the C. P. Municipalities Act passed towards the end of the last year has considerably increased the power of the Municipal Committees. It is under contemplation to extend the C. P. Municipalities Act to Berar. Viewed generally, municipal self-government is considered to have taken root successfully. The general basis of the scheme is the Local Board or each tahsil and the District Council

for each district. The larger towns have municipalities, there being 61 such bodies in the Province.

Under the Central Provinces Local Self-Government Act recently passed, the Local Boards consist of elected representatives of circles and nominated members other than Government officials not exceeding in number one-fourth of the Board, and the constitution of the District Council is a certain proportion of elected representatives of Local Boards, of members selected by those representatives and of members, other than Government servants, nominated by Government.

The District Councils in the Central Provinces will now have power of taxation within certain limits and Local Boards derive their funds in allotments from the District Councils. The new Central Provinces Local Self-Government Act has now been applied to Berar. The Office Bearers of the District Councils and Local Boards are with few exceptions non-officials.

Rural education and sanitation are among the primary objects to which these bodies direct their attention, while expenditure on famine relief is also a legitimate charge upon the District Council funds.

Public Works.

The Public Works Department is controlled by two Chief Engineers, who are also Secretaries to the Government. There are three Superintending Engineers for Roads and Buildings and three for Irrigation. In 1892 a separate division of the Public Works Department was formed for the construction of roads and buildings in the Feudatory States, but it has since been abolished. The expansion of the department and its work has been one of the most remarkable features of the administration in the past decade and a half, largely owing to the demands of a progressive age in regard to communications and new buildings. The Irrigation Branch of the P. W. D. represents a completely new departure. It was formerly the accepted view that the irregular surface of the country would make irrigation canals impossible and that the S. W. monsoon was so regular that it would pay better to relieve famine than to prevent it. Both conclusions have been reversed. Picked officers investigated projects for irrigation when the Irrigation Commission was appointed (1901) and canal and storage works have since been advanced with vigour. The Tandula, Wainganga, Mahanadi and Kharang canal projects are amongst the more important schemes, while an extensive network of minor protective works is being constructed throughout the Province.

Police.

The police force was constituted on its present basis on the formation of the Province, the whole of which including the Cantonments and the Municipalities, is under one force. The strength is equal to one man per 9 square miles of area. The superior officers comprise an Inspector-General, whose jurisdiction extends over Berar, three Deputy Inspectors-General, for assistance in the administrative control and supervision of the Police force, including the Criminal Investigation Department, and the usual cadre of District Superintendents of Police, Assistant and Deputy Superintendents and subordinate officers. On railways special Railway Police are employed under the control of two Superintendents of Railway Police with headquarters at Raipur and Hoshangabad. A Special Armed Force of 600 men is distributed over the headquarters of eight districts, for use in dealing with armed disturbers of the peace in whatever quarter they may appear. There is a small force of Mounted Police. The Central Provinces has no rural police as the term is understood in other parts of India. The village watchman is the subordinate of the village headman and not a police official and it is considered very desirable to maintain his position in this respect.

Education.

The Education Department of the Central Provinces and Berar is administered by a Director of Public Instruction, a Deputy Director, four Inspectors and two Inspectresses who in their turn are assisted by seven Assistant Inspectors and four Assistant Inspectresses. An Agency Inspector supervises the schools in the Feudatory States. Schools are divided into schools for general education and schools for special education. The latter are schools in which instruction is given in a special branch of technical or professional education, or for special classes of the community such as Europeans, girls and Rajkumars. The main divisions of schools for general education is into Primary and Secondary. In the Primary Schools the teaching is conducted wholly in the vernacular and these schools are known as Vernacular Schools. The Secondary Schools are divided into Middle and High Schools. The former may be either Vernacular Middle Schools in which the instruction is given wholly in the Vernacular, or Anglo-Vernacular Middle Schools in which the instruction is given both in English and the Vernacular. In the High School classes the instruction until recently was given in English but the vernacular was adopted as the medium of instruction at the beginning of the school year 1922-23. For administrative purposes schools are further divided according to their management into schools under public management and schools controlled by private bodies. The former consist of (a) schools controlled by Government and (b) schools controlled by Local Bodies or Boards. The latter consist of (a) Schools which are aided by grants from Government or from Local and Municipal Funds and (b) unaided schools. All schools under public management and all aided schools conform in their courses of study to the standards prescribed by the Education Department or by the High School Education Board. They are subject to inspection by the Department and to the general rules governing schools of this type. They are "recognised" by the Department and their pupils may appear as candidates for any prescribed examination for which he is otherwise eligible. Unaided schools do not follow the rules of the Department, nor are they subject to inspection by the Department. They are mostly indigenous schools or

which have been too recently opened to have acquired "recognition." Their pupils may not appear as candidates at any of the prescribed examinations without the previous sanction of the Department.

The Primary Education Bill which was passed by the Local Legislative Council in March 1920 marks an important stage by giving Local Bodies power to introduce compulsory education in the areas under their jurisdictions.

Higher education is at present given in five colleges. In Nagpur Morris College teaches upto the M.A. standard in Arts and up to the Final LL.B. standard in Law. Hislop College is affiliated up to the M.A. standard in Arts. The Victoria College of Science teaches up to the M.Sc. standard in Science. Up to the B.Sc. standard it works in conjunction with Morris College and Hislop College. In Jubbulpore Robertson College teaches up to the B.A. and B.Sc. standards. The King Edward College, capable of accommodating 350 students with spacious grounds and well-built hostels for two hundred boarders, is now established at Amraoti. It teaches up to the B.A. degree in Arts and the Intermediate degree in Science. The province contains also a Teacher's Training College at Jubbulpore, and Normal Schools at different centres, an Engineering school at Nagpur and a Technical Institute at Amraoti. There is also an Agricultural College at Nagpur under the Department of Agriculture.

Collegiate Education is now under control of the University of Nagpur to which the colleges of the province are affiliated. The Nagpur University Act of 1923 provided for a University which "in the first instance, will be of an examining and affiliating type though it may subsequently and without further legislation undertake wider functions as necessity arises and funds permit." In this connection the speech with which the Hon'ble the Minister for Education introduced the Bill is interesting. He pointed out that from the outset the University will exercise a marked control over its colleges with regard to instruction, the qualifications of teachers, the residence and discipline of students. It will also act as adviser to the Local Government with regard to the financial needs of the colleges and institutions connected with it. "Finally, the Bill is so drafted that the University may, at any moment without further legislation, supplement or replace collegiate instruction by instruction of its own. It may take over the management of existing colleges with the consent of their managing bodies, whether Government or private, or it may institute and maintain colleges of its own." The second important point of difference between the Nagpur Act and other University Acts subsequent to the publication of the Calcutta University Commission's Report is with regard to Intermediate Education. The Bill definitely follows the recommendations of the Central Provinces University Committee of 1914 and of the Sadler Commission in freeing the High schools from the control of the University. It differs from the Sadler Commission Report and subsequent University legislation in adopting the High School Certificate Examination as the standard of admission to the University and in placing Intermediate Education under the control of the University. The constitution of the University as provided in the Act is in accordance with other recent University legislation in India and is to consist of a Court, an Academic Council and an Executive Council with the Governor of the province as Ex-officio Chancellor.

As a corollary to the Central Provinces University Act the Central Provinces High School Education Bill was passed in 1923 on the lines of the United Provinces Intermediate and High School Education Act. Its aim is to free the High Schools of the Province from the control of the University and from this point of view to substitute for the University a Board of Secondary Education for the regulation and control of Secondary Education. In order, however, that the connection between Secondary and University Education may still be maintained the Bill provides that one-third of the members of the Board will be drawn from men experienced in university affairs and that of this one-third not less than two-thirds shall be teachers in the University or in colleges affiliated thereto. At the same time teachers engaged in school work will be adequately represented on the Board.

Medical.

The medical and sanitary services of the province are respectively controlled by an Inspector-General of Civil Hospitals and a Director of Public Health. The medical department has made much progress since the year 1911. A striking advance has been made in recent years with urban sanitation and the opening of a Medical School at Nagpur. The principal medical institutions are the Mayo Hospital at Nagpur, opened in 1874, with accommodation for 84 in-patients; the Victoria Hospital at Jubbulpore, opened in 1886 and accommodating 95 in-patients; the Lady Dufferin Hospital and the Mure Memorial Hospital at Nagpur and the Lady Elgin Hospital and the Crump Children's Hospital at Jubbulpore, these last four being for women and children and containing together accommodation for 126 in patients. The Province has one Mental Hospital at Nagpur. Vaccination is compulsory in some Municipal towns to which the Vaccination Act has been extended. The Government in 1913 sanctioned the opening of peripatetic dispensaries in unhealthy areas. There is at the present time one such dispensary at each district in the Province.

Finance.

The main source of Government income in the province has always been the land revenue, but under Mahratta rule many petty imposts were added in all branches of trade and industry and life in general. Thus there was a special tax on the marriage of Banias and a tax of a fourth of the proceeds of the sale of houses. The scheme of Provincial finance was introduced in 1871-72. Special settlements under this system have been necessitated in view of the special circumstances of the province and the recurrence of famine, which at the end of the 19th century caused a severe economic strain upon the province. The wave of prosperity which has spread over the country in the past 20 years has more than trebled the funds available for the administration, compared with what they were before the several years of scarcity, and the progress of the administration and of expenditure has increased correspondingly;

FINANCES OF THE CENTRAL PROVINCES.

ESTIMATED REVENUE FOR 1923-24.

Principal Heads of Revenue.	Rs.
Taxes on Income	70,000
Land Revenue	2,31,08,000
Excise	1,32,50,000
Stamps	78,00,000
Forest	53,40,000
Registration	7,50,000
Total ..	5,03,18,000
Irrigation.	
Irrigation, Navigation, Embankment and Drainage Works for which Capital Accounts are kept	— 96,000
Irrigation, Navigation, Embankment and Drainage Works for which no Capital Accounts are kept	1,24,000
Total ..	28,000
Debt Services.	
Interest	4,14,000
Civil Administration.	
Administration of Justice	4,22,000
Jails and Convict Settlements	2,14,000
Police	21,000
Education	2,90,000
Medical	17,00C
Public Health	86,00C
Agriculture	2,98,00C
Industries	43,00C
Miscellaneous Departments	45,000
Total ..	14,36,000
Civil Works.	
Civil Works	4,00,000

Miscellaneous.	Rs.
Transfers from Famine Insurance Fund	....
Receipts in aid of Superannuation	4,85,000
Stationery and Printing	84,000
Miscellaneous	2,75,000
Total ..	8,44,000
Miscellaneous adjustments between the Central and Provincial Governments	1,24,000
Total Provincial Revenue ..	5,35,64,000
Debt Heads.	
Deposits and Advances-Famine Insurance Fund	46,43,000
Loans and Advances by Provincial Governments	30,30,000
Loans between Central and Provincial Governments	30,70,000
Total Revenue and Receipts ..	6,43,07,000
Opening balance { Ordinary	49,74,000
Opening balance { Famine Insurance Fund ..	28,27,000
Grand Total ..	7,21,08,000

ESTIMATED EXPENDITURE OF 1923-24.

Direct Demands on the Revenue.	
Land Revenue	51,74,000
Excise	11,59,000
Stamps	1,85,000
Forest	33,09,000
Registration	2,72,000
Total ..	1,00,99,000
Irrigation.	
Revenue Account of Irrigation, Navigation, Embankment and Drainage Works—	
Interest on Works for which Capital Accounts are kept	19,83,000
Other Revenue expenditure financed from Ordinary Revenues	2,80,000
(1) Other Revenue expenditure financed from Famine Insurance Grants ..	4,83,000
Total ..	27,46,000
Capital Account of Irrigation, Navigation, Embankment and Drainage Works charged to Revenue.—	
Construction of Irrigation Navigation, Embankment and Drainage Works.—	
A.—Financed from Famine Insurance Grants	....
B.—Financed from Ordinary Revenue	....
Total ..	....
Debt Services.	
Interest on Ordinary Debt	1,82,000

	Rs.
Civil Administration.	
General Administration	50,36,000
Administration of Justice	31,46,000
Jails and Convict Settlements	9,87,000
Police	59,46,000
Scientific Departments	13,000
Education	....
Reserved	1,58,000
Transferred	50,50,000
Medical	14,66,000
Public Health	3,18,000
Agriculture	15,21,000
Industries—	
Reserved	22,000
Transferred	3,21,000
Miscellaneous Departments—	
Reserved	87,000
Transferred	12,000
Total	2,40,83,000
Civil Works.	
Civil Works—	
Reserved	30,000
Transferred	67,26,000
	67,56,000
Miscellaneous.	
Famine Relief and Insurance.—	
A.—Famine Relief	....
B.—Transfers to Famine Insurance Fund	42,43,000
Superannuation Allowances and Pensions	17,95,000
Stationery and Printing—	
Reserved	7,07,000
Transferred	15,000
Miscellaneous—	
Reserved	1,77,000
Transferred	9,45,000
Total	78,82,000
Contributions and Assignments to the Central Government by Provincial Governments.—	
Contributions and Assignments	22,00,000
Miscellaneous Adjustments	38,000
Total	22,38,000
Expenditure in England	10,09,000
Total Provincial Expenditure	5,49,95,000
Capital Account of Irrigation, Navigation, Embankments, Drainage and other Works not charged to Revenue—	
Forest Capital outlay	2,39,000
Capital outlay on Stationary and Printing	1,75,000
Construction of Irrigation Works	32,33,000
Total	35,47,000
Debt Heads.	
Deposits and Advances—	
Famine Insurance Funds	4,85,000
Loans and Advances by Provincial Government	4,10,000
Loans between Central and Provincial Governments	4,62,000
Total Expenditure and Disbursements	5,99,99,000
Closing balance { Ordinary	51,24,000
Closing balance { Famine Insurance Fund	69,85,000
Grand Total	7,21,08,000
Deficit	—14,31,000

GOVERNOR.

The Hon. Sir Frank Sly, K.C.S.I., I.C.S.

MEMBERS OF THE EXECUTIVE COUNCIL.

The Hon. Mr. B. P. Standen, C.S.I., C.I.E., I.C.S.

The Hon. Sir Moropant V. Joshi, Kt.

MINISTERS.

The Hon. Mr. S. M. Chitnavis.
The Hon. Mr. Syed Hifazat Ali.

SECRETARIAT.

Chief Secretary, Mr. A. E. Nelson, O.B.E., I.C.S., J.P., M.L.C.

Financial Secretary, (*Offg.*) Mr. Alexander McDonald, B.A., I.C.S.

Revenue Secretary, Mr. E. Gordon, I.C.S., M.L.C.

Legal Secretary, Mr. R. J. Jackson, B.A., I.C.S.

Under Secretaries, Messrs. C. M. Trivedi, I.C.S., Dionys John Norris Lee, B.A., I.C.S., and Hira Lal Varma.

Financial Asstt. Secretary, Mr. C. E. Higher.

Secretary, Public Works Department (Irrigation Branch), Lieut.-Col. H. de L. Pollard-Lowsley, C.I.E., D.S.O., R.E., C.M.G. (*Roads and Buildings*), Mr. J. M. M. Parker, A.C.H.

BERAR.

Commissioner, Mr. F. C. Turner, I.C.S., M.L.C.

MISCELLANEOUS APPOINTMENTS.

Director of Public Instruction, (*Offg.*) Mr. C. E.W. Jones, M.A., M.L.C.

Inspector-General of Police, Mr. Thomas Henry Morony.

Chief Conservator of Forests, Mr. B. B. Osmaston.

Inspector-General of Prisons, Major W. J. Powell, I.M.S.

Inspector-General of Civil Hospitals, Col. P. F. Chapman, I.M.S., M.L.C. (*on leave*); Lt.-Col. W. H. Kenrick, I.M.S. (*Offg.*)

Director, Public Health, Lt.-Col. T. G. N. Stokes, I.M.S.

Commissioner of Excise, Mr. C. U. Wills, O.B.E., I.C.S.

Income Tax Commissioner, Mr. K. S. Jatar.

Accountant-General, Mr. James Patch, O.B.E.

Postmaster-General, Mr. M. L. Pasricha.

Director of Agriculture, Mr. David Clouston, C.I.E.

Registrar of Co-operative Credit Societies, Mr. H. R. Crosthwaite, C.B.E., C.I.E.

CHIEF COMMISSIONERS.

Colonel E. K. Elliot 1860
Lieut.-Colonel J. K. Spence (*Officiating*) 1862
R. Temple (*Officiating*) 1862
Colonel E. K. Elliot 1863
J. S. Campbell (*Officiating*) 1864
R. Temple 1864
J. S. Campbell (*Officiating*) 1865
R. Temple 1865
J. H. Morris (*Officiating*) 1867
G. Campbell 1867
J. H. Morris (*Officiating*) 1868

Confirmed 27th May 1870.

Colonel R. H. Keatinge, V.C., C.S.I. (*Offg.*). 1870
J. H. Morris, C.S.I 1872
C. Grant (*Officiating*) 1879
J. H. Morris, C.S.I. 1879
W. B. Jones, C.S.I. 1883
C. H. T. Crosthwaite (*Officiating*) .. 1884

Confirmed 27th January 1885.

D. Fitzpatrie (*Officiating*) 1885
J. W. Neill (*Officiating*) 1887
A. Mackenzie, C.S.I. 1887
R. J. Crosthwaite (*Officiating*) 1889

Until 7th October 1889.

J. W. Neill (*Officiating*) 1890
A. P. MacDonell, C.S.I. 1891
J. Woodburn, C.S.I. (*Officiating*) 1893

Confirmed 1st December 1893.

Sir C. J. Lyall, C.S.I., K.C.I.E. 1895
The Hon'ble Mr. D. C. J. Ibetson, C.S.I... 1898
,, Sir A. H.L. Fraser, K.C.S.I... 1899
(*Officiating*) Confirmed 6th March 1902.
The Hon'ble Mr. J. P. Hewett, C.S.I., C.I.E. 1902
(*Officiating*) Confirmed 2nd November 1903.
The Hon'ble Mr. F.S.P. Lely, C.S.I., K.C.I.E. 1904
(*Officiating*) Confirmed 23rd Dec. 1904.
The Hon'ble Mr. J. O. Miller, C. S.I. .. 1905
S. Ismay, C.S.I. (*Officiating*) 1906

Until 21st October 1906.

F. A. T. Phillips (*Officiating*) 1907

Until 24th March 1907. Also from 20th May to 21st November 1909.

The Hon'ble Sir R. H. Craddock, K.C.S.I. 1907
,, Mr. H. A. Crump, C.S.I. .. 1912
Sub. *pro tem.* from 26th January 1912 to 16th February.
The Hon'ble Mr. W. Fox-Strangways, C.S.I. 1912 (Sub. *pro tem.*)
The Hon'ble Sir B. Robertson, K.C.S.I., C.I.E. 1912
,, Mr. Crump, C.S.I. (*Officiating*) .. 1914
,, Sir B. Robertson, K.C.S.I. .. 1914
,, Sir Frank George Sly, K.C.S.I., I.C.S. 1919

GOVERNOR.

The Hon'ble Sir Frank Sly, K.C.S.I. .. 1920

CENTRAL PROVINCES LEGISLATIVE COUNCIL.

(*i*) *Officials.*

Mr. Arthur Edward Nelson, C.I.E., C.B.E., I.C.S., Chief Secretary to the Government of the Central Provinces.
Mr. Alfred Ernest Mathias, I.C.S., Finance Secretary to the Government of the Central Provinces.
Mr. David George Mitchell, C.I.E., I.C.S., Legal Remembrancer and Legal Secretary to the Government of the Central Provinces.
Mr. Charles Evan William Jones, I.E.S., Director of Public Instruction and Secretary in the Education Department to the Government of the Central Provinces.
Mr. Cecil Upton Wills, I.C.S., Excise Commissioner and Superintendent of Stamps.

(*ii*) *Non-Officials.*

Mr. V. B. Kekre (Mandla).
Raja Thakur Raghuraj Singh of Pandaria (Zamindari and Jagirdari Estates).
Mr. William Pasley (European and Anglo-Indian Communities).
Mr. Ganesh Akaji Gaval (Depressed Classes).
Mr. Sukhaji Urkuda Katangale (Depressed Classes).
Mr. George Paris Dick, C.I.E.
Mr. Ramkrishna Raoji Jayavant, M.B.E.
Mr. Ghulam Mohiddin.
Mr. Ramkrishna Rao Shrikhande.

MEMBERS ELECTED.

Name.	Constituency.
Mr. Prabhat Chandra Bose	Jubbulpore City, Non-Muhammadan Urban.
Mr. Gyanchandra Verma	Jubbulpore Division, Non-Muhammadan Urban.
Mr. Raghvendra Rao	Chhattisgarh Division, Non-Muhammadan Urban.
Mr. Chandra Gopal Misra	Nerbudda Non-Muhammadan Urban.
Dr. N. B. Khare	Nagpur City-cum-Kamptee Non-Muhammadan Urban.
Dr. B. S. Munje	Do. do. do.
Mr. Balvant Baghav Deshmukh	Nagpur Division, Non-Muhammadan Urban.
Mr. Kanchhedilal	Jubbulpore District (South), Non-Muhammadan Rural.
Mr. Kashi Prasad Pande	Jubbulpore District (North), Non-Muhammadan Rural.
Mr. Gokulchand Singai	Damoh District, Non-Muhammadan Rural.
Mr. Gopal Rao	Saugor District, Non-Muhammadan Rural.
Mr. Prabhakar Dhundiraj Jatar	Seoni District, Non-Muhhammadan Rural.
Mr. Sheodass Daga	Raipur District (North), Non-Muhammadan Rural.
Mr. Ravishankar Shukla	Raipur District (South), Non-Muhammadan Rural.
Thakur Chhedilal	Bilaspur District, Non-Muhammadan Rural.
Mr. Ghansiham Singh Gupta	Drug District, Non-Muhammadan Rural.
Mr. Beni Madhava Awasthi	Hoshangabad District, Non-Muhammadan Rura .
Mr. Gopal Rao Rambhau Joshi	Nimar District, Non-Muhammadan Rural.
Chaudhry Daulat Singh	Narsinghpur District, Non-Muhammadan Rural.
Mr. Vishwanath Damodar Salpekar	Chhindwara District, Non-Muhammadan Rural.
Mr. Krishnarao Mahadeo Dharmadhikari ..	Betul District, Non-Muhammadan Rural.
Mr. Krishna Pandurang Vaidya	Nagpur District (East), Non-Muhammadan Rural.
Mr. Laxman Rao Waman Rao Halde	Nagpur District (West), Non-Muhammadan Rural.
Mr. Namdeo Yeshwant Dhopte	Wardha Tahsil, Non-Muhammadan Rural.
Mr. G. V. Deshmukh	Wardha District, Non-Muhammadan Rural.

Name.	Constituency.
Mr. Deorao Mukund Patil	Chanda District, Non-Muhammadan Rural.
Mr. Raghunath Ramchandra Pathak	Bhandara District, Non-Muhammadan Rural.
Mr. K. R. Mohariker	Balaghat District, Non-Muhammadan Rural.
Mazulvi Saiyid Muhammad Amin Shams-ul-ulma.	Jubbulpore Division, Muhammadan Rural.
Mr. Muhammad Masud Khan	Chhatisgarh Division, Muhammadan Rural.
Mr. Syed Hifazat Ali	Nerbudda Division, Muhammadan Rural.
Mr. M. K. Sinddiqui	Nagpur Division, Muhammadan Rural.
Mr. Shyam Sunder Bhargava	Jubbulpore and Nerbudda Landholders.
The Hon'ble Mr. S. M. Chitnavis, I.S.O. ..	Nagpur and Chhattisgarh Landholders.
Mr. M. K. Golwalkar	Nagpur University.
Rao Sahib Laxminarayan	Central Provinces and Berar Mining Association.
Rai Bahadur K. S. Nayudu	Central Provinces, Commerce and Industry.

Members elected from Berar.

Mr. Shripad Balwant Tambe	East Berar, Municipal, Non-Muhammadan Urban.
Mr. Ramchandra Anant Kanitkar	West Berar, Municipal, Non-Muhammadan Urban.
Mr. W. G. Mohrir...	Amraoti (Central), Non-Muhammadan Rural.
Mr. Panjabrao Bajirao Deshmukh	Amraoti (East), Non-Muhammadan Rural.
Mr. Ramrao Madhavrao Deshmukh	Amraoti (West), Non-Muhammadan Rural.
Mr. Tukaram Shcoram Korde	Akola (East), Non-Muhammadan Rural.
Mr. Umedsinh Narayansinh Thakur	Akola (North-West), Non-MuhammadanRural.
Mr. Umedsinh Narayansinh Thakur	Akola (North-West), Non-Muhammadan Rural
Mr. Janardan Bhalchandra Sane.	Akola (South), Non-Muhammadan Rural.
Mr. Y. M. Kale	Buldana (Central), Non-Muhammadan Rural.
Mr. Nathu Ragho Patil	Buldana (Malkapur-Jalgaon), Non-Muhammadan Rural.
Mr. Mahadeo Paikaji Kolhe	Yeotmal (East), Non-Muhammadan Rural.
Mr. Dattatraya Krishna Kane	Yeotmal (West), Non-Muhammadan Rural.
Khan Bahadur Saiyid Abdur Rahman ..	Berar, Municipal, Non-Muhammadan Urban.
Mr. Syed Muzaffar Husain	East Berar, Non-Muhammadan Rural.
Mr. Mansur Ali Khan	West Berar, Non-Muhammadan Rural.
Mr. Balkrishna Ganesh Khaparde	Berar Landholders.
Mr. Shirram Surajmal	Berar, Commerce and Industry.

North-West Frontier Province.

The North-West Frontier Province, as its name denotes, is situated on the north-west frontier of the Indian Empire. It is in form an irregular strip of country lying north by east and south by west and may generally be described as the tract of country, north of Baluchistan, lying between the Indus and the Durand boundary line with Afghanistan. To the north it extends to the mountains of the Hindu Kush. From this range a long broken line of mountains runs almost due south, dividing the province from Afghanistan, until the Sulaiman Range eventually closes the south of the Province from Baluchistan. The greatest length of the province is 408 miles, its greatest breadth 279 miles and its total area about 39,000 square miles. The territory falls into three main geographical divisions: the Cis-Indus district of Hazara; the narrow strip between the Indus and the Hills, containing the Districts of Peshawar, Kohat, Banu and Dera Ismail Khan, and the rugged mountainous regions on the north and west between those districts and the border line of Afghanistan. Hazara and the four districts in the second division contain 13,418 square miles. The mountain regions, north and west, are occupied by tribes subject only to the political control of the Chief Commissioner in his capacity as Agent to the Governor-General. The area of this tract is roughly 25,500 square miles and in it are situated, from north to south, the political agencies severally known as the Malakand, Khyber, Kurram, Tochi and Wana Agencies. Each of the Deputy Commissioners of the five administered districts is responsible for the management of political relations with certain tribes or sections of the tribes across the frontier. A few hundred miles of the trans-border Territory are internally administered by the Political Agents, but the bulk of the trans-border population is free from any internal interference, so long as offences are not committed and so long as the tribes observe the conditions on which allowances are paid to many of them.

The area of the Province is a little more than half that of Bombay (excluding Sind and Aden) and amounts to more than three-fifths of the size of England without Wales. The density of population throughout the Province equals 130 persons to a square mile, but in the more favoured portions the pressure of population is much greater. In the Hazara District there are 208 persons to a square mile and in the trans-Indus plains tract the number is 156. The key to the history of the people of the N.-W. F. P. lies in the recognition of the fact that the valley of Peshawar was always more closely connected politically with Eastern Iran than with India, though in pre-Mahomedan times its population was mainly Indian by race. Early history finds the Iranians dominating the whole Indus valley. Then came the Greek invasion under Alexander the Great, in B. C. 327, then the invasions of the Sakas, and of the White Huns and later the two great waves of Muhammadan invasion. Last came the Sikh invasion beginning in 1818. The Frontier Territory was annexed by the British in 1840 and placed under the control of the Punjab Government. Frequent warfare occurred with the border tribes. The most serious phases of these disturbances were the war provoked by the aggression of Afghanistan in 1919 and the protracted punitive operations against the Waziris in 1919-1920.

The division of the Frontier Province from the Punjab was frequently discussed, with the double object of securing closer and more immediate control and supervision of the Frontier by the Supreme Government and of making such alterations in the personnel and duties of frontier officials as would tend to the establishment of improved relations between the local British representatives and the independent tribesmen. The province was eventually removed from the control of the Punjab administration in 1901. To it was added the political charge of Dir, Swat and Chitral, the Political Agent of which had never been subordinate to the Punjab. The new Province was constituted under a Chief Commissioner and Agent to the Governor-General, with headquarters at Peshawar, in direct communication with the Government of India in the Foreign Department. In political questions there is no intermediary between the Chief Commissioner and the local officer; an arrangement designed to secure both prompt disposal of references and the utilisation of the expert knowledge of frontier conditions for which the head of the administration is selected. The advisability of re-uniting the Province with the Punjab has recently been much discussed in certain Indian political circles and as a result of the views expressed upon the matter in the Legislative Assembly the Government of India last year appointed a Committee of officials and unofficials to investigate it. The Committee, presided over by Mr. D. deS. Bray, M.L.A., Joint Foreign Secretary, toured the Frontier Province and the Punjab and heard numerous witnesses and at the time of writing their report has not appeared. Its members were Messrs. Raza Ali, M.C.S., T. Rangachari, Chaudhri Shahabuddin, N. M. Samarth and K. B. Abdur Rahim Khan, members of the Legislative Assembly, H. N. Bolton, I.C.S. (Foreign Dept.), and A. H. Parker (I.C.S., Punjab) (members).

The People.

The total population of the N.-W. F. P. (1921) is 5,076,476, made up as follows:—

Hazara	622,349
Trans-Indus Districts	1,628,991
Trans-Border Area	2,825,136

This last figure is estimated. There are only 561·3 females per 1,000 males in the towns, and 872·2 females per 1,000 males in rural areas.

This disproportion of the sexes cannot at present be explained in the N.-W. F. P. any more than in other parts of Northern India where it also appears. The discrepancy is greater

here than in any other Province of India. There is no ground for believing that the neglect of girls in infancy has any effect in causing the phenomenon. On the other hand, the female population has to face many trials which are unknown to men. The evils of unskilled midwifery and early marriage are among them. Both the birth and death-rates of the Province are abnormally low. The birth rate in the administered districts, according to the last available official reports, is 35·1 and the death-rate 33·3. There were 122·5 male births for every 100 females. It is recognised that in this matter, and in regard to population generally, the registration of females may be defective, inasmuch as the Pathan, for whatever reasons, regards the birth of a daughter as a misfortune, the less said about which the better. The population is naturally increasing, but emigration reduces the net result.

The dominant language of the Province is Pashtu and the population contains several lingual strata. The most important sections of the population, both numerically and by social position, are the Pathans. They own a very large proportion of the land in the administered districts and are the ruling race of the tribal area to the west. There is a long list of Pathan, Baluch, Rajput and other tribal divisions. Gurkhas have recently settled in the Province. The Mahomedan tribes constitute almost the whole population, Hindus amounting to only 5 per cent. of the total and Sikhs to a few thousands. The occupational cleavage of the population confuses ethnical divisions.

Under the North-West Frontier Province Law and Justice Regulation of 1901, custom governs all questions regarding successions, betrothal, marriage, divorce, the separate property of women, dower, wills, gifts, partitions, family relations such as adoption and guardianship, and religious usages and institutions, provided that the custom be not contrary to justice, equity or good conscience. In these matters the Mahomedan or Hindu law is applied only in the absence of special custom.

Climate, Flora and Fauna.

The climatic conditions of the N.-W.F.P., which is mainly the mountainous region, but includes the Peshawar Valley and the riverine tracts of the Indus in Dera Ismail Khan District, are extremely diversified. The latter district is one of the hottest areas of the Indian continent, while on the mountain ranges the weather is temperate in summer and intensely cold in winter. The air is generally dry and hence the annual ranges of temperature are frequently very large. The Province has two wet seasons, one the S.-W. Monsoon season, when moisture is brought up from the Arabian Sea and the Bay of Bengal: the other in winter, when storms from Mesopotamia, Persia and the Caspian Districts bring widespread rain and snowfall. Both sources of supply are precarious and not infrequently either the winter or the summer rainfall fails almost entirely. The following description of the Daman, the high ground above the Indus, stretching across Dera Ismail Khan to the mountains on the west, occurs in an account written some years ago by Captain Crost-waite: "Men drink once a day and the cattle every second day. Washing is an impossible luxury. . . . It is possible in the hot weather to ride thirty miles and neither hear a dog bark nor see the smoke of a single fire." With the exception of the Kunhar River, in Hazara, which flows into the Jhelum, the whole territory drains into the Indus. The flora of the Province varies from the shrubby jungle of the south-eastern plains to barren hills, pine forests and fertile mountain valleys. Tigers used to abound in the forests but are now quite extinct; leopards, hyenas, wolves, jackals and foxes are the chief carnivora. Bear, deer and monkeys are found; a great variety of fish is caught in the Indus.

The mountain scenery is often magnificent. The frontier ranges contain many notable peaks of which the following are the principal:

Takht-i-Sulaiman, Sulaiman Range, in Dera Ismail Khan, 11,292 feet.

Pir Ghal, Sulaiman Range, in Mahsud Waziristan, 11,583 feet.

Sika Ram, in the Safed Koh, in the Kurram Agency, 15,621 feet.

Kagan Peaks of the Himalayas, in the Hazara District, 10,000 to 16,700 feet.

Istragh Peak (18,900 ft.), Kachin Peak (22,641 ft.), Tirich Mir (25,426 ft.), all in the Hindu Kush, on the northern border of Chitral Agency.

Trade and Occupations.

The population derives its subsistence almost wholly from agriculture. The Province is practically without manufactures. There is no considerable surplus of commercial products for export. Any commercial importance which the province possesses it owes to the fact that it lies across the great trade routes which connect the trans-border tribal territories and the marts of Afghanistan and Central Asia with India, but the influence of railways is diminishing the importance of these trading interests. Special mention may be made of the railway comparatively recently opened linking Baluchistan, in the south-west of the N.-W.F.P., *via* Nushki with south-east Persia. The line connects with the north-west railway system of India and extends 343 miles to Duzdap, within the Persian border. Two weekly trains run each way and the freight carried largely consists of carpets, wool and dates, from Persia and of tea, sugar and piece-goods from the Indian side. Though the railway is primarily strategic in purpose its commercial and political effects will be considerable. The travelling traders (or Powindahs) from the trans-frontier area have always pursued their wanderings into India and now, instead of doing their trading in towns near the border, carry it by train to the large cities in India. Prices of agricultural produce have in recent years been high, but the agriculturists, owing to the poverty of the means of communication, have to some extent been deprived of access to Indian markets and have therefore been unable to profit by the rates prevailing. On the other hand, high prices are a hardship to the non-agricultural classes. The effects of recent extensions of irrigation have been important. Land tenures are generally

the same in the British administered districts as in the Punjab. The cultivated area of the land amounts to 32 per cent. and uncultivated to 68 per cent.

The work of civilisation is now making steady progress. Relations with the tribes have improved, trade has advanced, free medical relief has been vastly extended, police administration has been reformed and the desire of people for education has been judiciously and sympathetically fostered. In the British administered districts 19 per cent. males and 7 per cent. females of the total population are returned as literates. The figures for males denote a very narrow diffusion of education even for India. Those for females are not notably low, but they are largely affected by the high literacy amongst Sikh women, of whom 13·3 per cent. are returned as literate. The inauguration of a system of light railways throughout the Province, apart from all considerations of strategy, must materially improve the condition of the people and also by that means strengthen the hold of the administration over them. The great engineering project of the Upper Swat River Canal, which was completed in 1914, and the lesser work of the Paharpur Canal, also completed a few years ago, will bring ease and prosperity to a number of peasant homes.

Administration.

The administration of the North-West Frontier Province is conducted by the Chief Commissioner and Agent to the Governor-General in Council. His staff consists of—

(1) Officers of the Political Department of the Government of India.

(2) Members of the Provincial Civil Service.

(3) Members of the Subordinate Civil Service.

(4) Superintendents and Assistant Superintendents of Police.

(5) Officers recruited for the service of departments requiring special knowledge—Militia, Engineering, Education, Medicine and Forestry.

The cadre posts reserved for officers coming under the first head above are:—

Administration.	Chief Commissioner & Agent to the Governor-General		
	Secretary		
	Under-Secretary		5
	Personal Assistant		
	Revenue Commissioner and Revenue Secretary		
	Resident in Waziristan		1
	Deputy Commissioners	5	
	Political Agents	5	12
	District Judges	2	
	Assistant Commissioners and Assistant Political Agents		13
Judicial Commr.'s Court & Divisional Judges.	One Judicial Commissioner.		
	Two Divisional and Sessions Judges.		4
	One Additional ditto.		

The districts under the Deputy Commissioners are divided into from two to five sub-collectorates, in charge of tahsildars, who are invested with criminal and civil and revenue powers, and are assisted by naib-tahsildars, who exercise only criminal and revenue powers. Some sub-divisions are in charge of Assistant or Extra Assistant Commissioners. The village community characteristic of some parts of India is not indigenous among the Pathans. Its place as a social unit is to some extent taken by the tribe, which is held together by the ties of kinship and ancient ancestry, real or imaginary. Modern municipal local government has been introduced in the towns. There are also district boards. The district is the unit for police, medical and educational administration and the ordinary staff includes a District Superintendent of Police, a Civil Surgeon, who is also the Superintendent of Jail and a District Inspector of Schools. The Province forms a single educational circle and only possesses one forest division, that of Hazara. There are four divisions of the Roads and Building Branch of the Public Works Department, each under an Executive Engineer. The Irrigation Department of the P. W. D. is in charge of a Chief Engineer, irrigation, who is also *ex-officio* Secretary to the Chief Commissioner. The administration of the civil police force of the districts is vested in an Inspector-General. There is a special force of Frontier Constabulary. The revenue and expenditure of the Province are wholly Imperial. Of the Agencies only Kurram and Tochi Valley pay land revenue to the British Government. The revenue administration of all five administered districts is controlled by the Revenue Commissioner. For the administration of civil and criminal justice there are two Civil and Sessions divisions, each presided over by a Divisional and Sessions Judge. The Judicial Commissioner is the controlling authority in the Judicial branch of the administration, and his Court is the highest criminal and appellate tribunal in this Province. The principal officers in the present Administration are:—

Agent to the Governor General and Chief Commissioner, The Hon'ble Sir John Loader Maffey, K.C.V.O., C.S.I., C.I.E., I.C.S., (Assumed Charge, 8th March 1921).

Personal Assistant, Captain D. G. H. De la. Forgue.

Resident, Waziristan, (Offg.) Major C. E. Bruce, C.I.E., O.B.E.

Judicial Commissioner, (Offg.) J. H. R. Fraser.

Revenue Commissioner, Lt.-Col. W. J. Keen, C.I.E., O.B.E.

Secretary to Chief Commissioner, C. Latimer, C.I.E.

Under-Secretary to Chief Commissioner, T. B. Copeland, I.C.S.

Assistant Financial Secretary to Chief Commissioner, Lala Chuni Lal.

Indian Personal Assistant to Chief Commissioner, Khan Bahadur Risaldar Moghal Baz Khan, I.O.M., I.D.S.M.

Secretary, Public Works Department, Buildings, and Roads Branch, Col. H. A. D. Fraser, R. E.

Secretary, Public Works Department, Irrigation Branch, R. Cannell.

Deputy Conservator of Forests, R. Parnell.

Chief Medical Officer, Lieut.-Col. W. M. Anderson, C.I.E., I.M.S.

Inspector-General of Police, E. W. Tomkins C.I.E., O.B.E.

Commandant, Frontier Constabulary, E. C. Handy Side, O.B.E.

Director of Public Instruction, J. H. Towle.

Superintendent, Archaeological Survey, H. Hargreaves.

Divisional and Sessions Judges, Major R. A. Yule (Derajat), Lt.-Col. R. Garratt, I.A., Officiating Sessions Judge (Peshawar).

Political Agents.

Lt.-Col. H. Stewart, C.I.E., Dir, Swat and Chitral.
Major J. A. Brett, Khyber.
G. Cunningham, I.C.S., Toohi.
Major R. J. W. Heal, O.B.E., I.A., Kurram.

Deputy Commissioners.

Lt. Col. E. H. S. James, C.I.E., I.A., Hazara.
Mojor N. E. Reilly, D.S.O., I.A., Peshawar.
Major W. A. Garstin, Bannu.
H.A.F. Metcalfe, M.V.O., I.C.S., Dera Ismail Khan.
Major R. E. H. Griffith, C.I. E., I.A., Kohat.

Former Chief Commissioners.

Lieut.-Col. Sir Harold Deane, K.C.S.I. Died 7th July 1908.
Lieut.-Col. Sir George Roos-Keppel, G.C.I.E., K.C.S.I., to 9th September 1919.
The Hon. Sir Alfred Hamilton Grant, K.C.I.E., C.S.I., from September 1919 to 8th March 1921.

(*Provincial Governments continued on page* 673.)

Aden.

Aden was the first new territory added to the Empire after the accession of Queen Victoria. Its acquisition in 1839 was the outcome of an outrage committed by the local Fadhli chief upon the passengers and crew of a British buggalow wrecked in the neighbourhood. Various acts of treachery supervened during the negotiations regarding the buggalow outrage and Aden was captured by a force sent by the Bombay Government under Major Baillie. The act has been described as one of those opportune political strokes which have given geographical continuity to British possessions scattered over the world.

Aden is an extinct volcano, five miles long and three broad, jutting out to sea much as Gibraltar does, having a circumference of about 15 miles and connected with the mainland by a narrow isthmus of flat ground. This is nearly covered at one part at high spring tides, but the causeway and aqueduct are always above, though sometimes only just above, water. The highest peak on the wall of precipitous hills that surrounds the old crater which constitutes Aden is 1,775 feet above sea level. Rugged spurs, with valleys between, radiate from the centre to the circumference of the crater. A great gap has been rent by some volcanic disturbance on the sea surface of the circle of hills and this opens to the magnificent harbour. The peninsula of Little Aden, adjacent to Aden proper, was obtained by purchase in 1868 and the adjoining tract of Shaikh Othman, 39 square miles in extent, was subsequently purchased when, in 1882, it was found necessary to make provision for an over-flowing population.

Attached to the settlement of Aden are the islands of Perim, an island of 5 square miles extent in the Straits of Bab-el-Mandeb, in the entrance to the Arabian Sea; Sokotra island, at the entrance to the Gulf of Aden, in the Arabian Sea, acquired by treaty in 1886 and 1,382 miles in extent; and the five small Kuria Muria islands, ceded by the Imam of Maskat in 1854 for the purpose of landing the Red Sea cable, and otherwise valuable only for the guano deposits found upon them. They are off the Arabian coast about two-thirds of the way from Aden to Maskat. The whole extent of the Aden settlement, including Aden, Little Aden, Shaikh Othman and Perim, and subject to post-war adjustments, is approximately 80 miles. The 1921 census showed Aden, with Little Aden, Shaikh Othman, and Perim to have a population of 56,571. The population of Perim is a matter of a few hundreds, largely dependent on the Coal Depot maintained there by a commercial firm. That of Sokotra is 12,000, mostly pastoral and migratory inland, fishing on the coast.

Strategic Importance.

Aden's first importance is as a naval and military station of strategic importance. This aspect was ably discussed by Colonel A. M. Murray, in his "Imperial Outposts." He points out that Aden is not a naval base in the same sense that Gibraltar, Malta and Hong-Kong were made, but a *point d'appui*, a rendezvous and striking point for the fleet. It was seized in 1839 because of its usefulness as a harbour of refuge for British ships and from a strategist's point of view this is its primary purpose and the *raison d'etre* of its forts and garrison. Aden under British rule has retained its ancient prestige as a fortress of impregnable strength, invulnerable by sea and by land, dominating the entrance to the Red Sea, and valuable to its owners as a commercial emporium, a port of call and a cable centre. The harbour extends 8 miles from east to west and 4 from north to south and is divided into two bays by a spit of land. The depth of water in the western bay is from 3 to 4 fathoms, across the entrance 4½ to 5 fathoms, with 10 to 12 fathoms 2 miles outside. The bottom is sand and mud. There are several islands in the inner bay. Strategic control of the Red Sea was rendered complete by the annexation of Perim and Sokotra, which may both be regarded as outposts of Aden, and are under the political jurisdiction of the Resident.

The Arab chiefs of the hinterland of Arabia are nearly all stipendiaries of the British Government. Colonel Wahab and Mr. G. H. Fitzmaurice, of the Constantinople Embassy, were appointed in 1902, as Commissioners to delimitate the frontier between Turkish Arabia and the British protectorate around Aden. A convention was signed in 1905 settling details, the frontier line being drawn from Shaikh Murad, a point of the Red Sea coast opposite Perim, to the bank of the river Bana, the eastern limit of Turkish claims, at a point some 29 miles north-east of Dthala, and thence north-east to the great desert. The area left within the British Protectorate was about 9,000 square miles. The arrangement gave to Turkey Cape Bab-el-Mandeb, which forms the Arabian bank of the eastern channel past Perim into the Red Sea. England took this gatepost of the Red Sea from the Turks in November 1914. A sanitorium and small British garrison used to be maintained at Dthala, which is 7,700 feet high, but the garrison was withdrawn in 1906, Lord Morley explaining this step as being in accordance with the policy stated in the House of Lords in 1903,—that His Majesty's Government had never desired to interfere with the internal and domestic affairs of the tribes on the British side of the boundary, but had throughout made it plain that they would not assent to the interference of any other Power with those affairs. Affairs in this respect have been disarranged considerably by the war.

British Policy.

There has been much criticism of a policy under which Aden has failed to advance with the same progressive strides which have marked the development of other British dependencies. It is said that the former Persian possessors of Aden built its wonderful water tanks, and the Arabs made an aqueduct 20 miles long, while the British have done nothing except mount guns to protect their coal yards. Trade, it is argued, flourishes because this is a natural emporium of commerce, but not because of the attention its needs get from Government. Lord Roberts, writing on this point a few years ago, said: "It is not creditable to British rule to

make use of a dependency like Aden for selfish purposes of political necessity without attempting to extend the benefits of civilised Government to the neighbouring native tribes, especially when those tribes are living under the aegis of the British Crown. The Persians, the Turks and even the Arabs did more for Aden in their time than we have done during our seventy years' occupation.....Aden has always suffered under the disadvantage of being an appanage of the Bombay Presidency, with which it has neither geographical, racial nor political affinity. Probably the best solution of the matter would be to hand over the place to the Colonial Office, relieving the Government of Bombay of a charge which is only looked upon as an incubus." This question is still under discussion but some important steps have been taken in the past few years to satisfy the commercial needs of the port.

(i) The metre-gauge Railway, which was constructed as a military measure during the war, now extends from Maala (2¼ miles from Steamer Point) to Habill about 5 miles beyond Lahej, a total distance of about 30 miles. If it is extended further into the interior it should assist materially in the development of the trade of Aden and of the Yemen.

(ii) The main needs of Aden are:—

(*a*) Purer and more abundant water supply;

(*b*) An efficient drainage system;

(*c*) Electric lighting;

(*d*) Improved communications with the Interior.

Trade.

The trade of Aden is mostly transhipment, the port serving as a centre of distribution. The total seaborne trade in the official year 1922-23 was Rs. 13,90,42,158 as compared with the preceding year's total of Rs. 16,13,88,045 showing a decrease of Rs. 2,23,45,887. Merchandise decreased by Rs. 1,46,17,651 and Treasure by Rs. 77,28,236. The trade with the interior of Arabia amounted in imports and exports to Rs. 30,53,946 and Rs. 29,00,613 respectively, as compared with last year's total of Rs. 28,93,076 and Rs. 32,04,663.

Language.

The language of the settlement is Arabic, but several other Asiatic tongues are spoken. The population is chiefly returned as Arabs and Shaikhs. The Somalis from the African coast and Arabs do the hard labour of the port. So far as the settlement is concerned there are no products whatever, with the important exception of salt. The crops of the tribal low country adjoining are jowar, sesamum, a little cotton, madder, a bastard saffron and a little indigo. In the hills, wheat, madder, fruit, coffee and a considerable quantity of wax and honey are obtained. The water supply forms the most important problem. Water is drawn from four sources—wells, aqueducts, tanks or reservoirs and condensers.

Administration.

The administration of Aden has been continuously under the Government of Bombay. In 1920, the political control of Aden, which was exercised during the period of the war by the High Commissioner of Egypt, was retransferred to the Political Resident, Aden, who was to be directly responsible to the Foreign Office. In 1921, this responsibility was taken over by the Colonial Office with whom it at present remains. The future of the Protectorate has been the subject of no little discussion and various proposals have been put forward. At one time the idea that it should be transferred to the Colonial Office was seriously entertained. The proposals met with warm disapproval, from the important Indian community in Aden whose views were supported in India. There is constant friction between India and the Colonial Office over the status of Indians in the Dominions and some of the Crown Colonies, and the lukewarmness of the Colonial Office in protecting their rights is much resented. Therefore transfer to the Colonial Office was opposed as transfer to an unknowing and unsympathetic administration. On the 11th July 1922 the Under-Secretary of State for the Colonies stated in the House of Commons that there was no prospect of the Colonial Office taking over the control of Aden in the near future. The administration is conducted by a Resident, who is assisted by four Assistants. The Resident is also ordinarily military Commandant and has hitherto usually been an officer selected from the Indian army, as have his assistants. The Court of the Resident is the Colonial Court of Admiralty under Act XVI of 1891, and its procedure as such is regulated by the provisions of the Colonial Courts of the Admiralty Act 1890 (53 and 54 Vict., Chapter 27). The laws in force in the settlement are generally speaking those in force in the Bombay Presidency, supplemented on certain points by special regulations to suit local conditions. The management of the port is under the control of a Board of Trustees formed in 1888. The principal business of the Port Trust has been the deepening of the harbour, so as to allow vessels of all sizes to enter and leave at all states of the tide. The Aden police force consists of land and harbour police who number 370 and 62 respectively. There are hospitals and dispensaries in both Aden and Perim, in addition to the military institutions of this character. The garrison comprises a troop of engineers, three companies of garrison artillery, one battalion of British infantry, two companies of sappers and miners and one Indian regiment. Detachments from the last named are maintained at Perim and Shaikh Othman respectively.

Climate.

The average temperature of the station is 87 degrees in the shade, the mean range being from 75 in January to 98 in June, with variations up to 102. The lulls between the monsoons, in May and September are very oppressive. Consequently, long residence impairs the faculties and undermines the constitution of Europeans and even Indians suffer from the effects of too long an abode in

the settlement, and troops are not posted in the station for long periods, being usually sent there one year and relieved the next. But Aden is exceptionally free from infectious diseases and epidemics, and the absence of vegetation, the dryness of the soil and the purity of the drinking water constitute efficient safeguards against many maladies common to tropical countries. The annual rainfall varies from $\frac{1}{4}$ inch to $8\frac{1}{2}$ inches, with an irregular average of 3 inches.

The following are the principal officers of the present administration:—

Political Resident, Major-General T. E. Scott, C.B., C.I.E., D.S.O.

Assistant Residents.

1. Major C. C. J. Barrett, C.S. I., C.I.E. Aden.
2. ,, B. R. Reilly, O.B.E. .. ,, (on leave).
3. ,, H. M. Wightwick .. ,,
4. ,, H. Wilberforce-Bell .. ,,
5. Capt. G. P. Murphy. .. ,,
6. ,, J. MacGregor .. Perim

The area enclosed within the boundaries of India is 1,773,168 square miles, with a population of 315,132,537 of people—nearly one-fifth of the human race. But of this total a very large part is not under British Administration. The area covered in the Indian States is 675,267 square miles with a population of seventy millions. The Indian States embrace the widest variety of country and jurisdiction. They vary in size from petty states like Lawa, in Rajputana, with an area of 19 square miles, and the Simla Hill States, which are little more than small holdings, to States like Hyderabad, as large as Italy, with a population of thirteen millions. They include the inhospitable regions of Western Rajputana, Baroda, part of the Garden of India, Mysore, rich in agricultural wealth, and Kashmir, one of the most favoured spots on the face of the globe.

Relations with the Paramount Power.

So diverse are the conditions under which the Indian States were established and came into political relation with the Government of India, that it is impossible even to summarise them. But broadly it may be said that as the British boundaries expanded, the states came under the influence of the Government and the rulers were confirmed in their possessions. To this general policy however there was, for a brief period, an important departure. During the regime of Lord Dalhousie the Government introduced what was called annexation through lapse. That is to say, when there was no direct heir, the Government considered whether public interests would be secured by granting the right of adoption. Through the application of this policy, the states of Satara and of Nagpur fell in to the East India Company, and the kingdom of Oudh was annexed because of the gross misgovernment of its rulers. Then came the Mutiny. It was followed by the transference of the dominions of the East India Company to the Crown, and an irrevocable declaration of policy toward the Indian States. In the historic Proclamation of Queen Victoria it was set out that "We desire no extension of our present territorial possessions; and while we will permit no aggression on our dominions or our rights to be attempted with impunity, we shall allow no encroachments on those of others. We shall respect the rights, dignity and honour of the Native Princes as our own; and we desire that they, as well as our own subjects, should enjoy that prosperity and that social advancement which can only be secured by internal peace and good government." Since the issue of that proclamation there has been no encroachment on the area under Indian rule by the Government of India. On the contrary, the movement has been in the opposite direction. In 1881 the State of Mysore, which had been so long under British administration that the traditions of Native rule were almost forgotten, was restored to the old Hindu ruling house. In 1911 the Maharajah of Benares, the great taluqdar of Oudh, was granted ruling powers over his extensive possessions. On many occasions the Government of India has had to intervene, to prevent gross misgovernment, or to carry on the administration during a long minority; but always with the undeviating intention of restoring the territories as soon as the necessity for intervention passed. Almost all states possess the right of adoption in default of heirs.

Rights of Indian States.

The rights and obligations of the Indian States are thus described by the Imperial Gazetteer. The Chiefs have, without exception, gained protection against dangers from without and a guarantee that the protector will respect their rights as rulers. The Paramount Power acts for them in relation to foreign Powers and other Indian States. The inhabitants of the Indian States are the subjects of their rulers, and except in case of personal jurisdiction over British subjects, these rulers and their subjects are free from the control of the laws of British India. Criminals escaping to an Indian State must be handed over to it by its authorities; they cannot be arrested by the police of British India without the permission of the ruler of the State. The Indian Princes have therefore a suzerain power which acts for them in all external affairs, and at the same time scrupulously respects their internal authority. The suzerain also intervenes when the internal peace of their territories is seriously threatened. Finally they participate in all the benefits which the protecting power obtains by its diplomatic action, or by its administration of its own dominions, and thus secure a share in the commerce, the railways, the ports, and the markets of British India. Except in rare cases, applied to maritime states, they have freedom of trade with British India although they levy their own customs, and their subjects are admitted to most of the public offices of the British Government.

Obligations of Indian States.

On the other hand, the Indian States are under an obligation not to enter into relations with foreign nations or other states; the authority of their rulers has no existence outside their territories. Their subjects outside their dominions become for all intents and purposes British subjects. Where foreign interests are concerned, the Paramount Power must act so that no just cause of offence is given by its subordinate allies. All Indian States alike are under an obligation to refer to the British every question of dispute with other states. Inasmuch as the Indian States have no use for a military establishment other than for police, or display, or for co-operation with the Imperial Government, their military forces, their equipment and armament are prescribed by the Paramount Power. Although old and unaltered treaties declare that the British Government will have no manner of concern with any of a Maharajah's dependents or servants, with respect to whom the Maharajah is absolute, logic and public opinion have endorsed the principal which Lord Canning set forth in his minute of 1860, that the "Government of India is not precluded from stepping in to set right such serious abuses in a Native Government as may threaten any part of the country with anarchy or disturbance, nor from assuming temporary charge of a Native State when there shall be sufficient reason to do so." Of this necessity the Governor-General in Council is the sole judge

subject to the control of Parliament. Where the law of British India confers jurisdiction over British subjects or other specified persons in foreign territory, that power is exercised by the British courts which possess it. The subjects of European Powers and the United States are on the same footing. Where cantonments exist in an Indian State, jurisdiction both over the cantonment and the civil station is exercised by the suzerain power.

Political Officers.

The powers of the British Government are exercised through Political Officers who, as a rule, reside in the states themselves. In the larger states the Government is represented by a Resident, in groups of states by an Agent to the Governor-General, assisted by local Residents or Political Agents. These Officers form the sole channel of communication between the Indian States and the Government of India and its Foreign Department, with the officials of British India and with other Indian States. They are expected to advise and assist the Ruling Chiefs in any administrative or other matters on which they may be consulted. Political Agents are similarly employed in the larger States under the Provincial Governments but in the petty states scattered over British India the duties of the Agent are usually entrusted to the Collector or Commissioner in whose district they lie. All questions relating to the Indian States are under the special supervision of the Supreme Government, and in the personal charge of the Governor-General.

Closer Partnership.

Events have tended gradually to draw the Paramount Power and the Indian States into closer harmony. Special care has been devoted to the education of the sons of Ruling Chiefs, first by the employment of tutors, and afterwards by the establishment of special colleges for the purpose. These are now established at Ajmere, Rajkot, Indore and Lahore. The Imperial Cadet Corps, whose headquarters are at Dehra Dun, imparts military training to the scions of the ruling chiefs and noble families. The spread of higher education has placed at the disposal of the Indian States the products of the Universities. In these ways there has been a steady rise in the character of the administration of the Indian States, approximating more closely to the British ideal. Most of the Indian States have also come forward to bear their share in the burden of Imperial defence. Following on the spontaneous offer of military assistance when war with Russia appeared to be inevitable over the Penjdeh incident in 1885, the states have raised a portion of their forces up to the standard of the troops in the Indian Army. These were until recently termed Imperial Service Troops; but are now designated Indian State Forces: they belong to the States, they are officered by Indians; but they are inspected by a regular cadre of British officers under the general direction of an Inspector General. Their numbers are approximately 22,000 men; their armament is the same as that of the Indian Army and they have done good service often under their own Chiefs, on the Frontier and in China, in Somaliland and in the Great War. Secure in the knowledge that the Paramount Power will respect their rights and privileges, the Ruling Chiefs have lost the suspicion which was common when their position was less assured, and the visits of the Prince of Wales in 1875, of the Prince and Princess of Wales in 1905-06, and of the King and Queen in 1911-12 have tended to seal the devotion of the great feudatories to the Crown. The improvement in the standard of native rule has also permitted the Government of India largely to reduce the degree of interference in the internal affairs of the Indian States. The new policy was authoritatively laid down by Lord Minto, the then Viceroy, in a speech at Udaipur in 1909, when he said :—

"Our policy is with rare exceptions, one of non-interference in the internal affairs of the Native States. But in guaranteeing their internal independence and in undertaking their protection against external aggression it naturally follows that the Imperial Government has assumed a certain degree of responsibility for the general soundness of their administration and could not consent to incur the reproach of being an indirect instrument of misrule. There are also certain matters in which it is necessary for the Government of India to safeguard the interests of the community as a whole as well as those of the paramount power, such as railways, telegraphs and other services of an Imperial character. But the relationship of the Supreme Government to the State is one of suzerainty. The foundation stone of the whole system is the recognition of identity of interests between the Imperial Government and Durbars and the minimum of interference with the latter in their own affairs."

HYDERABAD.

Hyderabad, the premier Indian State in India, is in the Deccan. Its area is 82,698 square miles and population 13,374,676. The general physical characteristics of the State are an elevated plateau, divided geographically and ethnologically by the Manjra and Godaveri rivers. To the North-West is the Trappean region, peopled by Marathas, a country of black cotton soil producing wheat and cotton. To the South-East is the granatic region of the Telugus and producing rice.

HISTORY.—In pre-historic times Hyderabad came within the great Dravidian zone. The date of the Aryan conquest is obscure, but the dominions of Asoka 272 to 231 B.C. embraced the northern and western portions of the State. Three great Hindu dynasties followed, those of the Pallavas, Chalukyas and Yadavas. In 1294 the irruption of the Mahomedans under Ala-ud-din Khillji commenced, and thenceforward till the time of Aurungzebe the history of the State is a confused story of struggles against

the surviving Hindu kingdom of the South, and after the fall of Vijayanagar, with each other. Aurungzebe stamped out the remains of Mahomedan independence of the South, and set up his General, Asaf Jah, of Turcoman descent, as Viceroy, or Subhadar of the Deccan in 1713. In the chaos which followed the death of Aurungzebe, Asaf Jah had no difficulty in establishing and maintaining his independence, and thus founded the present House. During the struggle between the British and the French for mastery in India, the Nizam finally threw in his lot with the British, and unshaken even by the excitement of the mutiny, has been so staunch to his engagements as to earn that title of "Our Faithful Ally". The present ruler is His Exalted Highness Sir Usman Ali Khan Bahadur Fateh Jung, G.C.S.I.

THE BERARS.—A most important event in the history of the State occurred in November 1902, when the Assigned Districts of Berar were leased in perpetuity to the British Government. These districts had been administered by the British Government on behalf of the Nizam since 1853 ; under the treaties of 1853 and 1860, they were "assigned" without limit of time to the British Government to provide for the maintenance of the Hyderabad contingent, a body of troops kept by the British Government for the Nizam's use, the surplus revenue, if any, being payable to the Nizam. In course of time it had become apparent that the maintenance of the Hyderabad contingent on its old footing as a separate force was inexpedient and unnecessary, and that similarly the administration of Berar as a separate unit was very costly, while from the point of view of the Nizam the precarious and fluctuating nature of the surplus was financially inconvenient. The agreement of 1902 re-affirmed His Highness' sovereignty over Berar, which instead of being indefinitely "assigned" to the Government of India, was leased in perpetuity to an annual rental of 25 lakhs (nearly £167,000) ; the rental is for the present charged with an annual debit towards the repayment of loans made by the Government of India. The Government of India were at the same time authorised to administer Berar in such manner as they might think desirable, and to redistribute, reduce, re-organise and control the Hyderabad Contingent, due provision being made as stipulated in the treaty of 1853, for the protection of His Highness' dominions. In accordance with this agreement the Contingent ceased in March 1903 to be a separate force and was re-organised and redistributed as an integral part of the Indian Army, and in October 1903 Berar was transferred to the administration of the Chief Commissioner of the Central Provinces.

ADMINISTRATION.—The Nizam is supreme in the State and exercises the power of life and death over his subjects. The form of government was changed in 1919, an Executive Council being established which consists of seven ordinary and one extraordinary members under a president Sir Syed Ali Iman, K.C.S.I. Below the Secretariat the State is divided into Subhas or Divisions, Districts and Talukas. Fifteen Districts, 88 Taluk and nine Divisional Boards are at work in the District. A Legislative Council, consisting of 23 members, of whom 12 are official and 11 non-official, is responsible for making laws. The State maintains its own currency, the Osmania Sicca rupee with a subordinate coinage. In 1904 an improved Mahbubia rupee was struck and this exchanges with the British rupee at the ratio of 115 or 116 to 100. It has its own postal system and stamps for internal purpose. It maintains its own Army, comprising 16,269 troops, of which 3,753 are classed as Regular and 11,242 as Irregular. There are in addition 1,274 Imperial Service Troops.

FINANCE.—After many vicissitudes, the financial position of the State is strong. For the year 1918-19 receipts amounted to Rs. 583 lakhs and expenditure to Rs. 601 lakhs.

PRODUCTION AND INDUSTRY.—The principal industry of the State is agriculture, which maintains 57·1 per cent. of the population. The common system of land tenure is ryotwari. As no reliable figures are available to show the gross produce it is impossible to say what proportion the land revenue bears to it, but it is collected without difficulty. The principal food crops are millet and rice ; the staple money crops cotton, which is grown extensively on the black cotton soils, and oil-seeds. The State is rich in minerals. The great Warangal coal measures are worked at Singareni, but the efforts to revive the historic gold and diamond mines have met with very qualified success. The manufacturing industries are consequent on the growth of cotton, and comprise three spinning and weaving mills and ginning and pressing factories in the cotton tracts.

COMMUNICATIONS.—One hundred and thirty-seven miles of the broad gauge line from Bombay to Madras traverse the State. At Wadi, on this section, the broad gauge system of the Nizam's Guaranteed State Railway takes off, running East to Warangal and South-East toward Bezwada, a total length of 330 miles. From Hyderabad the metre gauge Godavari Railway runs North-West to Manmad on the Great Indian Peninsula Company's system 391 miles. There are thus 471 miles of broad gauge and 391 of metre in the State. The Barsi Light Railway owns a short extension to Latur. The roads are generally inferior.

EDUCATION.—The Osmania University at Hyderabad imparts instruction in all the faculties through the medium of Urdu, English being taught as a compulsory language. The Nizam College at Hyderabad (first grade) is, however, affiliated to the Madras University. In 1921-22 the total number of Educational institutions rose from 3,556 (1918-19) to 4,365, the number of Primary schools in particular having been largely increased.

British Resident—Mr. C. L. S. Russell, I.C.S.

MYSORE.

The State of Mysore is surrounded on all sides by the Madras Presidency except on the north and north-west where it is bounded by the districts of Dharwar and North Canara respectively and towards the south-west by Coorg. It is naturally divided into two regions of dis-

tinct character; the hill country (the Malnad) on the west and the wide-spreading valleys and plains (the Maidan) on the east. The State has an area of 29,469 square miles excluding that of the Civil and Military Station of Bangalore and a population of 5,978,892, of whom over 92 per cent. are Hindus. Kannada is the distinctive language of the State.

HISTORY.—The ancient history of the country is varied and interesting. Tradition connects the tableland of Mysore with many a legend enshrined in the great Indian epics, the Ramayana and the Mahabharata. Coming down to historical times, the north-eastern portion of the country formed part of Asoka's Empire in the third century B. C. Mysore then came under the rule of the Andhra dynasty. From about the third to the eleventh century A. D. Mysore was ruled by three dynasties, the north-western portion by the Kadambas, the eastern and northern portions by the Pallavas and the central and southern portions by the Gangas. In the eleventh century, Mysore formed part of the Chola dominion, but the Cholas were driven out early in the twelfth century by the Hoysalas, an indigenous dynasty with its capital at Halebid. The Hoysala power came to an end in the early part of the fourteenth century. Mysore was next connected with the Vijayanagar Empire. At the end of the fourteenth century, Mysore became associated with the present ruling dynasty. At first tributary to the dominant empire of Vijayanagar, the dynasty attained its independence after the downfall of Vijayanagar in 1565. In the latter part of the eighteenth century the real sovereignty passed into the hands of Haidar Ali and then his son Tippu Sultan. In 1799, on the fall of Seringapatam, the British Government restored the State comprised within its present limits, to the ancient dynasty in the person of Maharaja Sri Krishnaraja Wadiyar Bahadur III. Owing to the insurrections that broke out in some parts of the country, the management was assumed by the British Government in 1831. In 1881, the State was restored to the dynasty in the person of Sri Chamarajendra Wadiyar Bahadur under conditions and stipulations laid down in the Instrument of Transfer. That ruler with the assistance of Mr. (afterwards Sir) K. Seshadri Iyer, K.C.S.I., as Dewan, brought Mysore to a state of great prosperity. He died in 1894 and was succeeded by the present Maharaja Sir Sri Krishnarajendra Wadiyar Bahadur, G.C.S.I., G.C.I.E., who was installed in 1902. In November 1913, the Instrument of Transfer was replaced by a Treaty, which indicates more appropriately the relation subsisting between the British Government and the State of Mysore.

ADMINISTRATION.—The city of Mysore is the capital of the State, but Bangalore City is the administrative headquarters. His Highness the Maharaja is the ultimate authority in the State and the administration is conducted under his control, by the Dewan and Members of Council including the Extraordinary Member. The Chief Court consisting of three Judges is the highest judicial tribunal in the State. A Representative Assembly meets twice a year at Mysore—once in October during the Dasara and a second time on the occasion of the birthday of His Highness. In the October Sessions the Dewan presents to the Assembly an account of the Finances of the State of the preceding official year and deals also with the more important administrative measures. Representations about wants and grievances are heard and discussed. In the Birthday Session the Budget for the ensuing year is placed before the Assembly and its opinion invited. Such of the representations of the October Session as were not heard for want of time are taken up and discussed along with the fresh subjects brought up. There is also a Legislative Council consisting of 30 members, of whom 12 are officials, and 18 non-officials, thirteen elected and five nominated. The Council has been given the privileges of interpellation, discussion of the State budget and the moving of resolutions on matters other than the budget.

His Highness the Maharaja has recently announced the grant of a liberal measure of Constitutional Reforms under which both the Representative Assembly and the Legislative Council are to be strengthened and made more representative of the interests of the people with enlarged powers.

All the important branches of the administration are controlled by separate heads of departments. The strength of the military force at the end of 1921-22 was 2,805, of which 483 were in the Mysore Lancers, 384 in the Mysore Horse, 262 in the Transport Corps, and the remaining 1,676 in the Infantry. The total annual cost is about Rs. 12½ lakhs. The cost of the Police Administration during the same period was about Rs. 16 lakhs.

FINANCES.—The actual total receipts and disbursements charged to Revenue for the past five years together with the revised budget estimate for 1922-23 and budget for 1923-24 were as below :—

Year.	Receipts.	Disbursements.	Surplus.	Deficit.
	Rs.	Rs.	Rs.	Rs.
1919-20	3,13,12,256	3,12,97,693	+ 14,563	
1920-21	3,13,12,665	3,27,85,460		— 14,72,795
1921-22	3,12,05,389	3,27,45,479		— 15,40,090
1922-23	3,31,90,000	3,36,23,000		— 41,33,000
1923-24 .. .. (Draft Budget.)	3,31,01,000	3,29,91,000	+ 1,10,000	

ECONOMIC CONFERENCE.—The Mysore Economic Conference was organised in June 1911 with the object of creating and keeping alive public interest in matters connected with the economic progress of the State by a frequent interchange of views and discussions among those competent to deal with them and in order to associate men of enlightenment, public spirited citizens, prominent agriculturists, merchants and others with the officers of Government in such deliberations. The Conference meets annually at Mysore during the festivities in connection with His Highness the Maharaja's birthday. The Dewan is the President of the Conference. It has four Boards dealing with questions connected with Agriculture, Education, Industries and Commerce and Chemical research and scientific advance and Committees for developing economic activities in local areas, such as districts, talukas and towns. Bulletins on important subjects are periodically issued.

The economic work in the districts has been handed over to District Boards. The work in the Taluks has been delegated to Taluk Boards and in the villages to Village Panchayats.

AGRICULTURE.—Nearly three-fourths of the population are employed in agriculture and the general system of land tenure is Ryotwari. The principal food crops are ragi, rice, jola, millets, gram and sugarcane and the chief fibres are cotton and san-hemp. Nearly 45,000 acres are under mulberry, the silk industry being the most profitable in Mysore next to gold mining. A Superintendent of Sericulture has been appointed and the Sericultural Department affiliated to the Agricultural Department. Arrangements are being made for the supply of disease-free seed and a central and 5 Taluka Popular Schools have been doing good work. The Department of Agriculture is popularising agriculture on scientific lines by means of demonstrations, investigations and experiments. There is one Central Farm at Hebbal to deal with all classes of crops and two others, one at Hiriyur in connection with cotton and crops suited to localities where the rainfall is light and the other at Marathur in the region of heavy rainfall. A Sugarcane Farm has been opened under the new Krishnarajasagara Works and Committees have been constituted in several districts for the development of the sugarcane cultivation. A live stock expert has been appointed to consider measures regarding the encouragement of cattle-breeding and to improve the general live stock.

INDUSTRIES AND COMMERCE.—A Department of Industries and Commerce was organised in 1913 with a view to the development of Industries and Commerce in the State. Its main functions are stimulating private enterprise by the offer of technical advice and other assistance for starting new industries, undertaking experimental work for pioneering industries and developing existing industries and serving as a general bureau of information in industrial and commercial matters. The sandalwood oil factory started on an experimental basis is now working on a commercial scale. A factory is working at Bangalore. A large plant at a cost of more than 170 lakhs of rupees has been constructed at Bhadravati for purposes of manufacturing charcoal, pig iron, distilling wood alcohol, and developing subsidiary industries. The works are on the borders of an extensive forest area and practically at the foot of hills containing rich deposits of iron, manganese and bauxite, and are not far from the Gersoppa water-falls estimated to be capable of producing 100,000 horse-power of electric energy. The Soap Factory is run by Government on a commercial scale. The metal factory has been handed over to a syndicate of private capitalists. An arts and crafts depot has been opened to give special encouragement for inlay workers, sandalwood carvers and to those engaged in preparing high class silk, lace cloths and metal works. The Chamber of Commerce has been established at Bangalore with Branches at important trade centres with a separate division for dealing solely with questions relating to commercial developments in the State.

BANKING.—In 1913, a State-aided bank called the Bank of Mysore was started with its headquarters in Bangalore and agencies at many of the important places in the State. It has an authorised capital of Rs. 20 lakhs which has been fully paid up. The Bank was organised with the aid of Government, and many items of Government work are entrusted to it. Besides this, there are two Provincial Co-operative Banks, 6 District Banks, 9 Federal Banking Unions and 1,522 Co-operative Societies working with a capital of Rs. 81,97,280. There were 108 Joint Stock Companies at work on 31st March 1923 with the total authorised, subscribed and paid-up capital of Rs.8,30,60,100, Rs. 2,18,04,200 and Rs. 1,44,54,700 respectively.

COMMUNICATIONS.—Much has been done in recent years to improve and extend the means of communication. Bangalore is the central point from which radiate various branches of the Mysore and M. & S. M. Railway running through the State. Besides the Tarikere-Narasimharajapura Tramway with a length of 26.60 miles owned and worked by the State, the total length of open lines of railways in the State is about 688.99 miles of which, about 60 miles are broad gauge, 102.95 miles narrow-gauge, and the rest metre gauge. Of the total number of 688.99 miles, 366.63 miles are worked directly by the State. The surveys of some more new lines are complete, and estimates and reports relating thereto are under preparation. State roads of the length of 2,045 miles were maintained during 1921-22, of which 1911 miles were metalled roads. The cost of maintenance amounted roughly to Rs. 7 lakhs.

EDUCATION.—A separate University for Mysore was established on the 1st July 1916. It is of the teaching and residential type composed of the Central and Engineering Colleges at Bangalore, and the Maharaja's College at Mysore, with headquarters at Mysore. An important feature is that the University course is one of three years, what corresponds to the first year in other Universities being in the Collegiate High School which specially trains students for one year to fit them for the University Course. The colleges are efficiently equipped and organised and there is a training college for men located at Mysore. There is also a College for women at Mysore, *i.e.*, the Maharani's College.

With the introduction of compulsory education in select towns and the increase in the number of village schools, primary education has during recent years made considerable advance. Schools have been started for imparting instruction in agricultural, commercial, engineering and other technical subjects. There were altogether in 1920-21, 9,698 public and 782 private educational institutions in the State. This gives one school to every 2·8 square miles of the area and to every 543 inhabitants.

PLACES OF INTEREST.—Mysore City, the capital, is a modern city laid out with fine roads and suburbs. The prominent buildings are the Palace, the Krishnaraja Hospital, the Chamarajendra Technical Institute, Government House, the Maharaja's College, the Maharani's College and the University Library.

Bangalore, the largest city in the State and the commercial and manufacturing centre, stands on a table land, 3,000 feet above the sea and is noted for its salubrious climate and luxuriant gardens. The principal places of interest are the Public Offices, the Central College buildings, the Museum, the Lal Bagh, the Indian Institute of Science and the Indian Sanskrit Institute.

The historic town of Seringapatam, the famous Jog Falls, the Kolar Gold Fields, the Sivasamudram Falls, and Belur, Somnathpur and Halebid with their temples of exquisite architecture, are some of the other important places of interest in the State.

Resident in Mysore and Chief Commissioner of Coorg.—The Hon. W. P. Barton, C.S.I., C.I.E., I.C.S.

Dewan.—Albion Rajkumar Banerji, Esq., M.A., C.S.I., C.I.E.

Extraordinary Member of Council.—H. H. Sir Sri Kantirava Narasimharaja Wadiyar Bahadur, G.C.I.E.

Members of the Executive Council.—Mir Hamza Hussein, Esq., B.A., B.L., & K. R. Srinivasa Iyengar, Esq., M.A.

BARODA.

The State of Baroda is situated partly in Gujarat and partly in Kathiawar. It is divided into four district blocks: (1) the southern district of Navsari near the mouth of the Tapti river, and mostly surrounded by British territory; (2) central district, North of the Narbada, in which lies Baroda, the capital city; (3) to the North of Ahmedabad, the district of Kadi; and (4) to the West, in the Peninsula of Kathiawar, the district of Amreli, formed of scattered tracts of land. The area of the State is 8,135 square miles; the population is 2,126,522 of whom over four-fifths are Hindus.

HISTORY.—The history of the Baroda State as such dates from the break-up of the Mughal Empire. The first Maratha invasion of Gujarat took place in 1705. In later expeditions Pilaji Gaikwar, who may be considered as the founder of the present ruling family, greatly distinguished himself. Songhad was the headquarters till 1766. After 1723 Pilaji regularly levied tribute in Gujarat. His son Damaji finally captured Baroda in 1734, since then it has always been in the hands of the Gaikwars; but Mughal authority in Gujarat did not end until the fall of Ahmedabad in 1753, after which the country was divided between the Gaikwar and the Peshwa. In spite of the fact that Damaji was one of the Maratha chiefs defeated at Panipat by Ahmed Shah, he continued to add to his territory. He died in 1768, leaving the succession in dispute between two rival sons. He was succeeded in turn by his sons Sayaji Rao I. Fattesing Rao, Manaji Rao and Govind Rao. The last died in 1800, and was succeeded by Anand Rao. A period of political instability ensued which was ended in 1802 by the help of the Bombay Government, who established the authority of Anand Rao at Baroda. By a treaty of 1805 between the British Government and Baroda, it was arranged *inter alia* that the foreign policy of the State should be conducted by the British, and that all differences with the Peshwa should be similarly arranged. Baroda was a staunch ally of the British during the wars with Baji Rao Peshwa, the Pindari hordes and Holkar. But from 1820 to 1841, when Sayaji Rao II. was Gaikwar, differences arose between the two Governments, which were settled by Sir James Carnac, Governor of Bombay in 1841. Ganpat Rao succeeded Sayaji Rao in 1847. During his rule, the political supervision of Baroda was transferred to the Supreme Government. His successor Khande Rao, who ascended the *Gadi* in 1856, introduced many reforms. He stood by the British in the Mutiny. He was succeeded by his brother Malhar Rao in 1870. Malhar Rao was deposed in 1875 for "notorious misconduct" and "gross misgovernment," but the suggestion that he had instigated the attempt to poison Col. Phayre, the Resident, was not proved. Sayaji Rao III., a boy of 13 years of age, who was descended from a distant branch of the family, was adopted as heir of Khande Rao in 1875 and is the present Gaikwar. He was invested with full powers in 1881.

ADMINISTRATION.—An executive council, consisting of the principal officers of the State, carries on the administration, subject to the control of the Maharaja, who is assisted by a Dewan and other officers. A number of departments have been formed, which are presided over by officials corresponding to those in British India. The State is divided into four *prants* each of which is sub-divided into *Mahals* and *Peta Mahals* of which there are in all 42. Attempts have for some years been made to restore village autonomy, and village panchayats have been formed which form part of a scheme for local self-government. There is a Legislative Department, under a Legal Remembrancer, which is responsible for making laws. There is also a Legislative Council, consisting of nominated and elected members. A High Court at Baroda possesses jurisdiction over the whole of the State and hears all final appeals. From the decisions of the High Court, appeals lie in certain cases, to the Maharaja, who decides them on the advice of the Huzur Nyaya Sabha. The State Army consists of 5,086 Regular forces and 3,806 Irregular forces.

FINANCE—In 1921-22, the total receipts of the State were Rs. 2,12 lakhs and the disbursements Rs. 2,04 lakhs. The principal Revenue

heads were:—Land Revenue, Rs. 1·15 crores; Abkari, Rs. 29 lakhs; Opium, Rs. 5·75 lakhs; Railways, Rs. 7·38 lakhs; Interest Rs. 11 lakhs; Tribute from other States, Rs. 8 lakhs. British Currency was introduced in 1901.

PRODUCTION AND INDUSTRY.—Agriculture and pasture support 63 per cent. of the people. The principal crops are rice, wheat, gram, castor-oil, rapeseed, poppy, cotton, san-hemp, tobacco, sugarcane, maize, and garden crops. The greater part of the State is held on *ryotwari* tenure. The State contains few minerals, except sandstone, which is quarried at Songar, and a variety of other stones which are little worked. There are 93 industrial or commercial concerns in the State registered under the State Companies' Act. There are four Agricultural Banks and 539 Co-operative Societies in the Baroda State.

COMMUNICATIONS.—The B. B. & C. I. Railway crosses part of the Navsari and Baroda *prants*, and the Rajputana-Malwa Railway passes through the Kadi *prant*. A system of branch lines has been built by the Baroda Durbar in all the four *prants*, in addition to which the Tapti Valley Railway and the Baroda-Godhra Chord line (B. B. & C. I.) pass through the State. The Railways constructed by the State are about 652 miles in length. Good roads are not numerous.

EDUCATION.—The Education Department controls 2,814 institutions of different kinds, in 66 of which English is taught. The Baroda College is affiliated to the Bombay University. There are a number of high schools, technical schools, and schools for special classes, such as the jungle tribes and unclean castes. The State is "in a way pledged to the policy of free and compulsory primary education." It maintains a system of rural and travelling libraries. Ten per cent. of the population is returned in the census as literate. Total expense on Education is about Rs. 29 lakhs.

CAPITAL CITY.—Baroda City with the cantonment has a population of 94,712. It contains a public park, a number of fine public buildings, palaces and offices; and it is crowded with Hindu temples. The cantonment is to the north-west of the city and is garrisoned by an infantry battalion of the Indian Army. An Improvement Trust has been formed to work in Baroda City and has set itself an ambitious programme.

RULER.—His Highness Farzand-i-Khas-i-Dowlat-i-Englishia Maharaja Sir Sayaji Rao Gackwar Sena Khas Khel, Samsher Bahadur, G.C.S.I., G.C.I.E., Maharaja of Baroda.

Resident.—E. H. Kealy, I.C.S.

Dewan.—Sir Manubhai N. Mehta, Kt., C.S.I.

BALUCHISTAN AGENCY.

In this Agency are included the Indian States of Kalat, Kharan and Las Bela. The Khan of Kalat is head of the Baluchistan tribal chiefs whose territories are comprised under the following divisions:—Jhalawan, Sarawan, Makran, Kachi and Domki-Kaheri-Umrani. These districts form what may be termed Kalati Baluchistan, and occupy an area of 54,713 square miles. The inhabitants of the country are either Brahuis or Baluchis, both being Mahomedans of the Suni sect. The country is sparsely populated, the total number being about 300,543. It derives its chief importance from its position with regard to Afghanistan on the north-western frontier of British India. The relations of Kalat with the British Government are governed by two treaties of 1854 and 1876, by the latter of which the Khan agreed to act in subordinate co-operation with the British Government. There are, however, agreements with Kalat in connection with the construction of the Indo-European telegraph, the cession of jurisdiction on the railways and in the Bolan Pas, and the permanent leases of Quetta, Nushki and Nasirabad. The Khan is assisted in the administration of the State by a Wazir-i-Azam at present a retired officer from the British service. The Governor-General's Agent in Baluchistan conducts the relations between the Government of India and the Khan, and exercises his general political supervision over the district. The revenue of the State is about Rs. 14,42,000. The present Khan is His Highness Beglar Begi Mir Sir Mahmud Khan of Kalat, G.C.I.E. He was born in 1864.

Kharan extends in a westerly and south-westerly direction from near Nushki and Kalat to the Persian border. Its area is 18,565 square miles; it has a population of 27,738 and an annual average revenue of about Rs. 1,00,000.

The present Chief, Sardar Bahadur Sardar Nawab Habibullah Khan, was born about 1897 and succeeded his father Sardar Yakub Khan in 1911, when the latter was murdered by his uncle Amir Khan. The State is divided into 13 Niabats and the whole sources of income are chiefly agricultural.

Las Bela is a small State occupying the valley and delta of the Purali river, about 50 miles west of the Sind boundary. Area 7,132 square miles; population 50,696, chiefly Sunni Mahomedans, estimated average revenue about Rs. 3,49,000. The Chief of Las Bela, known as the Jam, is bound by agreement with the British Government to conduct the administration of his State in accordance with the advice of the Governor-General's Agent. This control is exercised through the Political Agent in Kalat. The Jam also employs an approved Wazir, to whose advice he is subject and who generally assists him in the transaction of State business.

Agent to the Governor-General for Baluchistan:—Hon. Mr. F. W. Johnston, C.S.I., C.I.E., I.C.S.

RAJPUTANA AGENCY.

Rajputana is the name of a great territorial circle with a total area of about 130,462 square miles, which includes 18 Indian States, two chiefships, and the small British province of Ajmer-Merwara. It is bounded on the west by Sind, on the north-west by the Punjab State of Bahawalpur, on the north and north-east by the Punjab, on the east by the United Provinces and Gwalior, while the southern boundary runs across the central region of India in an irregular zigzag line. Of the Indian States 17 are Rajput, 2 (Bharatpur and Dholpur) are Jat, and one (Tonk) is Mahomedan. The Chief administrative control of the British district is vested *ex-officio* in the political officer, who holds the post of Governor-General's Agent for the supervision of the relations between the several Native States of Rajputana and the Government of India. For administrative purposes they are divided into the following groups:—Bikaner, Sirohi and Jhalawar in direct relation with the Agent to the Governor-General; Eastern Rajputana and Alwar Agency, 3 States (Bharatpur, Dholpur, Karauli); Haraoti and Tonk Agency, 2 States (Bundi and Tonk) and Chiefship of Shahpura; Jaipur Residency, 3 States (principal State, Jaipur); Kotah Agency, 1 State; Mewar Residency; Southern Rajputana States Agency, 3 States (principal State Banswara) Jaisalmer and Kushalgarh Chiefship; Western Rajputana States Agency, 2 States (principal State, Marwar).

The Aravalli Hills intersect the country almost from end to end. The tract to the north-west of the hills is, as a whole, sandy, ill-watered and unproductive, but improves gradually from being a mere desert in the far west to comparatively fertile lands to the north-east. To the south-east on the Aravalli Hills lie higher and more fertile regions which contain extensive hill ranges and which are traversed by considerable rivers.

COMMUNICATIONS.—The total length of railways in Rajputana is 1,576 miles, of which 739 are the property of the British Government. The Rajputana-Malwa (Government) runs from Ahmedabad to Bandikui and from there branches to Agra and Delhi. Of the Native State railways the most important is the Jodhpur-Bikaner line from Marwar Junction to Hyderabad (Sind) and to Bikaner.

INHABITANTS.—Over 50 per cent. of the population are engaged in some form of agriculture; about 20 per cent. of the total population are maintained by the preparation and supply of material substances; personal and domestic service provides employment for about 5 per cent. and commerce for 2¼ per cent. of the population. The principal language is Rajasthani. Among castes and tribes, the most numerous are the Brahmans, Jats, Mahajans, Chamars, Rajputs, Minas, Gujars, Bhils, Malis and Balais. The Rajputs are, of course, the aristocracy of the country, and as such hold the land to a very large extent, either as receivers of rent or as cultivators. By reason of their position as integral families of pure descent, as a landed nobility, and as the kinsmen of ruling chiefs, they are also the aristocracy of India; and their social prestige may be measured by observing that there is hardly a tribe or clan (as distinguished from a caste) in India which does not claim descent from, or irregular connection with, one of these Rajput stocks.

The population and area of the States are as follows:—

Name of State.	Area in square miles.	Population in 1911.
In direct Political relation with A. G. G.—		
Bikaner	23,311	7,00,983
Sirohi	1,964	1,89,127
Jhalawar	810	96,271
Mewar Residency—		
Udaipur	12,953	1,293,776
Banswara	1,946	165,463
Dungarpur	1,447	159,192
Partabgarh	886	62,704
Western State Residency—		
Jodhpur	34,963	2,057,553
Jaisalmer	16,062	88,311
Jaipur Residency—		
Jaipur	15,579	2,636,674
Kishangarh	858	87,191
Lawa	19	2,564
Haraoti-Tonk Agency—		
Bundi	2,220	218,730
Tonk	1,114	303,181
Shahpura	405	47,397
Eastern States Agency—		
Bharatpur	1,982	626,665
Dholpur	1,155	270,973
Karauli	1,242	156,786
Alwar	3,141	791,688
Kotah-Jhalawar Agency—		
Kotah	5,684	639,089

Udaipur State (also called Mewar) was founded in about 646 A.D. The capital city is Udaipur, which is beautifully situated on the slope of a low ridge, the summit of which is crowned by His Highness the Maharana's palaces, and to the north and west, houses extend to the banks of a beautiful piece of water known as the Pichola Lake in the middle of which stand two island palaces. It is situated near the terminus of the Udaipur-Chitor Railway, 697 miles north of Bombay. The present ruler is His Highness Maharajadhiraj Maharana Sir Fateh Singhji Bahadur, G.C.S.I., G.C.I.E., G.C.V.O., who was born in 1849 and succeeded in 1884. He is the head of the Seesodia Rajputs and is the Premier Chief. The administration is carried on by the Maharana, assisted by Shriman Maharaj Kumar Sir Bhopal Singhji Bahadur, K.C.I.E., and two ministerial officers. The

revenue and expenditure of the State are now about 45 and 43 lakhs a year respectively. Udaipur is rich in minerals which are little worked. Its archæological remains are numerous, and stone inscriptions dating from the third century have been found.

Banswara State, the southernmost in Rajputana, became a separate State about 1527. In 1812 the Maharawal offered to become tributary to the British Government but no definite relations were formed with them till the end of 1818. The present ruler is His Highness Rai Rayan Maharawal Sahib Shree Pirthi Singhji Bahadur, who was born in 1888 and succeeded his father in 1913. The normal revenue is about 8 lakhs and the normal expenditure nearly equal to the same. The area of the State is 1,946 square miles, and the population 219,824, including Patta Kushalgarh. His Highness is entitled to a salute of 15 guns.

Dongarpur State, with Banswara, formerly comprised the country called the Bagar. It was invaded by the Mahrattas in 1818. As in other States inhabited by hill tribes, it became necessary at an early period of British supremacy to employ a military force to coerce the Bhils. The State represents the *Gadi* of the eldest branch of the Sisodiyas and dates its separate existence from about the close of the 12th Century. Samant Singh, King of Chitor, when driven away by Kartipal of Jalor, fled to Bagad and killed Chowrasimal, Chief of Baroda, and founded the State of Dungarpur. The present Chief is His Highness Rai Rayan Maharawal Shri Lakshman Singhji born on 7th March 1908 and succeeded on 15th November 1918. His Highness being minor, the administration is carried on by the Executive Council of the State under the supervision of the Political Agent, Southern Rajputana States. No railway line crosses the territory, the nearest railway station, Udaipur, being 65 miles distant. Revenue a little above 5 lakhs.

Partabgarh State, also called the Kanthal, was founded in the sixteenth century by a descendant of Rana Mokal of Mewar. The town of Partabgarh was founded in 1698 by Partab Singh. In the time of Jaswant Singh (1775-1844), the country was overrun by the Marathas, and the Maharawat only saved his State by agreeing to pay Holkar a tribute of *Salim Shahi* Rs. 72,700 (which then being coined in the State Mint was legal tender throughout the surrounding Native States), in lieu of Rs. 15,000 formerly paid to Delhi. The first connexion of the State with the British Government was formed in 1804; but the treaty then entered into was subsequently cancelled by Lord Cornwallis, and a fresh treaty by which the State was taken under protection was made in 1818. The tribute to Holkar is paid through the British Government, and in 1904 was converted to Rs. 36,350 British currency. The present ruler is His Highness Maharawat Sir Raghunath Singh Bahadur, K.C.I.E., who was born in 1859 and succeeded in 1890. The State is governed by the Maharawat with the help of the Dewan, and, in judicial matters, of a Committee of eleven members styled the Raj Sabha or State Council. Revenue about 6 lakhs; expenditure nearly 5 lakhs. The financial administration is under the direct supervision of the State.

Jodhpur State, the largest in Rajputana also called Marwar, consists largely of sandy country. The Maharaja of Jodhpur is the head of the Rathor Clan of Rajputs and claims descent from Rama, the deified king of Ayodhya. The earliest known king of the clan lived in the sixth century from which time onwards their history is fairly clear. After the breaking up of their Kingdom at Kanauj they founded this State about 1212 and the foundations of Jodhpur City were laid in 1459 by Rab Jodha. The State entered into a treaty of alliance with the British Govt. in 1818. Jaswant Singh succeeded in 1873 and reformed the State. His son Sardar Singh was invested with powers in 1898, the minority rule having been carried on by his uncle Maharaja Sir Pratab Singh. He died in 1911 and was succeeded by his eldest son Maharaja Sumer Singh Bahadur, who was then 14 years of age. The administration of the State was carried on by a Council of Regency, presided over by General Maharaja Sir Pratab Singh. On the outbreak of the European War both the Maharaja and the Regent offered their services and were allowed to proceed to the Front. The young Maharaja was, for his services at the Front, honoured with an Honorary Majority in the British Army and K.B.E. and was invested with full ruling powers in 1916 and died on 3rd October 1918. He was succeeded by his younger brother Maharaja Sir Umed Singhji Saheb Bahadur, K.C.V.O., who, on attaining majority, has taken over charge of the administration from the 27th January 1923. Revenue Rs. 1,20,31,738; expenditure Rs. 100 lakhs.

Jaisalmer State is one of the largest States in Rajputana and covers an area of 16,062 square miles. The Rulers of Jaisalmer belong to the Jadon clan and are the direct descendants of Krishna. Jaisalmer City was founded in 1156, and the State entered into an alliance of perpetual friendship with the British Government in 1818. In 1844 after the British conquest of Sind the forts of Shahgarh, Garsia and Ghotaru, which had formerly belonged to Jaisalmer, were restored to the State. The present Ruling Prince is His Highness Maharajadhiraja Maharawal Shri Sir Jawahar Singhji Bahadur, K.C.S.I. Revenue about four lakhs.

Sirohi State is much broken up by hills of which the main feature is Mount Abu, 5,650 feet. The Chiefs of Sirohi are Deora Rajputs, a branch of the famous Chauhan clan which furnished the last Hindu kings of Delhi. The present capital of Sirohi was built in 1425. The city suffered in the eighteenth century from the wars with Jodhpur and the depredations of wild Mina tribes. Jodhpur claimed suzerainty over Sirohi but this was disallowed and British protection was granted in 1823. The present ruler is His Highness Maharajadhiraj Maharao Shri Sarup Ram Singh Bahadur. The State is ruled by the Maharao with the assistance of Ministers and other officials. Revenue about 9¼ lakhs; expenditure 9 lakhs.

Jaipur State is the fourth largest in Rajputana. It consists, for the most part, of level and open country. The Maharaja of Jaipur is the head of the Kachwaha clan of Rajputs

which claims descent from Kusa, the son of Rama, king of Ayodhya, and the hero of the famous epic poem, the Ramayana. The dynasty in Eastern Rajputana dates from about the middle of the twelfth century, when Amber was made the capital of a small State. The Chiefs of that State acquired fame as generals under the Mughals in later centuries, one of the best known being Sawai Jai Singh in the eighteenth century who was remarkable as a great mathematician and for his scientific knowledge. It was he who moved the capital from Amber and built the present city of Jaipur and elevated the State above the principalities around. On his death a part of the State was annexed by the Jats of Bharatpur and internal disputes brought Jaipur to great confusion. British protection was extended to Jaipur in 1818, but the State continued to be disturbed and a Council of Regency was appointed, which governed up to 1851, when Maharaja Sawai Ramsingh assumed full powers. He nominated as his successor K. Kaim Singh of Isarda who succeeded in 1880, under the name of Sawai Madho Singh II, and died in 1922. He was born in 1861, and, in consideration of his youth, the administration was at first conducted by a Council under the joint presidency of the Maharaja and the Political Agent. He was invested with full powers in 1882. In 1887, his salute was raised from 17 to 19 guns as a personal distinction, followed in 1896 by two additional guns. In 1888 he was created a G.C.S.I. In 1901 a G.C.I.E., and in 1903 a G.C.V.O. In 1904 he was made honorary colonel of the 13th Rajputs, and in 1911 a Major-General and Lieutenant-General in 1921. In 1908 he was presented with the Honorary degree of LL.D. of Edinburgh University and in 1912 made a Donat of the Order of the Hospital of St. John of Jerusalem. He was made a G.B.E. in 1918. Jaipur City is the largest town in Rajputana and is one of the few eastern cities laid out on a regular plan. It contains in addition to the Maharaja's palace many fine buildings. The administration of the State was carried on by the Maharaja assisted by a Council of 10 Members. The Military force consists of about 5,000 infantry, 700 cavalry and 860 artillery men. The normal revenue is about 65 lakhs; expenditure about 59 lakhs. Among important events of His Highness's rule may be mentioned the raising of the Imperial Service Transport Corps in 1889-90; the construction of numerous irrigation works, hospitals and dispensaries. When the Great European War broke out the Government of India remembering the excellent past services of the Corps in the Frontier Expeditions of Chitral (1895-96) and Tirah (1897-98) requested the Durbar to send the Corps to Mesopotamia. Accordingly on the 3rd November 1914, the Corps consisting of 524 officers and men, 826 ponies and 360 carts proceeded on active service. Their services were often mentioned in despatches of the General Officers Commanding Mesopotamia Expeditionary Forces and published in the London and India Gazettes.

As soon as the Corps returned from Mesopotamia in May, 1919, its services were readily offered by the Durbar at the outbreak of hostilities with Afghanistan and it was mobilised for services with the North-West Frontier Force. The Corps fully maintained its former tradition and returned to depot on 19th January 1920.

Including His Highness the late Maharaja's endowment of Rs. 25 lakhs to Indian People's Famine Trust Fund, His Highness contributed no less than 48 lakhs of rupees to different funds and charitable institutions not only in India but in England. Besides the above gift His Highness contributed about 26 lakhs of rupees towards the expenses of the War, including a sum of Rs. 7,25,250 towards the maintenance of the Jaipur Transport Corps on active service.

During the Great War His Highness subscribed to the Indian War Loan in bonds of the total value of 25 lakhs of rupees.

In the State itself His Highness during his reign of nearly 41 years spent 1 crore and 72 lacs of rupees on works of public utility such as roads, irrigation works, railways and famine relief. When H. I. M. Queen Empress Mary visited Jaipur in 1911 His Highness granted to his subjects a remission of back rents amounting to 50 lakhs of rupees.

His Highness the present Maharaja Sawai Mansingh II Bahadur was born on 21st August 1911. He is a scion of the Rajawat family of Isarda. He was adopted by His late Highness on 24th March 1921 and ascended the *gadi* on the demise of His late Highness on the 7th September, 1922.

Kishangarh State is in the centre of Rajputana and consists practically of two narrow strips of land separated from each other with an area of 858 square miles (population 77,806), the northern mostly sandy, the southern generally flat and fertile. The Ruling Princes of Kishangarh belong to the Rathor clan of Rajputs and are descended from Maharaja Kishan Singh (Second son of Maharaja Udai Singh of Jodhpur) who founded the town of Kishangarh in 1611. The present ruler is Lieut.-Col. His Highness Maharajadhiraj Sir Madan Singh Bahadur, K.C.S.I., K.C.I.E., Umdai Rajhai-Buland Makan, who was born in 1884 and was invested with powers in 1905. He administers the State with the help of a Council. His Highness served in France in 1914-15 and was mentioned in despatches by Field-Marshal Lord French. Revenue 6 lakhs. Expenditure 5 lakhs.

Lawa State, or Chief of Rajputana is a separate chiefship under the protection of the British Government and independent of any Native States. It formerly belonged to Jaipur and then became part of the State of Tonk. In 1867, the Nawab of Tonk murdered the Thakur's uncle and his followers, and Lawa was then raised to its present State. The Thakurs of Lawa belonged to the Naruka sept of the Kachwaha Rajputs. The present Thakur, Raghubir Singh, was born in 1899, and succeeded to the estate in January 1923. Revenue about Rs. 20,000.

Bundi State is a mountainous territory in the south-east of Rajputana. The Chief of Bundi is the head of the Hara sept of the great clan of Chauhan Rajputs and the country occupied by this sept has for the last five or six centuries been known as Haraoti. The State was founded in the early part of the thirteenth century and constant feuds with Mewar and Malwa

followed. It threw in its lot with the Mahomedan emperors in the sixteenth century. In later times it was constantly ravaged by the Marathas and Pindaries and came under British protection in 1818 at which time it was paying tribute to Holkar. The present ruler of the State—which is administered by the Maharao Raja and a Council of 8 in an old-fashioned but popular manner—is His Highness Maharao Raja Sir Raghubir Singh Bahadur, G.C.I.E., G.C.V.O., G.C.S.I. He was born in 1869 and succeeded in 1889. Revenue about 10 lakhs: Expenditure 9·6 lakhs.

Tonk State—Partly in Rajputana and partly in Central India, consists of six Parganas separated from one another. The ruling family belongs to the Salarzai Clan of the Bunerwal Afghan tribes. The founder of the State was Nawab Mahomed Amir Khan Bahadur, General of Holkar's Army from 1798-1806. Holkar bestowed grants of land on him in Rajputana and Central India and the land so granted him was ratified by the peace made between the British and the Chiefs of Rajputana in 1817 and was consolidated into the present State. His grandson was deposed. The present ruler of the State is His Highness Amirud-Doula Wazirul-Mulk Nawab Sir Hafiz Muhammad Ibrahim Ali Khan Bahadur, G.C.S.I., G.C.I.E., ascended the masnad in 1866. The administration is conducted by the Nawab assisted by a Council of four members. Revenue Rs. 20,37,795: Expenditure Rs. 20,01,692.

Shahpura Chiefship is a small State. The ruling family belongs to the Seesodia clan of Rajputs. The Chiefship came into existence about 1629, being a grant from the Emperor Shah Jahan to one Sujan Singh. The present Chief is Sir Nahar Singh, K.C.I.E., who succeeded by adoption in 1870 and received full powers in 1876. In addition to holding Shahpura by grant from the British Government the Raja Dhiraj possesses the estate of Kachhola in Udaipur for which he pays tribute and does formal service as a great noble of that State. Revenue 5 lakhs: Expenditure 4 lakhs.

Bharatpur State.—Consists largely of an immense alluvial plain, watered by the Banganga and other rivers.

The present ruling family of Bharatpur are Jats, of the Sinsinwar clan who trace their pedigree to the eleventh century. The family derives its name from its old village Sinsini. Bharatpur was the first State in Rajputana that made alliance with the British Government in 1803. It helped Lord Lake with 5,000 horse in his conquest of Agra and battle of Laswari wherein the Maratha power was entirely broken and received 5 districts as reward for the service. In 1804, however, Bharatpur sided with Jaswant Rao Holkar against the British Government which resulted in a war. Peace was re-established in 1805 under a treaty of alliance and it continues in force. The Gadi being usurped by Darjan Sal in 1825, the British Government took up the cause of the rightful heir Maharaja Balwant Singh Shaib. Bharatpur was besieged by Lord Combermere, and as the faithful subjects of the State also made common cause with the British Army the usurper was quickly disposed of, and Maharaja Balwant Singh, the rightful heir to the Throne, came into his own. Bharatpur also rendered valuable service to the British Government during the Mutiny. The present Chief is His Highness Lieut.-Colonel Shri Maharaja Vrijendra Sawai Kishen Singh Bahadur, Bahadur Jung, who was born in 1899 and succeeded in the following year his father Maharaja Ram Singh, who was deposed. Revenue 32 lakhs: Expenditure 31 lakhs.

Dholpur State.—The family of the ruling Chiefs of Dholpur belongs to the Bamrolian Jats, the adopted home of one of their ancestors. The family takes the name of Bamrolia about the year 1367. They next migrated to Gwalior, where they took the part of the Rajputs in their struggles against the Emperor's Officers. Eventually the Bamrolia Jats settled near Johad, and 1505 Surjan Deo assumed the title of Rana of Gohad. After the overthrow of the Mahrattas at Panipat, Rana Bhim Singh in 1761 possessed himself of the fortress of Gwalior but lost it six years later. In order to bar the encroachments of the Maharattas, a treaty was made with the Rana in 1779 by the British Government under Warren Hastings, and the joint forces of the contracting parties re-took Gwalior. In the treaty of the 13th October 1781 between the British Government and Scindia, it was stipulated that so long as the Maharaj Rana observes his treaty with the English, Scindia should not interfere with his territories. The possession of Gohad however led to disputes between the British and Scindia, and in 1805 the Governor-General transferred Gwalior and Gohad to Scindia, and that of Dholpur, Bari, Baseri, Sepau and Rajakhera to Maharaj Rana Kirat Singh. Maharaj Rana Kirat Singh died in 1836 and was succeeded by his son Maharaj Rana Bhagwant Singh on whose death in 1870 his grandson, the late Chief Maharaj Rana Nehal Singh, succeeded to the Gadi. Major His Highness Rais-ud-Daula Sipahdar-ul-Mulk Sgramad Rajhai Hind Maharajadhiraj Sri Sawai Maharaj Rana Sir Udai Bhan Singh Lokindra Bahadur Diler Jang Jai Deo, K.C.S.I., K.C.V.O., the present ruler, is the second son of Maharaj Rana Nehal Singh and was born on the 12th February 1893. On the death of his brother Maharaj Rana Ram Singh His Highness succeeded to the gadi on March 1911. He was educated at the Mayo College, Ajmer, where he passed the Diploma Examination and won several prizes. After a short course of training in the Imperial Cadet Corps at Dehra Dun, His Highness went on a tour to Europe in 1912 and was invested with full ruling powers on the 9th October 1913.

By clan and family the Maharaj Rana is connected with the Jat Chiefs of Patiala, Jhind, Nabha and Bharatpur. His mother was the second sister of late Shahzada Basdeo Singh Sahib Bahadur of the family of Maharaj Ranjit Singh of Lahore. His Highness is married to the daughter of the Sardar of Badrukha in the Jhind State.

Karauli State.—A State in Rajputana under the Political control of the Political Agent, Eastern Rajputana States Agency, lying between 26° and 27° north latitude and 76° 30′ and 77° 30′ east longitude. Area, 1,242 square miles. The river Chambal forms the south-eastern boundary of the State, dividing it from Gwalior (Scindhia's Territory), on the south-west it is

bounded by Jaipur; and on the north-east by the States of Bharatpur, Jaipur and Dholpur. The State pays no tribute to Government. Languages spoken Hindi and Urdu.

Ruler—His Highness Maharajadhiraj Maharaja Sir Bhanwar Pal, Deo Bahadur, Yadukul Chandra Bhal, G.C.I.E. Chief Member, State Council, Pandit Shanker Nath Sharma.

Kotah State belongs to the Hara sect of the clan of Chauhan Rajputs, and the early history of their house is, up to the 17th century, identical with that of the Bundi family from which they are an offshoot. Its existence as a separate State dates from 1625. It came under British protection in 1817. The present ruler is H. H. Lieut.-Colonel Maharao Sir Umed Singh Bahadur, G.C.S.I., G.C.I.E., G.B.E., who was born in 1873 and invested with full powers in 1896. In administration he is assisted by a Diwan (Dewan Bahadur Chaube Raghunath Das, C.S.I.). The most important event of his rule has been the restoration, on the deposition of the late chief of the Jhalawar State, of 15 out of the 17 districts which had been ceded in 1838 to form that principality. Revenue 46 lakhs: Expenditure 42 lakhs.

Jhalawar State consists of two separate tracts in the south-east of Rajputana. The ruling family belongs to the Jhala clan of Rajputs. The last ruler was deposed for misgovernment in 1896, part of the State was reassigned to Kotah, and Kunwar Bhawani Singh, son of Thakur Chhatarsalji of Fatehpur, was selected by Government to be the Ruler of the new State. He was born in 1874 and was created a K.C.S.I. in 1908. He is assisted in administration by a Council, has established many useful institutions, and has done much to extend education in the State. Revenue 7 lakhs.

The Bikaner State in point of area is the 7th largest of all the Indian States and the second largest in Rajputana. The population of the State is 6,59,685 of whom 84 per cent. are Hindus, 11 per cent. Mohommadans and 1·5 per cent. Jains. The Capital City of Bikaner, with its population including the suburbs of 69,410, is the 3rd City in Rajputana.

The northern portion of the State consists of level loam land, whilst the remainder is for the most part sandy and undulating. The average rain-fall is about 12 inches. The water level over most of the State is from 150 feet to 300 feet deep.

The Reigning Family of Bikaner is of the Rathore clan of Rajputs, and the State was founded in 1465 A.D. by Rao Bikaji, son of Rao Jodhaji, Ruler of Marwar (Jodhpur) and after him both the Capital and the State are named. Rai Singhji, the first to receive the title of Rajah, was "one of Akbar's most distinguished Generals" and it was during his reign that the present Fort of Bikaner was built in 1593. The title of Maharajah was conferred on Rajah Anup Singhji by the Mughal Emperor in 1687 in recognition of his distinguished services in the capture of Golconda. The conspicuous services of Maharajah Sardar Singhji who in the Indian Mutiny of 1857 personally led his troops to co-operate with the British forces in the field on the outbreak of the Mutiny was acknowledged by the Government of India by the transfer of the Sub-Tehsil of Tibi, consisting of 41 villages, from the adjoining Sirsa Tehsil in the Punjab to the Bikaner State.

The present Ruler, Major-General His Highness Maharajah Dhiraj Raj Rajeshwar Narendra Shiromani Sri Sir Ganga Singhji Bahadur, G.C.S.I., G.C.I.E., G.C.V.O., G.B.E., K.C.B., A.D.C., LL.D., is the 21st of a long line of distinguished rulers renowned for their bravery and statesmanship. He was born on the 3rd October 1880, and assumed full ruling powers in December, 1898. He was awarded the first class Kaisar-i-Hind Medal for the active part he took in relieving the famine of 1899-1900, and soon after he went on active service to China in connection with the China War of 1900-1901 in command of his famous Ganga Risala and was mentioned in despatches and received the China Medal and the K.C.S.I. The State Forces consist of the Camel Corps, known as 'Ganga Risala,' whose sanctioned strength is 500, an Infantry Regiment also 500 strong, a Regiment of Cavalry 330 strong, a Battery of Artillery (6 guns), Body Guard 50 and Camel Battery 60. At the outbreak of the Great War in 1914, His Highness immediately placed the services of himself and his State forces and all the resources of the State at the disposal of His Imperial Majesty the King-Emperor, and the Ganga Risala reinforced by the Infantry Regiment, which became incorporated in the Camel Corps in the field, rendered very valuable services in Egypt and Palestine. An extra force was also raised for internal security. His Highness personally went on active service in August 1914 and enjoys the honour of having fought both in France and Egypt. His Highness also played a very conspicuous political part during the period of the War when he went twice to Europe as the Representative of the Princes of India, once in 1917 to attend the meetings of the Imperial War Cabinet and Conference, and again in 1918-19 to attend the Peace Conference where he was one of the signatories to the treaty of Versailles.

His Highness enjoys a salute of 19 guns (personal) whilst the permanent local salute of the State is also 19. His Highness has also the honour of having been elected the first Chancellor of the Chamber of Princes in 1921, a post which he still fills.

His Highness is assisted in the administration of the State by the State Council consisting of 5 Members under the Heir-Apparent as Chief Minister and President of the Council. A Legislative Assembly was inaugurated in 1918, consisting of 45 Members, 15 out of whom are elected Members, and which meets twice a year.

The revenues of the State are over eighty lacs of rupees and the State owns a large Railway system, the total mileage being 497·66. Several projects for its extension are under contemplation, including the new scheme of a railway line connecting Delhi with Sindh and running through the Bikaner and Jaisalmere States. At present there is practically no irrigation in the State, the crops depending wholly on the scanty rainfall; but the Sutlej Canal Project which is now under construction will irrigate annually some 350,000 acres in the north and help to protect the State against the serious famines

from which it has suffered in the past. Even larger expectations are held out from the Bhakra Dam Project from which it is hoped that the remaining level lands in the north of the State will be irrigated. A coal mine is worked at Palana, 14 miles south of the Capital.

Alwar State is a hilly tract of land in the East of Rajputana. Its Rulers belong to the Lalawat Naruka branch of Kshatrias, Solar Dynasty. This ruling family is descended from Raja Udai Karanji, who was the common ancestor of both Alwar and Jaipur. The State was founded by Pratab Singh, who before his death in 1791 had secured possession of large territories. His successor sent a force to co-operate with Lord Lake in the war of 1803 and an alliance was concluded with him in that year. Disputes about successions mark the history of the State during the earlier part of the nineteenth century. The present chief, H. H. Veerendra Shiromani Dev Col. Shri Sewai Maharaja Sir Jey Singhji Bahadur, G.C.I.E., K.C.S.I., who was born in 1882, succeeded his father in 1892 and was invested with powers in 1903. He carries on the administration with the assistance of four Ministers, Members of His Highness' Council and various heads of departments. The normal revenue and expenditure are about Rs. 40 lakhs a year. The State besides maintaining other forces, maintains also the Imperial Service Troops which His Highness the late Maharaja was the first prince in Rajputana to offer (in 1888) in the defence of the Empire. Alwar stood first in recruiting in Rajputana at the time of the Great War and enjoys a salute of 17 guns. The capital is Alwar on the Rajputana-Malwa Railway, 98 miles west of Delhi.

RAJPUTANA.

Agent to Governor-General—The Hon. Mr. R. E. Holland, C.S.I., C.I.E. (*On leave*); The Hon. Mr. C. C. Watson, C.I.E. (*Offg.*)

UDAIPUR.

Resident—W. H. J. Wilkinson, C.I.E.

JAIPUR.

Resident—Lieut.-Col. S. B. A. Patterson.

EASTERN RAJPUTANA STATES.

Political Agent—Lt.-Col. H. B. St. John, C.I.E., O.B.E.

WESTERN RAJPUTANA STATES.

Resident—L. W. Reynolds, C.I.E., O.B.E., M.C.

HARAOTI AND TONK.

Political Agent—Major H. R. Lawrence.

SOUTHERN RAJPUTANA STATE.

Political Agent—Major H. R. N. Pritchard, O.B.E.

CENTRAL INDIA AGENCY.

Central India is the name given to the country occupied by the Indian States grouped together under the supervision of the Political officer in charge of the Central India Agency. These States lie between 21° 24′ and 26° 32′ N. lat. and between 74° 0′ and 83° 0′ E. long. The British districts of Jhansi and Lalitpur divide the agency into two main divisions—Bundelkhand and Baghelkhand lying to the east, and Central India proper to the west. The total area covered is 51,505 square miles, and the population (1921) amounts to 59,97,023. The great majority of the people are Hindus. The principal States are seven in number—Indore, Bhopal, Rewa, Dhar, Jaora, Datia and Orcha of which two, Bhopal and Jaora, are Mahomedan and the rest are Hindu. Besides these there are a multitude of petty States held by their rulers under the immediate guarantee of the British Government, but having feudal relations with one or other of the larger States. The total number of States amounts to 153. For administrative purposes they are divided into the following groups: Baghelkhand Agency, 12 States (principal State, Rewa); Bhopal Agency, 19 States (principal State, Bhopal); Southern States Agency, 21 States (principal State, Dhar); Bundelkhand Agency, 22 States (principal States, Datia and Orcha); Indore Residency, 9 States (principal State, Indore); Malwa Agency, 38 States (principal State, Jaora). The Agency may be divided into three natural divisions, the plateau, low-lying, and hilly. The plateau tract includes the Malwa plateau, the Highland tract stretching from the great wall of the Vindhyas to Marwar, the land of open rolling plains. The low-lying tract embraces Northern Gwalior and stretches across into Bundelkhand and Baghelkhand up to the Kaimur Range. The hilly tract lies along the ranges of the Vindhyas and the Satpuras. There agriculture is little practised, the inhabitants being mostly members of the wild tribes. The territories of the different States are much intermingled, and their political relations with the Government of India and each other are very varied. Eleven Chiefs have direct treaty engagements with the British Government.

The following list gives the approximate size, population and revenue of the eight principal States above mentioned:—

Name.	Area in square miles.	Population.	Revenue.
			lakhs. Rs.
Indore ..	9,519	11,51,578	104
Bhopal ..	6,902	6,92,448	53
Rewah ..	13,000	14,01,524	37
Dhar ..	1,777	2,30,333	13
Jaora ..	601	85,778	10
Datia ..	911	1,48,659	11
Orcha ..	2,079	2,84,948	10

Gwalior.—The house of Scindia traces its descent to a family of which one branch held the hereditary post of patel in a village near Satara. The head of the family received a patent of rank from Aurangzebe. The founder of the Gwalior

House was Ranoji Scindia who held a military rank under the Peshwa Baji Rao. In 1726 the Peshwa granted deeds to Puar, Holker and Scindia, empowering them to levy "Chauth" and "Sardesmukhi" and retain half the amount for payment to their troops. In 1736 Ranoji Scindia accompanied Baji Rao to Delhi where he and Mulhar Rao Holker distinguished themselves in military exploits. Ranoji fixed his headquarters at the ancient city of Ujjain, which for the time became the Capital of the Scindia dominions. During the time of Mahadji Scindia and Dowlat Rao Scindia Gwalior played an important part in shaping the history of India. Despite the partial reverses which Mahadji Scindia's troops suffered at the hands of the British in 1780, reverses which led to the treaty of Salbai (1782), Scindia's power remained unbroken. For the first time he was now recognized by the British as an independent sovereign and not as a vassal of the Peshwa.

In 1790 his power was firmly established in Delhi. While he was indulging ambitious hopes he fell a prey to fever which ended his remarkable career on 12th February, 1794. Himself a military genius, Mahadji Scindia's armies reached the zenith of their glory under the disciplined training of the celebrated French adventurer—De Boigne. Mahadji was succeeded by his grand-nephew Daulat Rao in whose service Perron, a Military Commander of great renown played a leading part. The strength of Scindia's Army was, however, considerably weakened by the reverses, sustained at Ahmednagar, Assaye, Asirgarh and Laswari. Daulat Rao Scindia died in 1827. Till his death he remained in undisputed possession of almost all the territory which belonged to him in 1805.

Daulat Rao was succeeded by Jankoji Rao who passed away in the prime of life. On his demise in 1843 intrigue and party spirit were rampant and the Army was in a state of mutiny with the result that it came into collision with the British forces at Maharajpore and Pannihar.

Jankoji Rao was succeeded by Jiaji Rao, whose adherence to the British cause during the dark days of Mutiny, when his own troops deserted him, was unshakable. In 1861 he was created a Knight Grand Commander of the Most Exalted Order of the Star of India and in 1877 was made a Councillor of the Empress. Subsequently he received other titles and entered into treaties of mutual exchange of territories with the British Government. He died on the 20th June 1886 and was succeeded by his son Maharaja Madho Rao Scindia.

The present ruler is Lieutenant-General H. H. Maharaja Sir Madho Rao Scindia, Alijah Bahadur, G.C.V.O., G.C.S.I., G.B.E., A.D.C. to the King. He succeeded in 1886 and obtained powers in 1894. In 1901 he went to China during the war; he holds the rank of honorary Lieutenant General of the British Army and the honorary degrees of LL.D., Cambridge, and D.C.L., Oxon. He is also a Donat of the Order of St. John of Jerusalem in England. The ruler of the State enjoys a salute of 21 guns. The State is in direct relations with the Government of India. The State administration is controlled by the Maharaja assisted by nine members of the Majlis-i-khas with portfolios.

The northern part of the State is traversed by the G.I.P. Railway and two branches run from Bhopal to Ujjain and from Bina to Baran. The Gwalior Light Railway runs for 250 miles from Gwalior to Bhind from Gwalior to Sheopur and from Gwalior to Shivpuri. The main industries are cotton ginning, which is done all over the State; fine muslins made at Chanderi, leather work, etc. The State maintains three regiments of Imperial Service Cavalry, two battalions of Imperial Service Infantry and a transport corps. Lashkar, the Capital city, is two miles to the south of the ancient city and the fort of Gwalior. Annual income about 2 crores and expenditure about 175 lakhs.

Indore.—The founder of the House of the Holkars of Indore was Malhar Rao Holkar, born in 1693. His soldierly qualities brought him to the front under the Peshwa, who took him into his service and employed him for his conquests. When the Maratha power was weakened at the battle of Panipat in 1761, Malhar Rao had acquired territories stretching from the Deccan to the Ganges as a reward for his career as a military commander. He was succeeded by his grandson. On his death without issue his mother Ahilya Bai became the Ruler and her administration is still looked upon with admiration and reverence as that of a model ruler. She was succeeded by Tukoji Holkar who indeed had been associated with her to carry the military administration and had, in the course of it, distinguished himself in various battles. Tukoji was succeeded by Kashirao, who was supplanted by Jeswant Rao, his step brother, a person of remarkable daring and strategy as exhibited in a number of engagements in which he had taken part. The brilliant success he obtained at the battle of Poona against the combined armies of Peshwa and Scindia made him a dictator of Poona for some time and he declared in consequence the independence of Holkar State. During 1804-5 he had a protracted war with the British, closed by a Treaty which recognised the independence of Holkar State with practically no diminution of its territories and rights. Jaswant Rao showed signs of insanity from 1808 onwards and succumbed to that malady in 1811, when he was succeeded by his minor son Malhar Rao II. During the Regency which followed, the power of the State was weakened by various causes, the most important of which was the refractory conduct of the Military Commanders. On the outbreak of the war between the English and the Peshwa in 1817, some of these commanders, with a part of the army, rebelled against the authority of the State and were disposed to befriend the Peshwa, while the Regent, mother and her Ministers were for friendship with the British. There was a battle between the British Army and this refractory portion of the Holkar Army which culminated in the latter's defeat. Holkar had to come to terms and to cede extensive territories and rights over the Rajput Princes to the British, but the internal sovereignty remained unaffected. The Treaty of 1818 which embodied these provisions still regulates the relations between the British Government and the State.

Malhar Rao was well served by his able Minister Tatya Jog. He died a premature death in 1833. Then followed the weak administra-

tion of Hari Rao and his son. In 1844 Tukoji Rao II ascended the throne; but as he was a minor, the administration was carried on by a Regency which was fortunate in having Sir Robert Hamilton, the Resident as its Adviser. The prosperity of the State revived a great deal during this administration and the progress was maintained after the Maharaja assumed powers in 1852. It was interrupted by the outbreak of Mutiny in 1857 in British India. This wave of disaffection did not leave some of the State troops untouched. The Maharaja with his adherents and the remaining troops remained however staunch to the British and gave every possible assistance to the British authorities at Indore, Mhow and other places, which was recognised by the British Government. The Maharaja died in 1886 after having effected various reforms in the administration and raised the position of the State to a high degree of prosperity and honour. He was succeeded by Shivaji Rao who reigned for 16 years and will be specially remembered for his beneficent measures in matters of education, sanitation, medical relief and abolition of transit duties. The present Maharaja succeeded in 1903 while yet a minor. The Regency Administration continued till 1911 and it deserves credit for a number of reforms effected in all the branches of administration. The policy of the Regency has been maintained by the Maharaja and since his assumption of powers the State has advanced in education in general including female education, commerce and industrial developments, municipal franchise and other representative institutions. This prosperity is specially reflected in the Indore city the population of which has risen by 40 per cent. The city has a first grade College, 3 High Schools and 1 Sanskrit College, with a number of other Medical and Educational institutions. It has also 4 Spinning and Weaving Mills with five more under construction and a number of factories.

During the War of 1914 the Maharaja placed all his resources at the disposal of the British Government. His troops took part in the various theatres of war and the contribution of the State towards the War and Charitable Funds in money was 41 lakhs and its subscriptions to the War Loans amounted to Rs. 82 lakhs, while the contributions from the Indore people amounted to over one crore. This assistance received the recognition of the British Government. In the administration His Highness is assisted by his Prime Minister and a Council. The State Army consists of about 3,000 officers and men. The State is traversed by the Holkar State Railway the principa Station of which is Indore, R. M. Railway and B. B. & C. I. Railway and the U. B. Section of the G. I. P. Railway. Besides the trunk roads, there are 600 miles of roads constructed and maintained by the State.

The chief imports are:—Cloth, Machinery, Coal, Sugar, Salt, Metal and Kerosine Oil.

The chief exports are:—Cotton, Cloth, Tobacco and Cereals.

The area of the State is 9,520 square miles with a revenue of about one crore and twenty lakhs.

His Highness is a keen sportsman and has travelled extensively in India and Europe. He has one son Prince Yeshwant Rao Holkar and two daughters.

Bhopal.—The principal Mussalman State in Central India ranks next in importance to Hyderabad among the Muhammadan States of India. The ruling family was founded by Dost Mohammed Khan, a Tirah Afghan. He was granted a *Sanad* of Bairasia and Nazirabad *Purgannahs* in recognition of his meritorious services to the Emperor of Delhi. With the disintegration of the Mogul Empire Bhopal State developed into an independent State. In the early part of the 19th century, the Nawab successfully withstood the inroads of Scindia and Bhonsla and by the agreement of 1817 Bhopal undertook to assist the British with a contingent force and to co-operate against the Pindari bands.

The present ruler of the State, Her Highness Nawab Sultan Jehan Begum, C. I., G.C.S.I., G.C.I.E., G.B.E., is the third in the successive line of lady-rulers, who have ruled the destinies of the State with marked ability. Having succeeded in 1901, she personally conducts, and has introduced a number of reforms in the administration of her State. Her eldest son, Colonel Nawab Mahommad Sir Nasrullah Khan, K.C.S.I., controls the Forest Department and is also the Vice-President of Her Highness's State Council, her second son, Major General Nawab Mohsinulmulk Haji Hafiz Mohammed Obaidullah Khan, C.S.I. (Hon. Lt.-Col. in the British Army), is the Member, Military Department, and the Commander-in-Chief, State Forces, and her third and the youngest son, Lt.-Col. Nawabzada Iftikharulmuik Haji Mohammed Hamidullah Khan, B.A., C.S.I., C.V.O., A.D.C. to His Excellency the Viceroy and Governor-General of India, is the Member for the Departments of Finance and Law and Justice. The Nawabzada along with other Indian Princes was placed on the staff of His Royal Highness the Prince of Wales as an A.D.C., when His Royal Highness lately visited India. The names of other members of Her Highness' State Council are given below in order of precedence:—

1. Khan Bahadur Mulvi Mohammed Matinuzzaman Khan, B.A., F.S.S., Member, Revenue Department.

2. Dabirulmulk Sir Israr Hasan Khan, Khan Bahadur, Kt., C.I.E., Member, Home Department.

3. Rai Bahadur Munshi Oudh Narain Biseriya, B.A., Member, Council Affairs and Education Department. Her Highness has kept the Political Department under her direct control. The Secretary in charge of the Department is Kazi Ali Haider Abbasi. Along with other Troops, the State maintains one full strength pioneer Battalion for Imperial Service. The Capital, Bhopal city, situated on the Northern bank of an extensive lake is the junction for the Bhopal Ujjain section of the Great Indian Peninsula Railway.

Rewa.—This State lies in the Baghelkhand Agency, and falls into two natural divisions separated by the scarp of the Kaimur range. The area is 13,000 sq. miles with a population of 14 lakhs. Its Chiefs are Baghel Rajputs des-

cended from the Solanki clan which ruled over Gujarat from the tenth to the thirteenth century. In 1812, a body of Pindaries raided Mirzapur from Rewa territory and the Prince, who had previously rejected overtures for an alliance, was called upon to accede to a treaty acknowledging the protection of the British Government. During the Mutiny, Rewa offered troops to the British, and for his services then, various parganas, which had been seized by the Marathas, were restored to the Rewa Chief. The present chief is H. H. Maharaja Gulab Singhji Bahadur who was born in 1903. He was married in 1919 to the sister of His Highness the Maharaja of Jodhpur. Upon the death of his father Col. H. H. Maharaja Sir Venkat Raman Singh Bahadur, on 30th October, 1918, H. H. Maharaja Gulab Singh Bahadur succeeded to the gaddi on 31st October, as a minor. During the period of minority the State was administered by a Council of Regency with H. H. Maharaja Sir Sajjan Singh Bahadur, Colonel, K.C.S.I., K.C.V.O., A.D.C., of Rutlam as Regent. H. H. Maharaja Gulab Singh Bahadur attained majority in 1922 and was invested with full ruling power on 31st October, 1922, by H. E. the Viceroy and the administration of the State is now carried on by him with the aid of four Commissioners.

Dhar.—This State, under the Agency for Southern States in Central India, takes its name from the old city of Dhar, long famous as the capital of the Paramara Rajputs, who ruled over Malwa from ninth to the thirteenth century and from whom the present chiefs of Dhar—Powar Marathas—claim descent. In the middle of the 18th century the Chief of Dhar, Anand Rao, was one of the leading chiefs of Central India, sharing with Holkar and Scindia the rule of Malwa. But in 1819, when a treaty was made with the British, the State had become so reduced that it consisted of little more than the capital. The ruler is Major H. H. Maharaja Sir Udaji Rao Powar, Sahib Bahadur, K.C.S.I., K.C.V.O., K.B.E., who was born in 1886, and has control of all civil, criminal, and all administrative matters. There are 22 feudatories, of whom 13 hold a guarantee from the British Government. The average expenditure is about 18 lakhs. Rao Bahadur K. Nadkar is Dewan of the State.

Jaora State.—This State is in the Malwa Agency covering an area of about 600 square miles with a total population of 85,817, and has its headquarters at Jaora town. The Chiefs of Jaora claim descent from Abdul Majid Khan, an Afghan of the Tajik Khel, from Swat, who came to India to acquire wealth. The first Nawab was Ghafur Khan who obtained the State about the year 1808. The present chief is Lt.-Colonel H. H. Fakhruddowlah, Nawab Sir Mahomed Iftikhar Ali Khan Saheb Bahadur Saulat Jang, K.C.I.E., who was born in 1883 and is an Honorary Lt.-Colonel in the Indian Army. The administration is at present controlled by a Council of State of which His Highness the Nawab is the President. Khan Bahadur J. Rustomji, B.A., is the Chief Secretary to His Highness and Vice-President of the State Council. The Council is constituted of a President, a Vice-President and six other members whose names are (1) Sirajur Rehman Khan, Bar-at-law, (*Judicial Secretary*); (2) Pandit Amar Nath Katju, B. Sc., LL.B. (*Revenue Secretary*); (3) Munshi Ram Dayal (*Financial Secretary*); (4) Khan Bahadur Sahebzada Mohammad Sher Ali Khan (*Military Secretary*); (5) Khan Bahadur Sahebzada Mohammad Sarfraz Ali Khan (*Private Secretary*); and (6) Sahibzada Safder Ali Khan (*Council Secretary*). The soil of the State is among the richest in Malwa, being mainly of the best black cotton variety bearing excellent crops of poppy. The average annual revenue is Rs. 10 lakhs.

Rutlam—Is the premier Rajput State in the Malwa Agency. It covers an area of 871 square miles, including that of the Jagir of Khera in the Kushalgarh Chiefship, which pays an annual tribute to the Rutlam Darbar. The State was founded by Raja Ratansinghji, a great grandson of Raja Udai Singh of Jodhpur, in 1652. The Ruler of Rutlam is the religious head of the Rajputs of Malwa, and important caste questions are referred to him for decision. The State enjoys full and final civil and criminal powers. The present Ruler of Rutlam is Colonel His Highness Maharaja Sir Sajjan Singh, K.C.S.I., K.C.V.O., A.D.C. to H. R. H. the Prince of Wales, who was born in 1880, educated at Daly College, Indore, received military training in Imperial Cadet Corps and invested with full powers in 1898. His Highness served in the war in France and Egypt from 1915 to 1918, was mentioned in despatches and received the Criox d'Officiers de legion d'Honneur. He is also Regent of Rewa State. Salute: 13 guns, local 15 guns.

Dewan—Rai Bahadur B. N Zutshi, O.B.E., B.A., LL.B.

Datia State.—The chiefs of this State, in the Bundelkhand Agency, are Bundela Rajputs of the Orchha house. The territory was granted by the chief of Orchha to his son Bhagwan Rao in 1626, and this was extended by conquest and by grants from the Delhi emperors. The present chief is H. H. Maharaja Lokendra Sir Govind Singh Bahadur, K.C.S.I., who was born in 1886 and succeeded in 1907. H. H. enjoys a salute of 15 guns. The heir-apparent, Raja Bahadur Balbhadra Singh (*b* 1907), is being educated at the Daly College.

Orchha State.—The rulers of this State are Bundela Rajputs claiming to be descendants of the Gaharwars of Benares. It was founded as an independent State in 1048 A.D. It entered into relations with the British by the treaty made in 1812. The present ruler is His Highness Sir Pratap Singh, G.C.S.I., G.C.I.E., who was born in 1854. He has the hereditary titles of His Highness Saramad-i-rajhai-Bundelkhand Maharaja Mahendra Sawai Bahadur. The present chief enjoys a salute of 17 guns. The State has a population of about 330,032 and an area of 2,080 square miles. The capital is Tikamgarh, 36 miles from Lalitpur Station, on the G.I.P. Railway. Orchha, the old capital, has fallen into decay but is a place of interest on account of its magnificent buildings of which the finest were erected by Maharaj Bir Singh Deo, the most famous ruler of the State (1605-1627).

GWALIOR.
Resident—W. E. Jardine, C.I.E., I.C.S.

BHOPAL.
Political Agent—L. M. Crump, C.I.E.

BUNDELKHAND.
Political Agent—Major D. G. Wilson.

BAGHELKHAND.
Political Agent—Major J. L. R. Weir.

Sikkim.

Sikkim is bounded on the north and north-east by Tibet, on the south-east by Bhután, on the south by the British district of Darjeeling, and on the west by Nepal. The population consists of Bhutias, Lepchas, and Nepalese. It forms the direct route to the Chumbi Valley in Tibet. The main axis of the Himalayas, which runs east and west, forms the boundary between Sikkim and Tibet. The Singalila and Chola ranges, which run southwards from the main chain, separate Sikkim from Nepal on the west, and from Tibet and Bhutan on the east. On the Singalila range rise the great snow peaks of Kinchinjunga (28,146 feet), one of the highest mountains in the world. The Chola range which is much loftier than that of Singalila, leaves the main chain at the Dongkya La.

Tradition says that the ancestors of the Rajas of Sikkim originally came from eastern Tibet. The State was twice invaded by the Gurkhas at the end of the eighteenth century. On the outbreak of the Nepal War in 1814, the British formed an alliance with the Raja of Sikkim and at the close of the war the Raja was rewarded by a considerable cession of territory. In 1835 the Raja granted the site of Darjeeling to the British and received Rs. 12,000 annually in lieu of it. The State was previously under the Government of Bengal, but was brought under the direct supervision of the Government of India in 1906. The State is thinly populated, the area being 2,818 square miles, and the population 81,721, chiefly Buddhists and Hindus. The most important crops are maize and rice. There are several trade routes through Sikkim from Darjeeling District into Tibet. In the convention of 1890 provision was made for the opening of a trade mart but the results were disappointing, and the failure of the Tibetans to fulfil their obligations resulted in 1904 in the despatch of a mission to Lhasa, where a new convention was signed. Trade with the British has increased in recent years, and is now between 40 and 50 lakhs yearly. A number of good roads have been constructed in recent years. The present ruler, His Highness Maharajah Sir Tashi Namgyal, K.C.I.E., was born in 1893 and succeeded in 1914. His Highness was invested with full ruling powers on the 5th April 1918. The title of a C.I.E. was conferred upon the Maharaja on the 1st January 1918 and K.C.I.E. on 1st January 1923. The average revenue is Rs. 3,95,995.

Political Officer in Sikkim:—Major F. M. Bailey, C.I.E.

Bhutan.

Bhutan extends for a distance of approximately 190 miles east and west along the southern slopes of the central axis of the Himalayas, adjacent to the northern border of Eastern Bengal and Assam. Its area is 18,000 square miles and its population, consisting of Buddhists and Hindus, has been estimated at 300,000. The country formerly belonged to a tribe called Tek-pa, but was wrested from them by some Tibetan soldiers about the middle of the seventeenth century. British relations with Bhutan commenced in 1772 when the Bhotias invaded the principality of Cooch Behar and British aid was invoked by that State. After a number of raids by the Bhutanese into Assam, an envoy (the Hon. A. Eden) was sent to Bhutan, who was grossly insulted and compelled to sign a treaty surrendering the Duars to Bhutan. On his return the treaty was disallowed and the Duars annexed. This was followed by the treaty of 1865, by which the State's relations with the Government of India were satisfactorily regulated. The State formerly received an allowance of half a lakh a year from the British Government in consideration of the cession in 1865 of some areas on the southern borders. This allowance was doubled by a new treaty concluded in January 1910, by which the Bhutanese Government bound itself to be guided by the advice of the British Government in regard to its external relations, while the British Government undertook to exercise no interference in the internal administration of Bhutan. On the occasion of the Tibet Mission of 1904, the Bhotias gave strong proof of their friendly attitude. Not only did they consent to the survey of a road through their country to Chumbi, but their ruler, the Tongsa Penlop accompanied the British troops to Lhasa, and assisted in the negotiations with the Tibetan authorities. For these services he was made a K.C.I.E., and he has since entertained the British Agent hospitably at his capital. The ruler is now known as H.H. the Maharaja of Bhutan, Sir Uggen Wangchuk, K.C.S.I., K.C.I.E. At the head of the Bhutan Government, there are nominally two supreme authorities; the Dharma Raja, known as Shapting Renipoche, the spiritual head; and the Deb or Depa Raja, the temporal ruler. The Dharma Raja is regarded as a very high incarnation of Buddha, far higher than the ordinary incarnations in Tibet, of which there are several hundreds. On the death of a Dharma Raja a year or two is allowed to elapse, and his reincarnation then takes place, always in the Choje, or royal family of Bhutan.

Cultivation is backward and the chief crop is maize. The military force consists of local levies under the control of the different chiefs. They are of no military value.

Nepal.

The kingdom of Nepal is a narrow tract of country extending for about 520 miles along the southern slope of the central axis of the Himalayas. It has an area of about 54,000 square miles, with a population of about 5,000,000, chiefly Hindus. The greater part of the country is mountainous, the lower slopes being cultivated. Above these is a rugged broken wall of rock leading up to the chain of snow-clad peaks which culminate in Mount Everest (29,002 feet) and others of slightly less altitude. The country before the Gurkha occupation was split up into several small kingdoms under Newar kings. The Gurkhas under Prithvi Narayan Shah overran and conquered the different

kingdoms of Patan, Kathmandu, and Bhatgaon, and other places during the latter half of the 18th century and since then have been rulers of the whole of Nepal. In 1846 the head of the Rana family obtained from the sovereign the perpetual right to the office of Prime Minister of Nepal, and the right is still enjoyed by his descendant. In 1850 Jung Bahadur paid a visit to England and was thus the first Hindu Chief to leave India and to become acquainted with the power and resources of the British nation. The relations of Nepal with the Government of India are regulated by the treaty of 1816 and subsequent agreements by which a representative of the British Government is received at Kathmandu. By virtue of the same treaty Nepal maintains a Representative at Delhi and her treaty relations with Tibet allow her to keep a Resident at Lhassa of her own. Her relation with China is of a friendly nature. Ever since the conclusion of the treaty of 1816 the friendly relations with the British Government have steadily been maintained and during the rule of the present Prime Minister it has been at its height as is evidenced by the valuable friendly help in men and money which has been given and which was appreciatively mentioned in both the Houses of Parliament and by Mr. Asquith in his Guildhall speech in 1915. The message from His Majesty the King Emperor to the Nepalese Prime Minister sent on the termination of hostilities and published at the time as also the Viceroy's valedictory address to the Nepalese contingent on the eve of their return home after having laudably fulfilled their mission in India eloquently and gratefully acknowledged the valuable help rendered by Nepal during the four and a half years of war.

From the foregoing account of the history of Nepal it will be seen that the Government of the country has generally been in the hands of the Minister of the day. Since the time of Jung Bahadur this system of government has been clearly laid down and defined. The sovereign, or Maharajadhiraja, as he is called, is but a dignified figure-head, whose position can best be likened to that of the Emperor of Japan during the Shogunate. The present ruler, His Majesty Maharajadhiraja Tribhubana Bir Bikram Jung Bahadur Shah Bahadur Shum Shere Jung, ascended the throne on the death of his father in 1911 The real ruler of the country is the Minister who, while enjoying complete monopoly of power, couples with his official rank the exalted title of Maharaja. Next to him comes the Commander-in-Chief, who ordinarily succeeds to the office of Minister.

The present Minister at the head of affairs of Nepal is Maharaja Sir Chandra Shum Shere Jung Bahadur Rana, G.C.B., G.C.S.I., G.C.M.G., G.C.V.O., D.C.L. Thong-lin-pimma-Kokang-wang-Syan (Highest honour in the Chinese military order) and Honorary General in the British Army. He has been Prime Minister and Marshal of Nepal since June, 1901.

Rice, wheat and maize form the chief crops in the low lands. Mineral wealth is supposed to be great, but, like other sources of revenue, has not been developed. Communications in the State are primitive. The revenue is about two crores of rupees per annum. The standing army is estimated at 45,000, the high posts in it being filled by relations of the Minister. The State is of considerable archæological interest and many of the sites connected with scenes of Buddha's life have been identified in it by the remains of inscribed pillars.

British Envoy: Lieut.-Col. W. F. T. O'Connor, C.I.E., C.V.O.

NORTH-WEST FRONTIER STATES.

The Indian states of the North-West Frontier Provinces are Amb, Chitral, Dir and Phulera. The total area is about 7,704 square miles and the population, mainly Mahomedan, is 1,622,094. The average annual revenue of the first three is about Rs. 4,65,000, that of Phulera is unknown.

Amb.—Is only a village on the western Bank of the Indus in Independent Tanawala.

Chitral.—Runs from Dir to the south of the Hindu-Kush range in the north, and has an area of about 4,500 square miles. The ruling dynasty has maintained itself for more than three hundred years, during the greater part of which the State has constantly been at war with its neighbours. It was visited in 1885 by the Lockhart Mission, and in 1889, on the establishment of a political agency in Gilgit, the ruler of Chitral received an annual subsidy from the British Government. That subsidy was increased two years later on condition that the ruler, Amam-ul-Mulk, accepted the advice of the British Government in all matters connected with foreign policy and frontier defence. His sudden death in 1892 was followed by a dispute as to the succession. The eldest son Nizam-ul-Mulk was recognised by Government, but he was murdered in 1895. A war was declared by Umra-khan of Jandul and Dir against the infidels and the Agent at Gilgit, who had been sent to Chitral to report on the situation, was besieged with his escort and a force had to be despatched (April 1895) to their relief.

The three valleys of which the State consists are extremely fertile and continuously cultivated. The internal administration of the country is conducted by His Highness Sir Shujaul-mulk, K.C.I.E., the Mehtar of Chitral, and the foreign policy is regulated by the Political Agent at Malakand.

Dir.—The territories of this State, about 5,000 square miles in area, include the country drained by the Panjkora and its affluents down to the junction of the former river with the Bajaur Rud. The Nawab of Dir is the overlord of the country, exacting allegiance from the petty chiefs of the clans. Dir is mainly held by Yusufzai Pathans, the old non-Pathan inhabitants being now confined to the upper portion of the Panjkora Valley known as the Bashkar.

Political Agent for Dir, Swat and Chitral: Lieut.-Colonel H. Stewart, C.I.E.

STATES IN THE MADRAS PRESIDENCY.

The Madras Presidency includes 5 Indian States covering an area of 10,087 square miles. Of these the States of Travancore and Cochin represent ancient Hindu dynasties. Pudukottai is the inheritance of the chieftain called the Tondiman. Banganapalle and Sandur, two petty States, of which the first is ruled by a Nawab, lie in the centre of two British districts.

Name.	Area sq. miles.	Population.	Estimated Gross Revenue in lakhs of rupees.
Travancore ..	7,625	4,006,062	190·66
Cochin ..	1,417½	979,019	55·46
Pudukottai ..	1,17⅞	426,813	21·39
Banganapalle .	255	36,692	3·71
Sandur ..	167	11,684	1

These States were brought into direct relation with the Government of India on October 1st, 1923.

Travancore.—This State occupies the south-west portion of the Indian Peninsula, forming an irregular triangle with its apex at Cape Comorin. The early history of Travancore is in great part traditional; but there is little doubt that H. H. the Maharaja is the representative of the Chera dynasty, one of the three great Hindu dynasties which exercised sovereignty at one time in Southern India. The petty chiefs, who had subsequently set up as independent rulers within the State, were all subdued, and the whole country, included within its present boundaries, was consolidated and brought under one rule, by the Maharaja Marthanda Varma (1729-58). The English first settled at Anjengo, a few miles to the north of Trivandrum, and built a factory there in 1684. In the wars in which the East India Company were engaged in Madura and Tinnevelly, in the middle of the 18th century, the Travancore State gave assistance to the British authorities. Travancore was reckoned as one of the staunchest allies of the British Power and was accordingly included in the Treaty made in 1784 between the East India Company and the Sultan of Mysore. To protect the State from possible inroads by Tippu, an arrangement was come to in 1788 with the East India Company, and in 1795 a formal treaty was concluded, by which the Company agreed to protect Travancore from all foreign enemies. In 1805 the annual subsidy to be paid by Travancore was fixed at 8 lakhs of rupees.

The present ruler is His Highness Maharaja Sir Rama Varma, G.C.S.I., G.C.I.E., who was born in 1857 and ascended the masnad in 1885. The Government is conducted in his name with the assistance of a Dewan (Dewan Bahadur T. Raghavayya). The work of legislation is entrusted to a Council brought into existence in 1888 and now containing a majority of non-official elected members. The Council is invested with the powers of voting on the budget, moving resolutions and asking questions including supplementary questions. Women are placed on a footing of complete equality with men in the matter of both e'ectorship and membership. An assembly known as the Sri Mulam Popular Assembly meets once a year, when its members are able to bring suggestions before the Dewan. The State supports a military force of 1,473 men. Education has advanced considerably in recent years and the State takes a leading place in that respect. The principal food grain grown is rice, but the main source of agricultural wealth is the cocoanut. Other crops are pepper, areca-nut, jack-fruit and tapioca. Cotton weaving and the making of matting from the coir are among the chief industries. The State is well provided with roads, and with a natural system of back-waters, besides canals and rivers navigable for country crafts. Two lines of railways intersect the country, the Cochin-Shoranore in the north-west and the Tinnevelly-Quilon passing through the heart of the State. A third line, from Quilon to Trivandrum, was opened on the 1st January 1918. The capital is Trivandrum.

Political Agent: C. W. E. Cotton, C.I.E., I.C.S.

Cochin. This State on the south-west coast of India is bounded by the Malabar District of the Madras Presidency and the State of Travancore. Very little is known of its early history. According to tradition, the Rajas of Cochin hold the territory in right of descent from Cheraman Perumal, who governed the whole country of Kerala, including Travancore and Malabar, as Viceroy of the Chola Kings about the beginning of the ninth century, and afterwards established himself as an independent Ruler. In 1502, the Portuguese were allowed to settle in what is now British Cochin and in the following year they built a fort and established commercial relations in the State. In the earlier wars with the Zamorin of Calicut, they assisted the Rajas of Cochin. The influence of the Portuguese on the west coast began to decline about the latter part of the seventeenth century, and in 1663 they were ousted from the town of Cochin by the Dutch with whom the Raja entered into friendly relations. About a century later, in 1759, when the Dutch power began to decline, the Raja was attacked by the Zamorin of Calicut, who was expelled with the assistance of the Raja of Travancore. In 1776, the State was conquered by Hyder Ali, to whom it remained tributary and subordinate, and subsequently to his son, Tippu Sultan. A treaty was concluded in 1791 between the Raja and the East India Company, by which His Highness agreed to become tributary to the British Government for his territories which were then in the possession of Tippu, and to pay a subsidy.

His Highness Raja Sri Sir Rama Varmah, G.C.S.I., G.C.I.E., who was born in 1852, and who ascended the Masnad in 1895, having abdicated in December, 1914, His Highness Sri Sir Rama Varmah, G.C.I.E., who was born on 6th October, 1858, succeeded to the throne and was duly installed as Raja on the 21st January 1915. The administration is conducted under the control of the Maharaja whose chief Minister

and Executive Officer is the Dewan, Rao Bahadur P. Narayana Menon, I.S.O. The forests of Cochin form one of its most valuable assets. They abound in teak, ebony blackwood, and other valuable trees. Rice forms the staple of cultivation. Cocoanuts are largely raised in the sandy tracts, and their products form the chief exports of the State. Communications by road and back-waters are good, and the State owns a line of railway from Shoranore to Ernakulam, the capital of the State, and a Forest Steam Tramway used in developing the forests. The State supports a force of 25 officers and 250 men.

Political Agent: C. W. E. Cotton, C.I.E., I.C.S.

Pudukkottai.—This State is bounded on the north and west by Trichinopoly, on the south by Ramnad and on the east by Tanjore. In early times a part of the State belonged to the Chola Kings and the southern part to the Pandya Kings of Madura. Relations with the English began during the Carnatic wars. During the siege of Trichinopoly by the French in 1752, the Tondiman of the time did good service to the Company's cause by sending them provisions, although his own country was on at least one occasion ravaged as a consequence of his fidelity to the English. In 1756 he sent some of his troops to assist Muhammad Yusuf, the Company's sepoy commandant, in settling the Madura and Tinnevelly countries. Subsequently he was of much service in the wars with Haidar Ali. His services were rewarded by a grant of territory subject to the conditions that the district should not be alienated (1806). Apart from that there is no treaty or arrangement with the Raja. The present ruler is His Highness Sri Brihadamba Das, Sri Marthanda Bhairava Tondiman Bahadur, G.C.I.E., who is eighth in descent from the founder of the family. He succeeded in 1886. The Collector of Trichinopoly is ex-officio Political Agent for Pudukkottai. The administration of the State, under the Raja, is entrusted to a Regent. The various departments are constituted on the British India model. The principal food crop is rice. The forests, which cover about one-seventh of the State, contain only small timber. There are no large industries. The State is well provided with roads, but Pudukkottai is the only municipal town in the State.

Political Agent: P. Macqueen, I.C.S.

Banganapalle.—This is a small State in two detached portions which in the eighteenth century passed from Hyderabad to Mysore and back again to Hyderabad. The control over it was ceded to the Madras Government by the Nizam in 1800. The present ruler is Nawab Meer Fazle Ali Khan Bahadur. The chief food grain is cholam. The Nawab pays no tribute and maintains no military force.

Political Agent: C. F. Brackenbury, I.C.S.

Sandur.—The State is almost surrounded by the District of Bellary, the Collector of which is the Political Agent. After the destruction of the Empire of Vijayanagar in 1565 the State came to be held by semi-independent chiefs under the nominal sovereignty of the Sultan of Bijapur and in 1728 one of these chiefs, a Poligar of Bedar tribe, was turned out by an ancestor of the present Raja named Siddoji Rao of the Bhosle family of the famous Maharatta Chief Sivaji; they were Senapathies of Sivaji. In Siva Rao's time the State came under the Madras Government and his heirs in perpetuity with full powers, Civil and Criminal. In 1876 the title of Raja was conferred on the Chief as a hereditary distinction. The present Ruler is Raja Srimanth Venkata Rao Raj Saheb. He was born in 1892. He married Rani Srimanth Tara Raje, sister of the late Raja of Akalkot, in the Bombay Presidency. The State is administered by the Raja and the Dewan (Meherban T. Ramachandra Ayyar). The Raja pays no tribute and maintains no military force. The most important staple crop is cholam. Teak and sandalwood are found in small quantities in the forests.

The minerals of the State possess unusual interest. The hematites found in it are probably the richest ore in India. An outcrop near the southern boundary forms the crest of a ridge 150 feet in height, which apparently consists entirely of pure steel grey crystalline hematite (specular iron) of intense hardness. Some of the softer ores used to be smelted, but the industry has been killed by the cheaper English iron. Manganese deposits have also been found in three places, and during 1911 to 1914 over 223,000 tons of manganese ore were transported by one company.

Political Agent: A. C. Duff, I.C.S.

INDIAN STATES UNDER LOCAL GOVERNMENTS.

More than a half of the total number of the very various units counted as Indian States in India are under the Government of Bombay. The characteristic feature of the Bombay States is the great number of petty principalities; the peninsula of Kathiawar alone contains nearly two hundred separate States. The recognition of these innumerable jurisdictions is due to the circumstance that the early Bombay administrators were induced to treat the *de facto* exercise of civil and criminal jurisdiction by a landholder as carrying with it a quasi-sovereign status. As the rule of succession by primogeniture applies only to the larger principalities, the minor States are continually suffering disintegration. In Bombay, as in Central India, there are to be found everywhere the traces of disintegration and disorder left by the eighteenth century. In no part of India is there a greater variety of principalities. Some of the largest are of modern origin, having been founded by Marathas in the general scramble for power in the middle of the eighteenth century, but the Rajput houses date from earlier times. Interesting traces of ancient history are to be found at Sachin, Janjira and Jafarabad, where chiefs of foreign ancestry, descended from Abyssinian admirals of the Deccan fleets, still remain. A few aboriginal chiefs, Bhils or Kolis, exer-

cise an enfeebled authority in the Dangs and the hilly country that fringes the Mahi and the Narbada rivers.

The control of the Bombay Government is exercised through Political Agents, whose positions and duties vary greatly. In some of the more important States their functions are confined to the giving of advice and the exercise of a general surveillance; in other cases they are invested with an actual share in the administration; while States whose rulers are minors—and the number of these is always large—are directly managed by Government officers. Some of the States are subordinate to other States, and not in direct relations with the British Government; in these cases the status of the feudatories is usually guaranteed by Government. The powers of the chiefs are regulated by treaty or custom, and range downwards to a mere right to collect revenue in a share of a village, without criminal or civil jurisdiction, as in the case of the petty chiefs of Kathiawar.

States to be Transferred.—In November 1923 the Government of India issued the following memorandum relating to the transfer of States under the Bombay Government to a position of more direct relationship with the Central Government:—"In pursuance of the general policy advocated in paragraph 310 of the Montagu-Chelmsford Report, measures have already been taken in various parts of India to place the more important Indian States in direct relations with the Government of India. The States in the Punjab were brought into direct relations with the Government of India two years ago, and those in Madras on the 1st October last.

"The application of this policy to the States situated in the Bombay Presidency presented special difficulties, owing to the large number of States concerned and the interlacing of their territories with neighbouring British districts. It would, however, obviously be inconsistent and undesirable to exclude this very important body of Indian States for an indefinite period from a policy which was always intended for application throughout India, and it is confidently anticipated that the difficulties referred to above can be successfully surmounted provided that the policy is gradually applied and with due consideration to the circumstances.

"The Government of India, with the approval of the Secretary of State, have accordingly decided to assume by stages direct relations with the Bombay States. The first stage will be carried out at an early date as soon as the necessary administrative arrangements are completed. This stage represents a substantial advances towards the ultimate goal. It involves the creation of a new residency in direct relation with the Government of India, comprising the whole of the compact area which at present goes to make up the Kathiawar, Cutch and Palanpur Agencies under the Government of Bombay.

"No decision has been arrived at regarding the nature and date of further stages in the process of transfer. Such decisions must be largely dependent on the experience gained during the first stage, but it is not proposed to take any further steps earlier than five years hence."

The Indian States in the Bombay Presidency number 377. Area 63,000 square miles. Population (1921) 7,409,429. They are divided for administrative purposes into the following agencies:—Belgaum Agency, 1 State (Savantvadi) Bijapur Agency, 1 State (Jath); Cutch Agency, 1 State; Dharwar Agency, 1 State (Savanur); Kaira Agency, 1 State (Cambay); Kathiawar Agency, 187 States (principal States, Junagadh, Nawanagar, Bhavnagar, Dhrangadhra, Porbandar, Morvi, Gondal); Kolaba Agency, 1 State (Janjira); Kolhapur Agency, 9 States (principal State, Kolhapur, with 9 feudatory States); Mahi Kantha Agency, 51 States (principal State, Idar); Nasik Agency, 1 State (Surgana), Palanpur Agency, 17 States (principal States, Palanpur and Radhanpur); Poona Agency, 1 State (Bhor); Rewa Kantha Agency, 62 States (principal State, Rajpipla); Satara Agency, 2 States (Aundh and Phaltan) Sholapur Agency, 1 State (Akalkot) Sukkur Agency, 1 State (Khairpur); Surat Agency, 3 States (Baroda, Dharampur and Sachin); Thana Agency, 1 State (Jawhar). The table below gives details of the area, etc., of the more important States:—

State.	Area in sq. miles.	Population. (in 1921).	Approx. Revenue in lakhs. of rupees.
Bhavnagar ..	2,860	426,404	70
Cutch	7,616	484,570	38
Dhrangadhra .	1,167	88,406	25
Gondal ..	1,024	167,071	36
Idar	1,660	226,355	10
Junagadh ..	3,336	465,493	52 (gross)
Khairpur ..	6,050	193,152	24
Kolhapur ..	3,217	832,726	87
Morvi ..	813	96,697	9
Navanagar ..	3,791	345,353	58
Palanpur ..	1,750	236,694	9
Porbandar ..	642	101,881	21
Radhanpur ..	1,150	67,789	7
Rajpipla ..	1,517	168,454	18

Bijapur Agency.—This comprises the Satara Jaghir of Jath (980·8 square miles in area). On the annexation of Satara, in 1849, Jath and Daphlapur like other Satara Jaghirs, became feudatories of the British Government. The latter has more than once interfered to adjust the pecuniary affairs of the Jath Jaghir and in consequence of numerous acts of oppression on the part of the then ruler was compelled to assume direct management from 1874 to 1885. The small estate of Daphlapur with an area of 96·8 square miles lapsed to the Jath Jaghir on the demise of its last ruler Ranibai Saheb Daphle in January 1917. The Chief of Jath who belongs to the Maratta caste, ranks as a first class Sardar. He holds a sanad of adoption, and the succession follows the rule of primogeniture. The gross revenue of the State is about 3 lakhs chiefly derived from land revenue. The Jath State pays to the British Government Rs. 6,400 per annum in lieu of horse contingent and Rs. 4,840 on account of Sardeshmukhi rights.

Political Agent.—C. G. Henderson, I.C.S., Collector of Bijapur.

Cutch.—The State is bounded on the north and north-west by Sind, on the east by the Palanpur Agency, on the south by the Peninsula of Kathiawar and the Gulf of Cutch and the south-west by the Indian Ocean. Its area, exclusive of the great salt marsh called the Rann of Cutch, is 7,616 square miles. The capital is Bhuj, where the ruling Chief (the Maharao His Highness Maha Rao Sri Khengarji Saval Bahadur, G.C.S.I., G.C.I.E., resides. From its isolated position, the special character of its people, their peculiar dialect, and their strong feeling of personal loyalty to their ruler, the peninsula of Cutch has more of the elements of a distinct nationality than any other of the dependencies of Bombay. The earliest historic notices of the State occur in the Greek writers. Its modern history dates from its conquest by the Sind tribe of Samma Rajputs in the fourteenth century. The section of the Sammas forming the ruling family in Cutch were known as the Jadejas or 'children of Jada'. The British made a treaty with the State in 1815. There is a fair proportion of good arable soil in Cutch, and wheat, barley and cotton are cultivated. Both iron and coal are found but are not worked. Cutch is noted for its beautiful embroidery and silverwork and its manufactures of silk and cotton are of some importance. Trade is chiefly carried by sea. The ruling chief is the supreme authority. A few of the Bhayats are invested with jurisdictional powers in varying degrees in their own Estates and over their own ryots. A notable fact in connection with the administration of the Cutch State is the number and position of the Bhayat. These are Rajput nobles forming the brotherhood of the Rao. They were granted a share in the territories of the ruling chief as provision for their maintenance and are bound to furnish troops on an emergency. The number of these chiefs is 137, and the total number of the Jadeja tribe in Cutch is about 16,000. The British military force having been withdrawn from Bhuj, the State now pays Rs. 82,257 annually as an Anjar equivalent to the British Government. The military force consists of about 1,000 in addition to which, there are some irregular infantry, and the Bhayats could furnish on requisition a mixed force of four thousand.

Political Agent: Lt.-Col. Edward O'Brien.

Dharwar Agency.—This comprises only the small State of Savanur. The founder of the reigning family who are Mahomedans of Pathan origin was a Jagirdar of Emperor Aurangzeb. At the close of the last Maratha War the Nawab of Savanur, whose conduct had been exceptionally loyal, was confirmed in his possessions by the British Government. The State pays no tribute. The principal crops are jowari and cotton. The area is 70 square miles and population 16,830. The revenue is about Rs. 1,47,432. The present chief is Captain Meherban Nawab Abdul Majid Khan Diler Jang Bahadur, Nawab of Savanur.

Political Agent: C. S. Campbell, C.B.E., I.C.S.

Kaira Agency.—This includes only the State of Cambay at the head of the Gulf of the same name. Cambay was formerly one of the chief ports of India and of the Anhilvada Kingdom. At the end of the thirteenth century it is said to have been one of the richest towns in India; at the beginning of the sixteenth century also it formed one of the chief centres of commerce in Western India. Factories were established there by the English and the Dutch. It was established a distinct State about 1730, the founder of the present family of Chiefs being the last but one of the Mahomedan Governors of Gujarat. The present Nawab is His Highness Mirza Hussein Yawar Khan who is a Shiah Mogul of the Najumisani family of Persia, and was born on the 16th May 1911. His father, the late Nawab Jaffar Ali Khan, died on 21st January 1915, leaving him a minor. The State is therefore under British Administration. The State pays a tribute of Rs. 21,024 to the British Government. Wheat and cotton are the principal crops. There is a broad gauge line from Cambay to Petlad, connecting with the B. B. & C. I Railway at Anand. Cambay is a first class State having full jurisdiction. Revenue is about eight lakhs. The area of the State is 350 square miles, population 71,715.

Political Agent: H. K. Kirpaland, I.C.S.

Administrator: V. K. Namjoshi.

Kathiawar Agency.—Kathiawar is the peninsula or western portion of the Province of Gujarat, Bombay. Its extreme length is about 220 miles and its greatest breadth about 165 miles, the area being 23,445 square miles. Of this total about 20,882 square miles with a population of 2,542,535 is the territory forming the Political Agency subordinate to the Government of Bombay, established in 1822, having under its control nearly 200 separate States whose chiefs divided amongst themselves the greater portion of the peninsula. The Kathiawar Agency is divided for administrative purposes into two divisions, Western and Eastern Kathiawar States (four prants—Jhalawar, Halar, Sorath and Gohilwar) and the States have since 1863 been arranged in seven classes. Since 1822 political authority in Kathiawar has been vested in the Political Agent (now Agent to the Governor) subordinate to the Government of Bombay. In 1902 the designations of the Political Agent and his Assistants were changed to those of Agent to the Governor and Political Agents of the prants. Since 1923 the Political Agents of Prants are designated as Political Agents of Divisions Before 1863, except for the criminal court of the Agent to the Governor, established in 1831, to aid the Darbars of the several States in the trial of heinous crimes, interference with the judicial administration of the territories was diplomatic, not magisterial; and the criminal jurisdiction of the first and second-class chiefs alone was defined. In 1863, however, the country underwent an important change. The jurisdiction of all the chiefs was classified and defined; that of chiefs of the first and second classes was made plenary; that of lesser chiefs was graded in a diminishing scale. The two Political Agents of the Divisions resident in the two divisions of Kathiawar, now exercise residuary jurisdiction with large civil and criminal powers. Each Political Agent of a Division has a deputy, who resides at the headquarters of the division, and exercises subordinate civil and criminal powers. Serious criminal cases are committed by the Deputies to the court of the Agent to the Governor, to whom also civil and criminal appeals

lic. The Agent to the Governor is aided in this work by an officer known as the Judicial Assistant, who is usually a member of the Indian Civil Service. Appeals from his decisions lie direct to the Governor of Bombay in Council in his executive capacity. The Agent to the Governor is assisted at Headquarters by a Personal Assistant and two Deputy Political Agents. Of the latter the Daftardar is head of the Hazur Office and the Hazur Accounts Officer attends to Treasury business. There is also a Special Deputy for Railways with headquarters at Rajkot.

Agent to the Governor in Kathiawar: Lt.-Col. W. M. P. Wood, C.I.E.

Bhavnagar.—This State lies at the head and west side of the Gulf of Cambay. The Gohel Rajputs, to which tribe the Ruler of Bhavnagar belongs, are said to have settled in the country about the year 1260, under Sajakji from whose three sons—Ranoji, Saranji and Shahji—are descended respectively the chiefs of Bhavnagar, Lathi and Palitana. An intimate connexion was formed between the Bombay Government and Bhavnagar in the eighteenth century when the chief of that State took pains to destroy the pirates which infested the neighbouring seas. The State was split up when Gujarat and Kathiawar were divided between the Peshwa and the Gaekwar; but the various claims over Bhavnagar were consolidated in the hands of the British Government in 1807. The State pays an annual tribute of Rs. 1,28,060 to the British Government, Rs. 3,581-8-0 as Peshkashi to Baroda, and Rs. 22,858 as Zortalbi to Junagadh. During the minority of His Highness the Minor Maharaja Krishna Kumarsinhji who succeeded to the *gadi* on the death of his father, Maharaja Sir Bhavsinhji, K.C.S.I., on 17th July 1919, the administration of the State has been entrusted to a Council of Administration. The Council consists of Sir Prabhashankar D. Pattani, K.C.I.E., as President, and Major R.C. Burke as Vice-President. The other members of the Council are Rao Bahadur T. K. Trivedi and Mr. S. A. Goghawala, M.A., LL.B., Bar-at-law. One noteworthy feature in the administration is the complete separation of judicial from executive functions and the decentralisation of authority is another. The authority and powers of all the Heads of Departments have been clearly defined, and each within his own sphere is independent of the others, being directly responsible to the Council.

The chief products of the State are grain, cotton, sugar-cane and salt. The chief manufactures are oil, copper and brass vessels and cloth. The Bhavnagar State Railway is 280 miles in length. The capital of the State is the town and port of Bhavnagar, which has a good and safe harbour for shipping and carries on an extensive trade as one of the principal markets and harbours of export for cotton in Kathiawar. Bhavnagar supports 268 State Lancers and 222 State Infantry.

Population (in 1921) was 426,404 of whom 86 per cent. were Hindus and 8 per cent. Mahomedans. The average income for the last five years was Rs. 68,43,000 and the average expenditure Rs. 58,18,790.

Dhrangadhra State is a State of the First Class in Kathiawar with a population of nearly one lakh and an area of 1,167 square miles exclusive of the Dhrangadhra portion of the Runn of Kutch. The ruler of Dhrangadhra is the head of the Jhala family of Rajputs, originally called the Makvanas. This Rajput clan is of great antiquity having migrated to Kathiawar from the North, establishing itself first at Patri in the Ahmedabad District, thence moving to Halvad and finally settling in its present seat. Being the guardians of the North-Eastern marches of Kathiawar they had to suffer repeatedly from the successive inroads of the Mahomedans into that Peninsula, but after suffering the various vicissitudes of war they were confirmed in their possession of Halvad, its surrounding territories and the salt-pans attached thereto by an Imperial Firman issued by Emperor Aurangzeb. The States of Vankaner, Limbdi, Wadhwan, Chuda, Sayla and Than-Lakhtar are offshoots from Dhrangadhra. His Highness Maharana Shri Sir Ghanshyamsinhji, G.C.I.E., K.C.S.I., Maharaja Raj Saheb, is the ruler of the State and the titular head of all the Jhalas. The administration is conducted under the Maharaja's directions by the Dewan Rana Shri Mansinhji S. Jhala, C.I.E. The soil being eminently fit for cotton cultivation, the principal crops are long stapled cotton and cereals of various kinds. Excellent building and ornamental stone is quarried from the hills situated within the State. Wadagra salt of an excellent quality with Magnesium chloride and other bye-products of salt are also manufactured at the State Salt works at Kuda which offer practically in exhaustible supplies for their manufacture. The capital town is Dhrangadhra, a fortified town, 75 miles west of Ahmedabad.

Dhrangadhra State owns the Railway from Wadhwan Junction to Halvad, a distance of 40 miles, which is worked by the B. B. & C. I. Railway. The State has been authorised to extend this line up to Maliya on the borders of the Runn.

Gondal State.—The Ruling Prince of Gondal is a Rajput of the Jadeja stock with the title of H. H. Thakore Sahib, the present Ruler being H. H. Shri Bhagvat Sinhji, G.C.I.E. The early founder of the State, Kumbhoji I., had a modest estate of 20 villages. Kumbhoji II., the most powerful Chief of the House, widened the territories to almost their present limits by conquest; but it was left to the present ruler to develop its resources to the utmost, and in the words of Lord Reay, Governor of Bombay, by its "importance and advanced administration" to get it recognised as a First Class State. The State pays a tribute of Rs. 1,10,721. The chief products are cotton and grain and the chief manufactures are cotton and woollen fabrics and gold embroidery. Gondal has always been pre-eminent amongst the States of its class for the vigour with which public works have been prosecuted, and was one of the earliest pioneers of railway enterprise in Kathiawar, having initiated the Dhasa-Dhoraji line, it owns the Dhasa-Jam Jodhpur section called the Gondal Railway and manages it along with the Jetalsar-Rajkot Railway and H. H. Gaekwad's Khijadiya-Dhari line; it subsequently built the Jetalsar-Rajkot Railway in partnership

with other Native States in Kathiawar. There are no export and import dues, the people being free from taxes and dues. Comparatively speaking Gondal stands first in Kathiawar in respect of the spread of education. Compulsory female education in the State has been recently ordered by His Highness. Rs. 13 lakhs has been spent on irrigation tanks and canals and water supply to the town of Gondal. The Capital is Gondal, a fortified town on the line between Rajkot and Jetalsar.

Junagadh State.—This is a first class State under the Kathiawar Political Agency and lies in the south-western portion of the Kathiawar Peninsula between 24° 44′ and 21° 53′ North latitude and 70° and 72° east longitude with the Halar Division of the province as its northern boundary, and Gohelwad Prant to its east. It is bounded on the south and west by the Arabian Sea. The State is divided into 13 Mahals. It has 16 ports of which the principal are Verawal and Mangrol. The principal rivers in the State are the Bhadar, Uben, Ozat, Hiran, Saraswati, Machhundri, Singhaoda, Meghal, Vrajni, Raval and Sabli. The capital town of Junagadh, which is one of the most picturesque towns in India, is situated on the slope of the Girnar and Datar Hills; while in antiquity and historical interest it yields to none. The Upperkote or old citadel contains interesting Buddhist caves and the whole of the ditch and neighbourhood is honeycombed with caves or their remains. There are a number of fine modern buildings in the town. The famous Ashoka inscription of the Buddhistic time carved out on a big bolster of black granite stone is housed at the foot of the Girnar Hill which is sacred to the Jains, the Shivaites, the Vaishnavaites and other Hindus. To the south-west of the Girnar Hill lies the extensive forest of Gir comprising 494 sq. miles, 823 acres and 10 gunthas. It supplies timber and other natural products to the residents of the State and the neighbouring districts and is unique as the sole stronghold of the Indian lion. The area of the State is 3,336·9 square miles and the average revenue amounts to Rs. 56,60,945. The total population according to the census of 1921 was 465,493 of which 368,003 were Hindus, 90,091 Mahomedans, 7,216 Jains, 90 Christians, 53 Parsis, while 40 were of other castes. Until 1472 when it was conquered by Sultan Mahomed Begra of Ahmedabad, Junagadh was a Rajput State ruled by Chiefs of the Chudasama tribe. During the reign of the Emperor Akbar it became a dependency of Delhi under the immediate authority of the Mughal Viceroy of Gujarat. About 1735 when the representative of the Mughals had lost his authority in Gujarat, Sherkhan Babi, the ancestor of the present Babi Rulers, expelled the Mughal Governor, and established his own rule. The ruler of Junagadh first entered into engagements with the British Government in 1807. The principal articles of production in the State are cotton, bajri, juwar, sesamum, wheat, rice, sugarcane, cereals, grass, timber, stone, castor-seed, fish, country tobacco, groundnuts, cocoanuts, bamboos, etc., while those of manufacture are ghee, molasses, sugarcandy, copper and brass-ware, dyed cloth, gold and silver embroidery, pottery, hardware, leather, bamboo furniture, etc. The State pays a tribute of Rs. 28,394 annually to the Paramount Power and a *Peshkushi* of Rs. 37,210 to His Highness the Gaekwar; on the other hand, the State of Junagadh receives a tribute styled Zortalbi amounting to Rs. 92,421 from 134 States, a relic of the days of Mahomedan supremacy. The State maintains Junagadh State Forces the sanctioned strength of which is 173.

2. The Chief bears the title of Nawab; the present Nawab His Highness Mahabat Khan III is the ninth in succession and seventh in descent from His Highness Bahadurkhanji I, the founder of the Babi family of Junagadh in 1735 A. D. His Highness the Nawab Saheb is born on 2nd August 1900 and succeeded to the gadi in 1911, visited England in 1913-14, received his education at the Mayo College, Ajmer, and has been invested with full powers in March 1920. His Highness the Nawab Saheb is the Ruler of the Premier State in Kathiawar, ranks first amongst the Chiefs of Kathiawar, exercising plenary powers and enjoys a salute of 15 guns personal, 13 permanent and 15 local within the territorial limits of the Junagadh State.

Ruler:—His Highness Mahabat Khanj Rasulkhanji.

Heir-Apparent:—Mahomed Dilawar Khanji.

Navanagar State, on the southern shore of the Gulf of Cutch, has an area of 3,791 square miles. The Maharaja of Navanagar is a Jadeja Rajput by caste, and belongs to the same family as the Rao of Cutch. The Jadejas originally entered Kathiawar from Cutch, and dispossessed the ancient family of Jethwas (probably a branch of Jats) then established at Ghumli. The town of Navanagar was founded in 1540. The present Jam Sahib is the well-known cricketer, H. H. Jam Sahib Shri Ranjitsinhji Vibhaji, who was born in 1872 and succeeded in 1907. The principal products are grain, cotton and oil-seeds, shipped from the ports of the State. A small pearl fishery lies off the coast. The State pays a tribute of Rs. 1,20,093 per annum jointly to the British Government, the Gaekwar of Baroda and the Nawab of Junagadh. The State maintains two squadrons of Imperial Service Lancers. The Capital is Jamnagar a flourishing place, nearly 4 miles in circuit, situated 5 miles east of the port of Bedi. Population 345,353. Revenue nearly Rs. 60 lakhs.

Revenue Secretary: Gokulbhai B. Desai, Bar.-at-law.

Political Secretary: Parshuram B. Junnarkar, B.A., LL.B.

General Secretary: Hirabhai M. Mehta, B.A. (Cantab.), Bar-at-law.

Kolaba Agency.—This Agency includes the State of **Janjira** in the Konkan, a country covered with spurs and hill ranges and much intersected by creeks and backwaters. The ruling family is said to be descended from an Abyssinian in the service of one of the Nizam Shahi Kings of Ahmednagar at the end of the fifteenth century. The most noticeable point in its history is the successful resistance that it alone, of all the states of Western India, made against the determined attacks of the Marathas. The British, on succeeding the

Marathas as masters of the Konkan, refrained from interfering in the internal administration of the State. The chief is a Sunni Mahomedan; by race a Sidi or Abyssinian, with a title of Nawab. He has a sanad guaranteeing succession according to Mahomedan law and pays no tribute. Till 1868 the State enjoyed singular independence, there being no Political Agent, and no interference whatever in its internal affairs. About that year the maladministration of the chief, especially in matters of police and criminal justice, became flagrant; those branches of administration were in consequence taken out of his hands and vested in a Political Agent. The last ruler, H. H. Nawab Sidi Sir Ahmed Khan, G.C.I.E., died on 2nd May 1922, and was succeeded by his son Sidi Muhammad Khan, born on the 7th March 1914. The area of the State is 377 square miles, and the population 98,530. The average revenue is 6 lakhs. The State maintains an irregular military force of 246. The capital is Janjira, 44 miles south of Bombay Island. The Chief is entitled to a dynastic salute of 11 guns. In recognition of services rendered in connection with the war the last ruler's salute was raised on the 1st January 1918 to 13 guns personal and 13 permanent within the limits of his own State from the 1st January 1921.

Kolhapur Agency.—Kolhapur is a State with an area of 3,217 square miles and population of 833,726. Subordinate to Kolhapur are nine feudatories, of which the following five are important: Vishalgarh, Bavda, Kagal (senior), Kapsi and Ichalkaranji. The ruling house traces its descent from a younger son of Shivaji, founder of the Maratha power. The prevalence of piracy from the Kolhapur port of Malvan compelled the Bombay Government to send expeditions against Kolhapur in 1765, and again in 1792, when the Raja agreed to give compensation for the losses which British merchants had sustained since 1785, and to permit the establishment of factories at Malvan and Kolhapur. Internal dissensions and wars with neighbouring States gradually weakened the power of Kolhapur. In 1812 a treaty was concluded with the British Government, by which, in return for the cession of certain ports, the Kolhapur Raja was guaranteed against the attacks of foreign powers; while on his part he engaged to abstain from hostilities with other States, and to refer all disputes to the arbitration of the British Government. The principal articles of production are rice, jawar and sugar-cane and the manufactures are coarse cotton and woollen cloths, pottery and hardware. The State pays no tribute, and supports a military force of 690. The nine feudatory estates are administered by their holders, except in the case of two whose holders are minors. Kolhapur proper is divided into five pethas or talukas and four mahals and is managed by the Maharaja, who has full powers of life and death. The Southern Mahratta Railway passes through the State and is connected with Kolhapur City by a line which is the property of the State.

Resident and Senior Political Agent for Kolhapur and the Southern Mahratta Country —Lieut.-Col. J. W. B. Merewether, C.I.E.
Lieut.-Col.R. S. Pottinger (*Acting*).

Southern Maratha Country States.—The Agency consists of the following eight States:—

Name of State.	Area in square miles.	Population.	Tribute to British Government.	Average revenue.
			Rs.	Rs.
Sangli	1,136	221,321	1,35,000	12,05,236
Miraj (Senior)	342	82,605	12,558	3,67,300
Miraj (Junior)	196¼	34,626	7,389	3,12,048
Kurundwad (Senior)	182	38,773	9,619	1,64,335
Kurundwad (Junior)	114	34,288	....	1,79,712
Jamkhandi	524	101,195	20,516	7,32,104
Mudhol	368	60,140	2,672	3,87,456
Ramdurg	169	34,007	....	1,89,809
Total ..	3,032	608,363	1,87,754	35,38,000

Mahi Kantha.—This group of States has a total area of 3,124 square miles and a population of 450,478, including that of **Idar**, which is 226,351. The revenue is about 14 lakhs. The Agency consists of the first class State of Idar and 51 small States. The Native State of Idar covers more than half the territory. It has an area of 1,668 square miles and an average revenue of Rs. 12,24,732. The present Ruler of Idar, Lieutenant-Colonel H. H. Maharaja Dhiraj Maharajaji Shri Sir Dowlat Singhji, K.C.S.I., is a Rajput of the Rathod clan. He was born in 1878 and ascended the Gadi in 1911. His Highness had been on active service in Egypt during the great war. The subordinate feudatory Jagirdars are divided into 3 classes. The Jagirdars comprised in the class of Bhayats are cadets of the Ruling House to whom grants have been made in maintenance or as a Jivarak. Those known as Sardar Pattawats are descendants of the military leaders who accompanied Anand Singh and Bal Singh,

the founder of the present Marwar dynasty when they took possession of the State in the first quarter of the eighteenth century and to whom grants of land were made by Maharaja Anand Singh in 1741 A. D. on condition of military service. In the class of the Bhoomias are included all subordinate Feudatories who were in possession of their Pattas prior to the advent of the present Marwar dynasty. The Pattas which they hold were acquired by their ancestors by grant from the former Rao rulers of the State. The Maharaja receives Rs. 52,427 annually on account of Khichdi and other Rajhaks from its subordinate Sardars, the tributary Talukas of the Mahi Kantha Agency and others and pays Rs. 30,340 as Ghasdana to Gaekwar of Baroda through the British Government. Of the smaller states Polo and Danta are important two second class States. The names of their Chiefs are Rao Shri Hamir Singhji, and Maharana Shri Hamir Singhji. Nine other States are of some importance and the remainders are estates belonging to Rajput or Koli Thakurs, once the lawless feudatories of Baroda and still requiring the anxious supervision of the Political Officer.

Political Agent—Lt.-Col. A. H. E. Mosse, I.A.

Nasik Agency.—This consists of one State Surgana, lying in the north-west corner of the Nasik District. Surgana has an area of 360 square miles and a population of 14,838. The ruling chief is Prataprao Shankarrao Deshmukh, who is descended from a Maratha Pawar family. He rules the State subject to the general control of the Collector and Political Agent, Nasik. The revenue of the State is about Rs. 36,000.

Palanpur Agency.—This group of States in Gujarat comprises two first class States, Palanpur and Radhanpur, and a few minor States and petty talukas. Its total area is 6,393 square miles and the population is 515,092. The gross revenue is about 14½ lakhs. The territory included in the Agency has, like the more central parts of Gujarat, passed during historical times under the sway of the different Rajput dynasties of Anhilvada, the early Khilji and Tughlak Shahi dynasties of Delhi, the Ahmedabad Sultans, the Mughal Emperors, the Mahrattas, and lastly the British. The State from which the Agency takes its name is under the rule of Captain His Highness Zubadtul-Mulk Dewan Mahakhan Talcy Muhammad Khan Bahadur, K.C.I.E., K.C.V.O., Nawab of Palanpur. His Highness is descended from the Usafzai Lohani Pathan, an Afghan tribe who appeared in Gujarat in the 14th century. The connection of the British Government with the State dates from 1819 in which year the Ruler was murdered by body of nobles. Two high roads from Ahmedabad pass through the State and a considerable trade in cloth, grain, sugar and rice is carried on. The State pays tribute of Rs. 38,000 to the Gackwar of Baroda. The capital is Palanpur situated on the B. B. & C. I. Railway, and is the junction station of the Palanpur-Deesa Branch of B. B. & C. I. Railway. It is a very old settlement of which mention was made in the 8th century.

Political Agent—Lt.-Col. N. S. Coghill.

Radhanpur is a State, with an area of 1,150 square miles, which is held by a branch of the Babi family, who since the reign of Humayun have always been prominent in the annals of Gujarat. The present chief is H. H. Jalalud-din Khanji, the Nawab of Radhanpur. He has powers to try his own subjects even for capital offences without permission from the Political Agent. The State maintains a Police force of 208. The principal products are cotton, wheat and grain. The capital is Radhanpur town, a considerable trade centre for Northern Gujarat and Cutch.

Rewa Kantha Agency.—This Agency, with an area of 4,956 square miles and a population of 665,099, comprises 61 States, of which Rajpipla is a first class State, 5 are second class, one is third class and the rest are either petty States or talukas. Among those petty States are Sanjeli in the north, Bhadarva and Umeta in the west, Jambhughoda in the south-east, and two groups of Mehwas. The 26 Sankheda Mehwas petty estates lie on the right bank of the Narbada, while the 24 Pandu Mehwas petty estates including Dodka, Anghad and Raika, which together form the Dodka Mehwas are situated on the border of the Mahi.

The following are the statistics of area and population for the principal States:—

State.	Area in square miles.	Population.
Balasinor	189	44,030
Bariya	813	137,291
Chhota Udaipur	873	125,702
Lunavada	388	83,136
Narukot (Jambhughoda) ..	143	9,540
Rajpipla	1,517	168,425
Sunth	394	70,957
Other Jurisdictional States, Civil Stations and Thana Circles	639	113,977

Under the first Anhilvada dynasty (746-961) almost all the Rewa Kantha lands except Champaner were under the government of the Bariyas, that is, Koli and Bhil chiefs. In the eleventh, twelfth and thirteenth centuries chiefs of Rajput or part Rajput blood, driven south and east by the pressure of Muhammadan invasions, took the place of the Koli and Bhil leaders. The first of the present States to be established was the house of the Maharaja of Rajpipla.

Rajpipla.—This State lies to the south of the Narbada. It has an area of 1,517½ square miles. The lands are rich and very fertile and except a few forest-clad hills are suitable and available for cultivation in large quantities in the south-east talukas. The family of the Maharaja of Rajpipla, H. H. Maharana Shri Vijayasinjhi, is said to derive its origin from a Rajput of the Gohel clan. The State pays an annual sum of Rs. 50,000 on account of Ghasdana to the Gackwar of Baroda. Cotton is the most important crop in the State. In the hills there are valuable teak forests. The capital is Nandod, which is connected with Anklesvar by railway built by the State.

Satara Jagirs.—Under this heading are grouped the following six States:—

State.	Area in sq. miles.	Population.	Revenue in lakhs.
Aundh	501	68,995	3
Phaltan	397	55,996	2
Bhor	925	144,601	5
Akalkot	498	89,082	4
Jath	884	69,810	2
Daphlapur	96	8,833	2

These were formerly feudatory to the Raja of Satara. In 1849 five of them were placed under the Collector of Satara, and Akalkot under the Collector of Sholapur. Subsequently, the Jagir of Bhor was transferred to the Collector of Poona and Jath and Daphlapur to the Southern Mahratta country. The last two are now under the Collector of Bijapur. The ruling chiefs are as follows:—

State.	Ruling Chiefs.	Tribute to British Government.
		Rs.
Aundh	Bhavanrao Shrinivasrao *alias* Baba Saheb, Pant Pratinidhi ..	....
Phaltan	Mudhojirav Janrav Nimbalkar	9,600
Bhor	H. H. Shankarrav Chimnaji, Pant Sachiv	4,684
Akalkot		14,512
Jath	Ramrav Amritrav *alias* Aba Saheb Daphle	6,400
Daphlapur.. ..	Rani Bai Saheb Daphle, widow of Ramchandrarav Venkatrav Chavan Daphle.	....

Savantwadi.—This State has an area of 925 square miles and population of 206,440. The average revenue is Rs. 6,37,736. It lies to the north of the Portuguese territory of Goa, the general aspect of the country being extremely picturesque. Early inscriptions take the history of the State back to the sixth century. So late as the nineteenth century the ports on this coast swarmed with pirates and the country was very much disturbed. The present chief is Khem Savant V. *alias* Bapu Saheb Bhonsle. Rice is the principal crop of the State, and it is rich in valuable teak. The sturdy Marathas of the State are favourite troops for the Indian Army and supply much of the immigrant labour in the adjacent British districts. The Capital is Savantvadi, also called Sundar Vadi, or simply Vadi.

Sholapur Agency.—This contains the State of Akalkot which forms part of the tableland of the Deccan. It has an area of 498 square miles and a population of 81,250. In the beginning of the eighteenth century the Akalkot territory, which had formerly been part of the Mussulman kingdom of Ahmednagar, was granted by the Raja of Satara to a Maratha Sardar, the ancestor of the present chief, subject to the supply of a contingent of horse. In 1849 after the annexation of Satara, the Akalkot Chief became a feudatory of the British Government.

Baria.—The State has an area of 813 square miles with a population of 137,291 and is situated in the heart of the Panchmahals district. The Capital Devgad Baria is reached by road from Piplod station on the B. B. & C. I. Railway, at a distance of eight miles. The average revenue of the State is about 8 lakhs. The State enjoys plenary powers. The Ruler Captain His Highness Maharaol Shree Sir Ranjitsinhji, K.C.S.I., is the direct descendant of the Great House of Kichhi Chowhan Rajputs who ruled over Gujrat for 244 years with their capital at Champaner, with the proud title of Pavapatis. His family has the noblest historical traditions. The state pays no tribute either to the British Government or any other Indian state. He enjoys a salute of eleven guns. He served in France and Flanders in the Great European War and in the Afghan War, 1919. The staple crop is maize. The forests are rich in teakwood and all sorts of jungle produce. There is a large scope for forest industries.

The Sukkur Agency.—This consists of the Khairpur State, a great alluvial plain in Sind. It has an area of 6,050 square miles and a population of 1,93,152, and revenue of over 24 lakhs. The present chief, H. H. Mir Ali Nawaz Khan, belongs to a Baloch family called Talpur. Previous to the accession of this family on the fall of the Kalohra dynasty of Sind in 1783, the history of Khairpur belongs to the general history of Sind. In that year Mir Fateh Ali Khan Talpur established himself as Rais or ruler of Sind; and subsequently his nephew, Mir Sohrab Khan Talpur, founded the Khairpur branch of the Talpur family. In 1832 the individuality of the Khairpur State, as separate from the other Talpur Mirs in Sind,

was recognised by the British Government in a treaty, under which the use of the river Indus and the roads of Sind were secured to the British. The chief products of the State are oil-seeds, ghee, hides, tobacco, fuller's earth, carbonate of soda, cotton, wool and grain. The manufactures comprise cotton fabrics and various kinds of silverware and metal work. There is an industrial school at the capital where lacquer work, carpets, pottery, etc., are produced. The Railway from Hyderabad to Rohri runs through the whole length of the State. The rule of the Mir is patriarchal, but many changes have been made in recent years introducing greater regularity of procedure into the administration. The Wazir, an officer sent from British service, conducts the administration under the Mir. The State supports a military force of 354 rank and file composed of 216 Infantry, 72 Transport, 24 Cavalry and 42 Band and Bag-pipes including an Imperial Service Camel and Baggage Corps which is 139 strong and served at the Front.

Political Agent: The Collector of Sukkur.

Surat Agency.—This is a small group of three second class States under the Political Agent, Surat.

State.	Ruling Chiefs.	Area in sq. miles.	Population (1921).
Dharampur ..	Maharana Shri Vijayadevji Mohandevji	704	95,182
Bansda ..	Maharaval Shri Indrasinhji Pratapsinhji	215	40,153
Sachin ..	His Highness Nawab Sidi Ibrahim Muhammad Yakut Khan Mubazarat Daula Nasrat Jung Bahadur.	49	19,077

The joint revenue of these States is 22 lakhs. Tribute is paid to the British Government of Rs. 9,154. There is also attached to this Agency a tract of country known as the Dangs, which has an area of 999 square miles and a population of 29,353 and a revenue of Rs. 30,000. The country is divided into 14 Dangs or States of very unequal area, each under the purely nominal rule of a Bhil Chief with the title of Raja, Naik, Pradhan or Povar.

Thana Agency.—This includes the State of Jawhar, in the Thana District, on a plateau above the Konkan plain. It has an area of 310 square miles and a population of 49,662 and revenue of 4½ lakhs. Up to 1294, the period of the first Mahomedan invasion of the Deccan, Jawhar was held by a Varli, not a Koli chief. The first Koli chief obtained his footing in Jawhar by a device similar to that of Dido, when he asked for and received as much land as the hide of a bull would cover. The Koli chief cut a hide into strips, and thus enclosed the territory of the State. The present chief is Raja Vikramshah Patangshah, who administers the State, assisted by a Karbhari under the supervision of the Collector of Thana who is Political Agent of the State.

UNDER THE GOVERNMENT OF BENGAL.

Cooch Behar.—This State, which at one time comprised almost the whole of the Northern Bengal, Assam and a part of Bhutan now known as the Duars, is a low-lying plain in North Bengal. It has an area of 1,307 square miles, a population of 592,472 and a revenue of nearly 33 lakhs. By the demise of the late Maharaja His Highness Maharaja Sir Jitendra Narayan Bhup Bahadur in December 1922 in England, his eldest son Yuvaraj Kumar Jagaddipendra Narayan (born on December 15, 1915) succeeded to the gadi at the age of 7, which necessitated a minority administration under the guidance of a Regent. His Highness the Maharaja belongs to the Kshatriya Varna of Kshatriya origin. The present Maharaja has three sisters Maharajkumaris Ila Devi (aetat 8), Ayesha Devi (aetat 4) and Meneka Devi (aetat 3) and one brother Maharajkumar Indrajit Narayan (aetat 5). Her Highness the Maharani Sahiba of Cooch Behar was appointed Regent under the wishes of the late Maharaja and administers the State on behalf of her minor son with a Council of Regency, comprising four members at present, of which Her Highness is the President. Cooch Behar once formed part of the famous kingdom of Kamrup. British connection with it began in 1772 when owing to inroads of the Bhuteas, the assistance of the East India Company was invoked. The chief products of the State are rice, jute, mustard seed and tobacco. The capital is Cooch Behar, which is reached by the Cooch Behar State Railway, a branch from the Eastern Bengal State Railway System.

Tripura.—This State lies to the east of the district of Tippera and consists largely of hills covered with dense jungles. It has an area of 4,116 square miles and a population of 3,04,437. The revenue from the State is about 14 lakhs and from the Zemindari in British territory a slightly smaller sum. The present ruler is Maharaja Birendra Kishore Deb Barman Manikya Bahadur, who is a Kshatriya by caste and comes of the Lunar race and is entitled to a salute of 13 guns. The military prestige of Tripura dates back to the fifteenth century and a mythical account of the State takes the history to an even earlier date. Both as regards its constitution and its relations with the British Government, the State differs alike from the large Native States of India, and from those which are classed as tributary. Besides being the ruler of Tripura, the Maharaja also holds a large landed property situated in the plains of the Districts of Tippera, Naokhali and Sylhet. This estate covers an area of 600 square miles, and is

held to form with the State an indivisible Raj. Disputes as to the right of succession have occurred on the occasion of almost every vacancy in the *gadi* producing in times gone by disturbances and domestic wars, and exposing the inhabitants to serious disorders and attacks from the Kukis, who were always called in as auxiliaries by one or other of the contending parties. The principles which govern succession to the State have recently, however, been embodied in a *sanad* which was drawn up in 1904. The chief products of the State are rice, cotton, *til*, tea and forest produce of various kinds, the traffic being carried chiefly by water. The administration is conducted by the Minister at Agartala, the capital, assisted by several assistants. The Ruler has full administrative powers and the State Courts are authorised to inflict capital punishment.

Political Agent: Magistrate and Collector of Tippera (*ex-officio*).

UNDER THE GOVERNMENT OF BIHAR AND ORISSA.

Under this Government there are the Chota Nagpur Feudatory States of Kharsawan and Seraikela, and the Orissa Feudatory States, 24 in number. The total area is 28,656 square miles, and the total population 3,959,669. The revenue is Rs. 84,16,352. The inhabitants are hill-men of Kolarian or Dravidian origin and their condition is still very primitive. The chief of **Kharsawan** belongs to a junior branch of the Porahat Raja's family. The State first came under the notice of the British in 1793, when, in consequences of disturbances on the frontier of the old Jungle Mahals, the Thakur of Kharsawan and the Kunwar of Saraikela were compelled to enter into certain agreements relating to the treatment of fugitive rebels. The chief is bound, when called upon, to render service to the British Government, but he has never had to pay tribute. His present sanad was granted in 1920. He exercises all administrative powers, executive and judicial, subject to the control of the Political Agent and Commissioner, Orissa Feudatory States. The Bengal Nagpur Railway runs through a part of the State. The adjoining State of Seraikela is held by the elder branch of the Porahat Raja's family.

Orissa Feudatory States.—This group of 24 dependent territories is situated between the Mahanadi Delta and the Central Provinces, and forms the mountainous background of Orissa. The names of the individual States are Athgarh, Talcher, Mayurbhanj, Nilgiri Keonjhar, Pal Lahara, Dhenkanal, Athmallik, Hindol, Narsinghpur, Baramba, Tigiria, Khanpara, Nayagarh, Ranpur, Daspalla and Baud. To these there were added in 1905 the following States: Bamra, Rairakhol, Sonpur, Patna and Kalahandi from the Central Provinces, and Gangpur and Bonai from the Chota Nagpur States. The total population is 3,807,172 with a revenue of Rs. 80,75,458. The Feudatory States have no connected or authentic history. Comprising the western and hilly portion of the province of Orissa they were never brought under the central government, but from the earliest times consisted of numerous petty principalities which were more or less independent of one another. They were first inhabited by aboriginal races, who were divided into innumerable communal or tribal groups each under its own chief or headman. These carried on incessant warfare with their neighbours on the one hand and with the wild beasts of the forests on the other. In course of time their hill retreats were penetrated by Aryan adventurers, who gradually overthrew the tribal chiefs and established themselves in their place. Tradition relates how these daring interlopers, most of whom were Rajputs from the north, come to Puri on a pilgrimage and remained behind to found kingdoms and dynasties. It was thus that Jai Singh became ruler of Mayurbhanj over 1,300 years ago, and was succeeded by his eldest son, while his second son seized Keonjhar. The chiefs of Baud and Daspalla are said to be descended from the same stock; and a Rajput origin is also claimed by the Rajas of Athmallik, Narsinghpur, Pal Lahara, Talcher and Tigiria. Nayagarh, it is alleged, was founded by a Rajput from Rewah, and a scion of the same family was the ancestor of the present house of Khandpara. On the other hand, the chiefs of a few States, such as Athgarh, Baramba and Dhenkanal, owe their origin to favourites or distinguished servants of the ruling sovereigns of Orissa. The State of Ranpur is believed to be the most ancient, the list of its chiefs covering a period of over 3,600 years. It is noteworthy that this family is admittedly of Khond origin, and furnishes the only known instance in which, amid many vicissitudes, the supremacy of the original settlers has remained intact. The States acknowledged the suzerainty of the paramount power and were under an implied obligation to render assistance in resisting invaders; but in other respects neither the ancient kings of Orissa nor their successors, the Mughals and Marathas, ever interfered with their internal administration. All the States have annals of the dynasties that have ruled over them; but they are made up in most part of legend and fiction and long genealogical tables of doubtful accuracy, and contain very few features of general interest. The British conquest of Orissa from the Marathas, which took place in 1803, was immediately followed by the submission of ten of the Tributary States, the chiefs of which were the first to enter into treaty engagements.

The States have formed the subject of frequent legislation of a special character. They were taken over from the Marathas in 1803 with the rest of Orissa; but, as they had always been tributary states rather than regular districts of the native governments, they were exempted from the operation of the general regulation system. This was on the ground of expediency only and it was held that there was nothing in the nature of British relations with the proprietors that would preclude their being brought under the ordinary jurisdiction of the British courts, if that should ever be found advisable. In 1882 it was held that the States did not form part of British India and this was afterwards accepted by the Secretary of State.

The staple crop in these States is rice. The forests in them were at one time among the best timber producing tracts in India, but until lately forest conservancy was practically unknown. The States have formed the subject of frequent legislation of a special character. The relations with the British Government are governed mainly by the sanads granted in similar terms to all the chiefs in 1804. They contain ten clauses reciting the rights, privileges, duties and obligations of the chiefs, providing for the settlement of boundary disputes, and indicating the nature and extent of the control of the Political Agent and Commissioner.

Political Agent and Commissioner: C. L. Philip.

UNDER THE GOVERNMENT OF THE UNITED PROVINCES.

Three States: Rampur, Tehri and Benares are included under this Government:—

State.	Area Sq. Miles.	Population.	Revenue in lakhs.
Rampur ..	892	453,607	52
Tehri (Garhwal)	4,200	318,482	8
Benares ..	875	362,735	25

Rampur is a fertile level tract of country. The ruler Colonel His Highness Alijah Farzandi Dilpizir-i-Daulat-Inglishia, Mukhlis-ud-Daulah, Nasir-ul-Mulk, Amir-ul-Umra, Nawab Sir Syed Mohammed Hamid Ali Khan Bahadur Mustaid Jung, G.C.S.I., G.C.I.E., G.C.V.O, A.D.C., to His Imperial Majesty the King Emperor. Born 31st August 1875, descended from the famous Sadats of Bahera. Succeeded in February 1889, His Highness is the sole surviving representative of the once great Rohilla power in India. He is the premier Ruler in the United Provinces, and rules over a territory of 892 square miles with a population of 4,53,607. His Highness is an enlightened Prince and is well educated in Arabic, Persian and English languages. He is a keen supporter of education for Mohammedans, and has travelled extensively in America and Europe. During the Mutiny of 1857 the then Nawab of Rampur displayed his unswerving loyalty to the British Government by affording pecuniary aid, protecting the lives of Europeans, and rendering other valuable services which were suitably recognised by the Paramount Power. This State contributes towards the defence of the Indian Empire by maintaining a well-equipped and well trained Infantry battalion called Rampur Infantry and a cavalry unit consisting of two squadrons called Rampur Lancers.

During the great War the Rampur Infantry was sent to East Africa where it rendered valuable services to the Imperial cause and returned to Rampur after a stay of about four years. A detachment of Rampur Lancers trained Government Horses at the Remount Depots of Bellary and Aurangabad while another escorted Government horses to Europe. During the Afghan War the two Regiments were sent on garrison duty in British India.

His Highness has three sons, the eldest Nawab Syed Raza Ali Khan Bahadur being the heir-apparent.

The State has an income of over fifty lakhs of rupees a year.

His Highness enjoys a permanent salute of 15 guns.

Tehri State (or Tehri-Garhwal).—This State lies entirely in the Himalayas and contains a tangled series of ridges and spurs radiating from a lofty series of peaks on the border of Tibet. The sources of the Ganges and the Jumna are in it. The early history of the State is that of Garhwal District, the two tracts having formerly been ruled by the same dynasty. Pradyumna Shah, the last Raja of the whole territory, was killed in battle, fighting against the Gurkhas; but at the close of the Nepalese War in 1815, his son received from the British the present State of Tehri. During the Mutiny the latter rendered valuable assistance to Government. He died in 1859 without issue, and was succeeded by his near relative Bhawani Shah; and he subsequently received a *sanad* giving him the right of adoption. The present Raja is Captain H. H. Narendra Shah, C.S.I. The principal product is rice, grown on terraces on the hill sides. The State forests are very valuable and there is considerable export of timber. The Raja has full powers within the State. A unit of Imperial Service Sappers is maintained. The capital is Tehri, the summer capital being Pratapnagar, 8,000 feet above the sea-level.

Agent to the Governor-General: The Governor of the U. P. of Agra and Oudh.

Benares.—The founder of the ruling family of Benares was one Mansa Ram, who entered the service of the Governor of Benares under the Nawab of Oudh in the early eighteenth century. His son, Balvant Singh, conquered the neighbouring countries and created a big state out of them over which he ruled till 1770. Raja Chet Singh succeeded him, but was expelled by Warren Hastings in 1781. In 1794, owing to the mal-administration of the estates which had accumulated under the Raja of Benares, an agreement was concluded by which the lands held by the Raja in his own right were separated from the rest of the province of which he was simply administrator. The direct control of the latter was assumed by the Government, and an annual income of one lakh of rupees was assured to the Raja while the former constituted the Domains. Within the Domains the Raja had revenue powers similar to those of a Collector in a British District, which were delegated to certain of his own officials. There was thus constituted what for over a century was known as the Family Domains of the Maharaja of Benares. On the 1st of April 1911 these Domains became a State consisting of the parganas of Bhadohi (or Konrh) and Chakia (or Kera Mangraur) with the town of Ramnagar and its neighbouring villages. The Maharaja's powers are those of a ruling chief, subject to certain

conditions, of which the most important are the maintenance of all rights acquired under laws in force prior to the transfer, the reservation to Government of the control of the postal and telegraph systems, of plenary criminal jurisdiction within the State over servants of the British Government and European British subjects, and of a right of control in certain matters connected with excise. The present ruler is Lieut.-Colonel H. H. Maharaja Sir Prabhu Narayan Singh Bahadur, G.C.S.I., G.C.I.E., who was born in 1855 and succeeded to the State in 1889. He is entitled to a salute of 15 guns and is a Hon. Lt.-Colonel in the Indian Army.

PUNJAB STATES.

The 13 Salute States of the Punjab were transferred to the Political charge of the Government of India with effect from the 1st November 1921. Area 30,746 square miles. Population (1921) 4,008,077. Revenue Rs. 3,02,95,684.

These States may be grouped under three main classes. The Hill States which lie in the Punjab Himalayas are held by families of ancient Rajput descent. To the south-west lies the large Mohamadan State of Bahawalpur. The remaining Sikh States of Patiala, Jind, Nabha, Kapurthala and Faridkot and the Mohammadan Chiefships of Malerkotla and Loharu lie east of Lahore in the eastern plains of the Punjab.

The list below gives details of the area, population and revenue of the 13 States :—

Name.	Area in square miles.	Population (Census of 1921)	Revenue approximate in lakhs.	
Bahawalpur	15,000	7,81,101	44,48,290	44½
Bilaspur (Kahlur)	448	98,000	3,20,750	3½
Chamba	3,216	1,41,867	4,75,279	3¾
Faridkot	642	1,50,661	17,92,227	18
Jind	1,259	3,08,183	25,00,000	25
Kapurthala	630	2,84,275	37,00,000	37
Loharu	222	20,621	1,06,676	1
Malerkotla	167	80,322	14,03,525	14
Mandi	1,200	1,85,048	8,00,000	8
Nabha	928	2,63,394	22,45,337	22½
Patiala	5,412	14,99,730	1,15,18,000	115½
Sirmur (Nahan)	1,198	1,40,448	6,00,000	6
Suket	420	54,328	3,85,600	3¾
Total ..	30,746	40,08,077	3,02,95,684	

Bahawalpur.—This State, which is about 300 miles in length and about 40 miles wide, is divided lengthwise into three great strips. Of these, the first is a part of the Great Indian Desert; the central tract is chiefly desert, not capable of cultivation, identical with the Bar or Pat uplands of the Western Punjab; and the third, a fertile alluvial tract in the river valley, is called the Sind. The ruling family claims descent from the Abbaside Khalifas of Egypt. The tribe originally came from Sind, and assumed independence during the dismemberment of the Durrani empire. On the rise of Ranjit Singh, the Nawab made several applications to the British Government for an engagement of protection. These, however, were declined, although the Treaty of Lahore in 1809, whereby Ranjit Singh was confined to the right bank of the Sutlej, in reality effected his object. The first treaty with Bahawalpur was negotiated in 1833, the year after the treaty with Ranjit Singh for regulating traffic on the Indus. It secured the independence of the Nawab within his own territories, and opened up the traffic on the Indus and Sutlej. During the first Afghan War the Nawab rendered assistance to the British and was rewarded by a grant of territory and life pension. On his death the succession was disputed and for a time the State was in the hands of the British. The present Nawab is Lt. H. H. Ruku-ud-Daula, Nasrat-i-Jang, Hafiz-ul-Mulk, Nawab Sir Sadiq Mohamad Khan Bahadur Abasi V. who was born in 1904 and succeeded in 1907. During his minority the State is managed by a Council of Regency. The chief crops are wheat, rice and millet. The Lahore-Karachi branch of the North-Western State Railway passes through the State. The State supports an Imperial Service combined Mounted Rifles Infantry, in addition to other troops. The capital is Bahawalpur, a walled town built in 1748.

Agent to the Governor-General, Punjab States:—Lieutenant-Colonel A. B. Minchin, C.I.E., I.A.

Chamba.—This State is enclosed on the west and north by Kashmir, on the east and south by the British districts of Kangra and Gurdaspur, and it is shut in on almost every side by lofty hill ranges. The whole country is mountainous and is a favourite resort of sportsmen. It possesses a remarkable series of copper plate inscriptions from which its chronicles have been completed.

Founded probably in the sixth century by Marut, a Surajbansi Rajput, who built Brahmapura, the modern Barmaur, Chamba was extended by Meru Varma (680) and the town of Chamba built by Sahil Varma about 920. The State maintained its independence, until the Moghal conquest of India.

Under the Moghals it became tributary to the empire, but its internal administration was not interfered with, and it escaped almost unscathed from Sikh aggression. The State first came under British influence in 1846. The part, west of the Ravi, was at first handed over to Kashmir, but subsequently the boundaries of the State were fixed as they now stand, and it was declared independent of Kashmir. The present chief is H. H. Raja Ram Singh, who was born in 1891, and succeeded in 1919. The principal crops are rice, maize and millets. There are some valuable forests which were partly leased to Government in 1864 for a term of 99 years, but the management of them has now been retroceded to the Chamba Durbar. The mountain ranges are rich in minerals which are little worked. The principal road to Chamba town is from Pathankot, the terminus of the Amritsar Panthankot branch of the North-Western Railway. Chamba town, on the right bank of the Ravi, contains a number of interesting temples, of which that of Lakshmi Narayan, dating possibly from the tenth century, is the most famous.

Faridkot.—The ruling family of this sandy level tract of land belongs to the Sidhu-Barar clan of the Jats, and is descended from the same stock as the Phulkian houses. Their occupation of Faridkot and Kot Kapura dates from the time of Akbar, though quarrels with the surrounding Sikh States and internal dissensions have greatly reduced the patrimony.

The present Ruling Prince, Farzand-i-Saadat Nishan Hazarat-i-Kaisar-i-Hind Brar Bans Raja Har Indar Singh Bahadur was born in 1915 and succeeded his father in 1919. Under the orders of the Government of India the administration of the State has been entrusted to a Council of Administration consisting of a President, Sardar Bahadur Sardar Indar Singh, B.A., and four members. The State has an area of 643 square miles with a population of 150,661 and has an annual income of 18 lakhs. The Ruler is entitled to a salute of 11 guns and a visit and return visit from the Viceroy. The State Forces consist of State Sappers and Household Troops (Cavalry and Infantry).

Jind.—Jind is one of the three Phulkian States (the other two being Patiala and Nabha). Its area is 1,268 square miles, with a population of 308,183 souls and an income of 25 lakhs.

The history of Jind as a separate State dates from 1763, when Raja Gajpat Singh, the maternal grand-father of Maharaja Ranjit Singh, and great grand-son of the famous Phul, established his principality. He was succeeded by Raja Bhag Singh, who greatly assisted Lord Lake in 1805. His grand-son Raja Sangat Singh was succeeded by the nearest male collateral Raja Sarup Singh in 1864. In the crisis of 1857 Raja Sarup Singh rendered valuable services to the British and was rewarded with a grant of nearly 600 square miles of land, known as Dadri territory. He was succeeded by his son Maharaja Raghbir Singh, who gave help to the British Government on the occasion of Kuka outbreak (1872) and the 2nd Afghan War (1878). The present ruler Maharaja Ranbir Singh was born in 1879, succeeded in 1887, and invested with full powers in 1899. The State rendered exemplary services in the Great European War. It supplied 8,673 men to the Indian Army and Imperial Service Troops and doubled the strength of its Imperial Service Infantry. The total contribution amounted to nearly 35 lakhs, in gifts of cash, materials, animals and loan.

His Highness enjoys a salute of 15 guns. The capital is Sangrur, which is connected by a State Railway with the North Western Railway. The principal executive Officer of the State is the Chief Minister, under whom there are other Ministers and departmental officers.

Ruler.—Lt.-Col. His Highness Farzand-i-Dilband Rasikh-ul-Itikad, Daulat-i-Inglishia Raja-i-Rajgan Maharaja Sir Ranbir Singh Rajendra Bahadur, G.C.I.E., K.C.S.I., etc.

Kapurthala.—This State consists of three detached pieces of territory in the great plain of the Jullundur Doab. The ancestors of the ruler of Kapurthala at one time held possessions both in the Cis and Trans-Sutlej and also in the Bari Doab. In the latter lies the village of Ahlu, whence the family springs, and from which it takes the name of Ahluwalia. When the Jullundur Doab came under the dominion of the British Government in 1846, the estates north of the Sutlej were maintained in the independent possession of the Ahluwalia Raja, conditional on his paying a commutation in cash for the service engagements by which he had previously been bound to Ranjit Singh. The Bari Doab estates are held by the head of the house as a jaghir in perpetuity, the civil and police jurisdiction remaining in the hands of the British authorities. For good services during the Mutiny, the present Maharaja's grandfather was rewarded with a grant of other States in Oudh. The present Ruler is H. H. Maharaja Sir Jagatjit Singh Bahadur, G.C.S.I., G.C.I.E., who was born in 1872 and succeeded in 1877. He was granted the title of Maharaja as an hereditary distinction in 1911. The rulers of Kapurthala are Sikhs and claim descent from Rana Kapur, a member of the Rajput House of Jaisalmer. Only a small proportion of the population however are Sikhs, the majority being Mahomedans. The chief crops are wheat, gram, maize, cotton and sugarcane. The town of Sultanpur in this State is famous for hand-painted cloths. The main line of the North-Western Railway passes through part of the State and the Grand Trunk Road runs parallel to it. A branch railway from Jullundur City to Ferozepur passes through the State. Kapurthala maintains a battalion of Imperial Service troops and a small force of local troops. The capital is Kapurthala.

Political Officer: The Agent to the Governor-General, Punjab States, Lahore.

Maler Kotla.—This State consists of a level sandy plain unbroken by a hill or stream, bounded by the district of Ludhiana on the north, by Patiala territory on the east and south and by the Ludhiana District, Patiala and Nabha territories on the west. The Rulers (Nawabs) of Maler Kotla are of "Kurd"

descent who came originally from the Province of "Sherwan" and settled in the town of "Sherwan" north of Persia, and after settling for a time in Afghanistan near Ghazni came to India and settled at *Maler*, the old capital of the State in 1442. Originally they held positions of trust under the Lodhi and Moghal Emperors. As the Moghal Empire began to sink into decay they gradually became independent. The result was constant feuds with the newly created adjacent Sikh States. After the victory of Laswari, gained by the British over Sindhia in 1803 and the subjugation and flight of Holkar in 1805, when the Nawab of Maler Kotla joined the British Army, the British Government succeeded to the power of the Mahrattas in the districts between the Sutlej and the Jamna. The State entered into political relations with the British Government in 1809. The present Ruler is Lt. Col. His Highness Nawab Sir Ahmad Ali Khan, Bahadur, K.C.S.I., K.C.I.E., who was born in 1881 and succeeded in 1908. He was created Hony. Major in the Indian Army for his services during the war and promoted to the rank of Lt. Col. in December 1919.

The chief products are cotton, sugar, poppy, ani-seed, mustard, ajwain, methi, tobacco, garlic, onions and all sorts of grains.

The State maintains a company of Sappers, Infantry, Cavalry and Artillery. The capital is Maler Kotla. The population of the town is 30,000 souls. Annual revenue of the State is about 16 lakhs.

Mandi.—This is a mountainous State in the upper reaches of the Beas. It has a history of considerable length, as it once formed part of the Suket State. Its relations with the British were determined after the battle of Sobraon in 1846. The present minor Chief H. H. Raja Jogindra Sen Bahadur was installed in 1913. His Highness was married to the only daughter of H. H. The Maharaja of Kapurthala on the 5th February, 1923. The administration is carried on by Pandit Maharaj Kishan, M.B.E., the Superintendent. The principal crops are rice, maize, wheat and millet. About three-fifths of the State are occupied by forest and grazing lands. It is rich in minerals. The capital is Mandi, founded in 1527 which contains several temples and other buildings of interests and is one of the chief marts for commerce with Ladakh and Yarkhand.

Nabha.—Nabha which became a separate State in 1763 is one of the 3 Phulkian States —Nabha, Patiala and Jind, and though second in point of population and revenue of the 3 sister States, it claims seniority being descended from the eldest branch. It consists of two distinct parts, the main portion comprising 12 separate pieces of territory scattered among the other Punjab States and Districts, forms the City of Nabha and the *Nizamats* of Phul and Amloh; the second portion forms the *Nizamat* of Bawal in the extreme south-east of the Punjab on the border of Rajputana; this Nizamat of Bawal was subsequently added to its territory as a reward from the British Government for the loyalty of the Rulers of Nabha. The State now covers an area of about 1,000 square miles and has a population of about 3 lakhs. The High Court is the head of the Judicial Department. The State supports one battalion of Imperial Service Infantry consisting of 600 men; besides this there are local forces of infantry, cavalry and artillery, etc., consisting of about 1,000 men all told and also a Transport Corps. For the preservation of the peace there is a Police force consisting of about 600 men.

The State is traversed by the main and 3 branch lines of the N. W. Railway and the Rajputana Malwa Railway crosses the *Nizamat* of Bawal. A large portion of the State is irrigated by the Sirhind Canal. The crops of the State are gram, pulses, bajra, sugarcane, cotton, wheat and barley, to facilitate trade the Darbar has opened grain markets and Banks near the principal railway station within the State territory. The chief industries of the State consist of the manufacture of silver and gold ornaments, brass utensils, and cotton carpets, lace and *gota*, etc. There are some ginning factories and a cotton steam press in the State which are working successfully. In 1923 an inquiry was held into certain matters in dispute between the Patiala and the Nabha Durbars which showed that the Nabha Police had fabricated cases against persons connected with the Patiala State with the object of injuring them through the Patiala Durbar. The Maharaja of Nabha who was born in 1883 and succeeded his father in 1911 abdicated in favour of his son who is a minor as the result of this affair and the administration of the State has been handed over to the Government of India.

Patiala.—This is the largest of the Phulkian States, and the premier State in the Punjab. Its territory is scattered and interspersed with small states and even single villages belonging to other States and British districts. It also comprises a portion of the Simla Hills and territory on the border of Jaipur and Alwar States. Area 5,932 square miles. Population 1,499,739. Gross income Rs. one crore and thirty-five lakhs. Its history as a separate State begins in 1762. The present Ruler, Major General His Highness Farzand-i-Khas Daulati-Inglishia Mansur-ul-Zaman Amir-ul-Umra Maharaja Dhiraj Rajeshwar, Sri Maharaja-i-Rajgan Bhupindra Sing Mohinder Bahadur, G.C.S.I., G.C.I.E., G.C.V.O., G.B.E., A.D.C., was born in 1891 and succeeded in 1900, and assumed the reins of Government in 1909 on attaining majority. His Highness the Maharaja Dhiraj enjoys at present personal salute of 19 guns and he and his successors the distinction of exemption from presenting Nazar to the Viceroy in Durbar in perpetuity. The principal crops are grain, barley, wheat, sugar-cane, rapeseed, cotton and tobacco. A great part of the State is irrigated by the Sirhind and Western Jumna Canal distributaries. It possesses valuable forests. The State is rich in antiquities, especially at Pinjaur, Sunam, Sirhind, Bhatinda, Narnaul, etc. Besides possessing a Railway line of its own, known as Rajpura-Bhatinda Railway of 108 miles in length, the North-Western Railway, the E. I. Railway, the B.B. & C.I. Railway and the J. B. Railway traverse the State. His Highness maintains a contingent of two regiments of cavalry and four battalions of infantry—one battery of Horse Artillery.

Since the State has entered into alliance with the British Government in 1809, it has render-

ed help to the British Government on all critical occasions such as Gurkha War, Sikh War, Mutiny of 1857, Afghan War of 1878-79, Tirah and N. W. F. campaign of 1897.

On the outbreak of the European War His Highness placed the entire resources of his State at the disposal of His Majesty the King Emperor and offered his personal services. The entire Imperial Service Contingent was on active service throughout the period of the War and served on various fronts in Egypt, Gallipoli, Mesopotamia and Palestine, winning numerous distinctions. Two mule and one camel corps were raised and placed at the service of the British Government for the period of the War, and in addition to furnishing nearly 28,000 recruits for the British Indian Army and maintaining the State Imperial Service Contingent at full strength, contributed substantially in money and material.

His Highness was selected by His Excellency the Viceroy to represent the Ruling Princes of India at the Imperial War Conference and Imperial War Cabinet in June 1918 and during his stay in Europe His Highness paid visits to all the different and principal fronts in Belgium, France, Italy and Egypt (Palestine) and received the following decorations from the allied Sovereigns and Governments:—(*a*) Grand Cordon of the Order de Leopold, (*b*) Grand Cross of the Legion of Honour, France, and (*c*) Grand Cross of the Order of the Crown of Italy and (*d*) Grand Cordon of the Order of the Nile, (*e*) Grand Gross of the Order of the Crown of Roumania.

Again in 1919 on the outbreak of hostilities with Afghanistan His Highness served personally on the frontier on the Staff of the General Officer Commanding, and the Imperial Service Contingent was on active service towards Kohat and Quetta fronts. For his services on the N.-W. Frontier His Highness was mentioned in despatches.

Sirmur (Nahan).—This is a hilly State in the Himalayas under the Political control of the Agent to the Governor-General, Punjab States, Lahore. Its history is said to date from the 11th century. In the eighteenth century the State was able to repulse the Gurkha invasion, but the Gurkhas were invited to aid in the suppression of an internal revolt in the State and they in turn had to be evicted by the British. In 1857 the Raja rendered valuable services to the British, and during the second Afghan War he sent a contingent to the North-West Frontier. The present Chief is Lieut.-Colonel H. H. Maharaja Sir Amar Prakash Bahadur, K.C.S.I., K.C.I.E., who was born in 1888 and succeeded in 1911. The main agricultural feature of the State is the recent development of the Kiarda Dun, a fertile level plain which produces wheat, gram, rice, maize and other crops. The State forests are valuable and there is an iron foundry at Nahan which was started in 1867 but, being unable to compete with the imported iron, is now used for the manufacture of sugar-cane crushing mills. The State supports an Imperial Service Corps of Sappers and Miners which served in the Great War. It was captured with General Townshend's force at Kut-al-Amara but the Corps has since been reconstituted and has again gone on service.

UNDER THE GOVERNMENT OF BURMA.

The States under this Government comprise the Shan States which are included in British India though they do not form part of Burma proper and are not comprised in the regularly administered area of the Province and the Karenni States which are not part of British India and are not subject to any of the laws in force in the Shan States or other parts of Burma.

The Shan States comprise the two isolated States of Hsawnghsup and Singaling Hkamti in the Upper Chindwin District under the supervision of the Commissioner, North West Border Division, the eight petty village communities under separate hereditary Chiefs known as Hkamti Long in the Putao District and the two main divisions of the Shan States known as the Northern and Southern Shan States numbering six and thirty-five States respectively which with the Hkamti Long States have been included in the North East Frontier Division.

Hsawanghsup with an area of 529 square miles and a population of 7,043 lies between the 24 and 25 parallels of latitude and on the 95 parallel of longitude between the Chindwin river and the State of Manipur.

Singaling Hkamti has an area of 983 square miles and a population of 2,287 and lies on the 26th and 90th parallels of latitude and longitude respectively.

The Hkamti Long States have an area of 200 square miles with a population of 7,673 and lie between the 27th and 28th parallels of atitude on the Upper Waters of the N'Mai branch of the Irrawaddy.

The Northern Shan States (area 20,156 square miles and population 585,924) and the Southern Shan States (area 36,157 square miles and population 847,018), form with the unadministered Wa States (area about 2,000 square miles) and the Karenni States, a huge triangle lying roughly between the 19th and 24th parallels of latitude and the 96th and 102nd parallels of longitude with its base on the plains of Burma and its apex on the Mekhong river.

The population consists chiefly of Shans who belong to the Shan group of the Tai Chinese family; the remainder belong chiefly to the Wa-palaung and Mon Khmer groups of races of the Austro-Asiatic brand of the Austric family, or to the Karen family which Sir George Grievson now proposes to separate from the Tai Chinese family. There are also a number of Kachins and others of the Tibeto-Burman family. The Shans themselves shade off imperceptibly into a markedly Chinese race on the frontier. Buddhism and Animism are the principal religions.

The climate over so large an area varies greatly. In the narrow lowlying valleys the heat in summer is excessive. Elsewhere the summer shade temperature is usually 80 to 95 Fahr. In winter frost is severe on the paddy plains and open downs but the temperature on the hills is more equable. The rainfall varies from 50 to 100 inches in different localities.

The agricultural products of the States are rice, pulses, maize, buckwheat, cotton, sessamum, groundnuts, oranges and pineapples.

Land is held chiefly on communal tenure but unoccupied land is easily obtainable on lease from the Chiefs in accordance with special rules for non-natives of the States. Great spaces of the States are suitable for cattle, pony and mule breeding and in the Northern States Chinese settlers appear to have found the latter a very paying proposition.

The mineral resources of the States are still unexplored. The Burma Corporation have a concession for silver and lead in the Northern States which they claim to be the richest in the world. The Mawson area in the Southern States is also rich in lead. Lignite and iron ore of a low grade are found in many places.

Lashio, the headquarters of the Northern Shan States District, is the terminus of the Myohaung-Lashio Branch of the Burma Railways (178 miles) and is also connected with Mandalay by a cart road.

The Burma Corporation's narrow gauge private railway track 46 miles long connects their Bawdwin mine with the Burma Railways system at Namyao.

The Southern Shan States are served by the Burma Railways branch line Thazi to Heho (87 miles) which it is proposed to extend shortly to Tayaw in the Yawnghwe plain.

Taunggyi, the headquarters of the Southern Shan States, is connected with Thazi by a well-graded motor road. The States vary much in size and importance. The largest State is Kengtung with an area of 12,400 square miles and population 208,755. The smallest State is Namtok with an area of 14 square miles and population 1,465.

Hsipaw with an area of 4,400 square miles and population 131,450 is the richest State with a gross revenue of Rs. 6,66,841.

The Sawbwas of Kengtung, Hsipaw and Yawnghwe and Mongnai have salutes of nine guns while the Tawngpeng Sawbwa has a personal salute of the same number.

Administration.

Under the Burma Laws Act, 1898, the Civil, Criminal and Revenue administration of every Shan State is vested in the Chief of the State subject to the restrictions specified in the sanad of appointment granted to him and under the same Act the law to be administered in each State is the customary law of the State so far as it is in accordance with justice, equity and good conscience and not opposed to the law in force in the rest of British India. The customary law may be modified by the Governor who has also power to appoint officers to take part in the administration of any State and to regulate the powers and proceedings of such officers. The Chiefs are bound by their sanads to follow the advice of the Superintendents appointed but subject to certain modifications which have been made in the customary law relating to criminal and civil justice have more or less maintained the semi-independent status which was found existing at the annexation of Upper Burma.

In 1920, Sir Reginald Craddock, Lieutenant-Governor of Burma, proposed a scheme for the sanction of the Secretary of State under which the Chiefs of the Northern and Southern Shan States have agreed to federalise the departments of Government in which they had been previously largely dependent on contributions from the Provincial Funds. Under this scheme no interference is contemplated in the internal management of the States and the Chiefs continue to collect their taxes and be responsible for law and order, maintain Courts for the disposal of criminal and civil cases, appoint their own officials and control their own subjects under the advice of the Superintendents. But the Federation is responsible for the centralised Departments of Public Works, Medical, Forests, Education, Agriculture and to a small extent Police. In place of the individual tribute formerly paid by them the Chiefs contribute to the Federation a proportion of their revenue which amounts roughly to the expenditure hitherto incurred by them on the heads of administration now centralised while the Provincial Government surrenders to the Federation all provincial revenue previously derived from the States and makes an annual contribution to enable it to maintain its services at the same degree of efficiency formerly enjoyed. The Federation on the other hand pays a fixed proportion of its revenue to the Provincial Treasury as tribute in place of the individual contributions of the Chiefs. Under this scheme the Federation is a sub-entity of the Burma Government, is self-contained and responsible for its own progress. The Chiefs express their views on Federal and general matters through a Council of Chiefs consisting of all Chiefs of the rank of Sawbwa and four elected representatives of the lesser Chiefs. The Superintendents and the Commissioner of the North-East Frontier Division to whom the supervision of the Federation has been entrusted are *ex-officio* members of the Council. The scheme was sanctioned and brought into force with effect from October 1922. The first meeting of the Council of Chiefs was formally opened by His Excellency the Governor Sir Spencer Harcourt Butler, G.C.I.E., K.C.S.I., I.C.S., in March 1923.

Karenni.

This district which formerly consisted of five States now consists of three as two have been amalgamated with others. It has a total area of 4,280 square miles and a population of 63,850. It lies on the south of the Southern Shan States between Siam and the British district of Toungoo. The largest State is Kantarawadi with an area of 3,000 square miles and a population of 36,621 and a revenue of nearly 1½ lakhs of rupees. More than half of the inhabitants are Red Karens. An Assistant Political Officer is posted at Loikaw subject to the supervision of the Superintendent,

States, who exercises in practice same control over the Chiefs as is exercised in the Shan States though nominally they are more independent than their Shan neighbours. Mineral and forest rights however in Karenni, belong to the Chiefs and not to the Government. In the past substantial contributions from Provincial revenues have been made to the Karenni Chiefs for education and medical service. The Chiefs are at present unwilling to surrender their special rights and join the Shan States Federation though very considerable advantages might accrue from their doing so.

The principal wealth of the country used to be in its teak timber and a large alien population was at one time supported by the timber trade. This has largely declined in the last few years and unless the Chiefs are prepared to deny themselves and close their forests they will soon disappear.

UNDER THE GOVERNMENT OF ASSAM.

The only State of importance under the Government of Assam is Manipur, which has an area of 8,456 square miles and a population 384,016 (1921 Census) of which about 60 per cent. are Hindus, and 36 per cent. animistic forest tribes. Manipur consists of a great tract of hilly country and a valley, about 35 miles long, 20 miles wide, which is shut in on every side. The State adopted Hinduism in the early eighteenth century, when it came under a Naga Raja, who subsequently made several invasions into Burma. On the Burmese retaliating, Manipur negotiated a treaty of alliance with the British, in 1762. The Burmese again invaded Manipur during the first Burmese War and on the conclusion of peace, in 1826, Manipur was declared independent. The chief event in its subsequent history was the intervention of the British in 1891 to establish the claim of Kula Chandra Singh as Maharaja, followed by the treacherous murder of the Chief Commissioner, Mr. Quinton and the officers with him and the withdrawal of the escort which accompanied him. From 1891 to 1908 the State was administered by a Political Agent and Superintendent of the State during the minority of H. H. Raja Chura Chand Singh. The Raja was invested with ruling powers in 1908.

The administration of the State is now conducted by His Highness the Maharaja assisted by the Darbar, which consists of a President, who is a member of the Indian Civil Service, his services being lent to the State by the Assam Government, 3 ordinary and 3 additional members who are all Manipuries. The staple crop of the country is rice. Forests of various kinds cover parts of the hill ranges.

Khasi and Jaintia Hills.—These petty chiefships, 25 in number, with a total area of about 3,900 square miles and a population of 136,000, are included under the Government of Assam. Most of the States have treaties or engagement with the British Government. The largest of them is Khyrim, the smallest is Nonglwai, which has a population of 246. Most of them are ruled by a Chief or Siem. The Siemship usually remains in one family. The succession was originally controlled by a small electoral body constituted from the heads of certain clans but in recent years there has been a tendency to broaden the elective basis. The constitution of a Khasi State has always been of a very democratic character, a Siem exercising but little control over his people. Among many of the north-east frontier tribes there is little security of life and property, and the people are compelled to live in large villages on sites selected for their defensive capabilities. The Khasis seem, however, to have been less distracted by internal warfare, and the villages, as a rule, are small.

UNDER THE GOVERNMENT OF THE CENTRAL PROVINCES.

The Central Provinces include fifteen feudatory States subordinate to the Government with an area of 31,176 square miles and a population of 2,066,900. One of the States, Makrai, lies within Hoshangabad District; the remainder are situated in the Chhattisgarh Division, to the different districts of which they were formerly attached. Their relations with Government are controlled by a Political Agent. The States vary greatly in size and importance. Sakti, the smallest, having an area of 138 square miles and Bastar, the largest, an area of 13,062 square miles. They are administered by hereditary chiefs, who hold on conditions of loyalty and good government set forth in patents and acknowledgments of fealty, but are nominally free from direct interference save in the case of sentences of death, which require His Excellency the Governor's confirmation. But, as a fact, the Government has exercised a very large amount of control, owing mainly to the frequency with which the States have been taken under direct management, because of either the minority or the misconduct of the chief.

The States pay a tribute to Government which amounts in the aggregate to about 2½ lakhs.

Statistics relating to the chief States are contained in the following table:—

State.	Area.	Population, 1921.	Revenue (approximate) in Lakhs.
	Sq. Miles.		
Bastar ..	13,062	464,407	6
Jashpur ..	1,963	154,156	2
Kanker ..	1,431	124,928	3
Khairagarh ..	931	124,008	5
Nandgaon ..	871	147,906	10
Raigarh ..	1,486	241,684	5
Sirguja ..	6,055	377,679	3
Eight other States ..	5,377	432,182	10
Total ..	31,176	2,066,900	44

Bastar.—This State, which lies to the south-east corner of the Provinces, is the most important of the group. It has an area of 13,062 square miles and a population of 433,310. The family of the Raja is very ancient, and is stated to belong to the Rajputs of the Lunar race. Up to the time of the Marathas, Bastar occupied an almost independent position, but a tribute was imposed on it by the Nagpur government in the eighteenth century. At this period the constant feuds between Bastar and the neighbouring State of Jeypore in Madras kept the country for many years in a state of anarchy. The chief object of contention was the Kotpad tract, which had originally belonged to Bastar, but had been ceded in return for assistance given by Jeypore to one of the Bastar chiefs during some family dissensions. The Central Provinces Administration finally made this over to Jeypore in 1863 on condition of payment of tribute of Rs. 3,000, two-thirds of which sum was remitted from the amount payable by Bastar. By virtue of this arrangement the tribute of Bastar was, until recently, reduced to a nominal amount. The cultivation of the State is extremely sparse. Rice is the most important crop. The State is under Government Management. The Superintendent of the State (Mr. W. A. Turner, J. P.) is an extra Assistant Commissioner of the Central Provinces on deputation who has two Assistants under him. After a recent period of disturbance the State has returned to complete tranquillity and precautions are being taken to remove all causes of unrest by better supervision over the minor State officials and a very considerate forest policy. The chief town is Jadgalpur on the Indravati River. The famous falls on the Indravati called the Chitrakote are 23 miles away from Jagdalpur.

Sirguja.—Until 1905 this was included in Chota Nagpur State of Bengal. The most important feature is the Manpat, a magnificent tableland forming the southern barrier of the State. The early history of Surguja is obscure; but according to a local tradition in Palamau, the present ruling family is said to be descended from a Raksel Raja of Palamau. In 1758 a Maratha army overran the State, and compelled its chief to acknowledge himself a tributary of the Bhonsla Raja. At the end of the eighteenth century, in consequence of the Chief having aided a rebellion in Palamau against the British, an expedition entered Surguja; and, though order was temporarily restored, disputes again broke out between the Chief and his relations, necessitating British interference. Until 1818 the State continued to be the scene of constant lawlessness; but in that year it was ceded to the British Government under the provisional agreement concluded with Mudhoji Bhonsla of Berar, and order was soon established. The principal crops are rice and other cereals. The present Chief of the State is Maharaja Ramanuj Saran Singh Deo, C.B.E., who succeeded to the *gadi* in 1918 and enjoys full powers of a Ruling Chief.

KASHMIR.

Kashmir (known to Indians as Jammu) lies to the east of the Indus and to the west of the Ravi. It is a mountainous country with just a strip of level land along the Punjab frontier, and intersected by valleys of which many are of surpassing beauty and grandeur. It may be divided physically into two areas: the north-eastern comprising the area drained by the Indus with its tributaries, and the south-western, including the country drained by the Jhelum, the Kishanganga and the Chenab. The dividing line between those two areas is the great central mountain range. The area of the State is 84,432 square miles, and the population 3,158,126.

History.—Various poets have left more or less trustworthy records of the history of the valley down to 1586, when it was conquered by Akbar. Srinagar, the capital, had by then been long established, though many of the fine buildings erected by early Hindu rulers had been destroyed by the Mahomedan kings who first appeared in the 12th century. In the reign of Sikandar the population became almost entirely Mahomedan. Akbar visited the valley three times. Jehangir did much to beautify it; but after Aurangzebe there was a period of disorder and decay, and by the middle of the eighteenth century the *Subah* of Kashmir was practically independent of Delhi. Thereafter it experienced the oppression of Afghan rule until it was rescued, in 1819, by an army sent by Ranjit Singh. Sikh rule was less oppressive than that of the Afghans. The history of the State as at present constituted is practically that of one man, a Dogra Rajput, Gulab Singh of Jammu. For his services to the Sikhs this remarkable man had been made Raja of Jammu in 1820, and he added largely to his territory by conquest. He held aloof from the war between the British and the Sikhs, only appearing as mediator after the battle of Sobraon (1846) when the British made over to him for Rs. 75 lakhs the present territories of the State. He had to fight for the valley and subsequently lost part of his State, Gilgit, over which the successors had at a heavy cost to reassert their claims. His son Ranbir Singh, a model Hindu, ruled from 1857 to 1885, when he was succeeded by his eldest son Major-General H. H. Maharaja Sir Partab Singh, G.C.S.I., G.C.I.E., G.B.E., LL.D., &c.

Administration.—For some years the administration of the State was conducted by a Council over which the Maharaja presided. In 1905 enhanced ruling powers were granted to His Highness, the State Council being abolished. Recently His Highness has been invested with full powers of administration and authority enjoyed by his ancestors. Under the new constitution an Executive Council has been established to assist His Highness in the administration of the State. The Council is presided over by His Highness and consists of 4 members, the portfolio of the Senior and Foreign Member being held by General Raja Sir Harisingh, K.C.I.E., K.C.V.O., who is also in charge of the Military affairs as Commander-in-Chief of the State Army. The British Resident has his headquarters at Srinagar; there is also a Political Agent at Gilgit responsible to the Government of India for the administration of the outlying petty States; and a British Officer

is stationed at Leh to assist in the supervision of Central Asian trade. In the Dogras the State has splendid materials for an Army, which consists of 9,610 troops, of whom 6,298 are maintained as Imperial Service troops.

Finance.—The financial position of the State is strong, and it has more than 46 lakhs invested in Government of India securities. The total revenue last year was 93 lakhs, the chief items being land revenue, forests, customs and octroi.

Production and Industry.—The population is pre-eminently agricultural and pastoral. The system of land tenure has been described as "ryotwari in ruins," great complexity existing owing to the fact that there is no local law of rent and revenue. The principal food crop is rice, maize, cotton, saffron, tobacco, hops (autumn crops) and wheat, barley, poppy, beans (spring crops) are also grown. Sheep are largely kept. The State forests are extensive and valuable. A survey of the mineral resources of the State is being conducted under an expert. Vast fields of friable, dusty coal have been found. Gold has been found at Gulmarg, Sapphires in Padar, Aquamarine in Skardu and lead in Uri. The industries of manufacture are chiefly connected with sericulture (the silk filature at Srinagar, the largest in the world, was destroyed by fire in July 1912), and oil-pressing. The woollen cloth, shawls, and wood carving of the State are famous.

Communications.—Great efforts have been made and are being made towards the improvement of wheeled traffic in the Kashmir State. The Jhelum Valley Road (196 miles) which links the Kashmir Valley with the Punjab and the North Western Province is used by wheeled traffic of sorts, *viz.*, Ekkas, Tongas, Carts, Motor Cars and Motor Lorries. The Banihal Cart Road (nearly as long as the Jhelum Valley Road) which is nearing completion, will soon join Kashmir with the Jammu Tawi Railway Station. Roads fit for pack-animals lead from Srinagar, the summer Capital of Kashmir, to the frontier districts of Gilgit and Leh. Internal village communications have also been much improved.

Public Works.—In 1904, a flood spill channel above Srinagar was constructed with a view to minimising the constant risk of floods; and it was hoped that the danger would be still further reduced by the carrying out of a scheme for lowering a part of the bed of the Jhelum, which has since been taken in hand. Good progress has been made with irrigation; but the most important schemes of recent years have been those for an electrical power station on the Jhelum River, and for a Railway into Kashmir. It was proposed to supply from this power station electrical energy for various State schemes (including the Jhelum dredging scheme) and for private enterprise and possibly for working the proposed Kashmir Railway. The works were completed about 1907, and the scheme according to the latest reports is working very satisfactorily. The proposal for a railway to Kashmir had been held in abeyance for the present.

Education.—In education Kashmir is still backward. In the State as a whole only 2 in every 100 persons can read and write. The number of educational institutions including two Colleges is 726.

Resident.—Sir J. B. Wood, K.C.I.E., K.C.V.O. C.S.I.

Political Agent at Gilgit—Major D. L. R. Lorimer, C.I.E.

THE CHAMBER OF PRINCES.

The Report on Indian constitutional reforms by Mr. Montagu and Lord Chelmsford stated that it was desired to call into existence a permanent consultative body which would replace the conference of Princes which had periodically met at the invitation of the Viceroy. After pointing out the need for regular meetings of the Council, the Report said:—"We contemplate that the Viceroy should be **president**, and should as a rule preside, but that in his absence one of the Princes should be chairman. The rules of business would be framed by the Viceroy after consultation with the Princes, who might from time to time suggest modifications in the rules."

It was further suggested in the joint report that the Council of Princes should be invited annually to appoint a small **standing committee**, to which the Viceroy or the Political Department might refer decisions affecting the Native States, particularly questions dealing with custom or usage. The Joint Report also made recommendations for the appointment of commissions to inquire into disputes in which Native States might be concerned and into cases of misconduct, and for arranging for joint deliberation on matters of common interest between the Council of State and the Council of Princes.

At the end of January 1919 a Conference of the Ruling Princes was held at Delhi, to consider this scheme. The subject which gave rise to the longest discussion was the proposal in the Reform Scheme to divide the Native States into two categories, those possessing "full powers" of internal Government and those not having such powers. Some of the Princes held that membership of the Council of Princes should be limited to the rulers enjoying full powers, whilst others considered that some measure of representation ought to be given to the smaller States; and the Conference came to no agreement on the matter. The proposal to institute a Council of Princes received, however, general support, and it was suggested that the new House should be called the **Narendra Mandal** (House of Princes.)

The recommendations of the Conference were then placed before the Secretary of State, and in the next Conference held in November 1919. Lord Chelmsford propounded a general scheme for a Chamber of Princes approved by His Majesty's Government. The Conference after debating the question passed a resolution warmly accepting the scheme and expressing an earnest hope that the Chamber might be brought into existence during the ensuing year. On the occasion of the **formal inauguration** of the

Chamber of Princes Lord Chelmsford, describing how he enlisted the advice and criticism of the Codification Committee of Princes which had been appointed by the Conference and how with their assistance the drafts of the Constitution of the Chamber with the first Regulations and Rules of Business, and the draft resolution concerning Courts of Arbitration and Commissions of Enquiry were moulded into practical shape, explained that difficulties had arisen in the selection of a suitable Indian designation for the Chamber which would for the present be known by the English title of the Chamber of Princes. He also said that another point on which the published constitution differed from the wording favoured by the Committee of Princes was the absolute prohibition of the discussion in the Chamber of the internal affairs of individual States and the actions of individual Rulers. The main function of the Chamber was to discuss matters affecting the States generally or of common concern to the States and to British India or the Empire at large. As regards the question of direct relations between the Government of India and the important States, a recommendation had been made to the Secretary of State for the transfer of the more important States in the Bombay Presidency, according to a scheme prepared by a special Committee, to be carried into effect at some future date, when the conditions appear to be favourable. A scheme would also shortly be placed before His Majesty's Government for the bringing of the important States of the Punjab into direct relations with the Government of India as soon as the necessary arrangements could be made. Gwalior State would soon be brought into direct touch with the Central Government through a Resident who would be independent of the Central India Agency and some of the Rajputana States, which were formerly in relations with a Local Resident, were now in direct relations with the Agent to the Governor-General in Rajputana.

The Chamber was formally inaugurated by the Duke of Connaught on February 8th, 1921. Annual meetings are held, for which the programme is prepared by a Standing Committee in consultation with the Government of India.

Indian States' Tribute.

Many of the States pay tribute, varying in amount according to the circumstances of each case, to the British Government. This tribute is frequently due to exchanges of territory of settlement of claims between the Governments, but is chiefly in lieu of former obligations to supply or maintain troops. The actual annual receipts in the form of tribute and contributions from Indian States are summarised in the following table. The relations of the States to one another in respect of tributes are complicated, and it would serve no useful purpose to enter upon the question. It may, however, be mentioned that a large number of the States of Kathiawar and Gujarat pay tribute of some kind to Baroda, and that Gwalior claims tribute from some of the smaller States of Central India :—

States paying tribute directly to the Government of India.

	£
Tribute from Jaipur	26,667
,, ,, Kotah	15,648
,, ,, Udaipur	13,333
,, ,, Jodhpur	6,533
,, ,, Bundi	8,000
,, ,, Other States	15,170
Contribution of Jodhpur towards cost of Erinpura Irregular Force	7,667
,, of Kotah towards cost of Deohi Irregular Force	13,333
,, of Bhopal towards cost of Bhopal Levy	10,753
,, of Jaora towards cost of United Malwa Contingent	9,142
Contributions towards cost of Malwa Bhil Corps	2,280
Central Provinces and Berar.	
Tribute from various States	15,696
Burma.	
Tributes from Shan States	28,524
,, ,, other States	1,367
Assam.	
Tribute from Manipur	333
,, ,, Rambrai	7
Bengal.	
Tribute from Cooch Behar	4,514
United Provinces.	
Tribute from Benares	14,000
,, ,, Kapurthala (Bahraich)	8,733
Punjab.	
Tribute from Mandi	6,667
,, ,, other States	3,086
Madras.	
Tribute from Travancore	53,333
Peshkash and subsidy from Mysore	233,333
,, ,, ,, Cochin	13,333
,, ,, ,, ,, Travancore	888
Bombay.	
Tribute from Kathiawar	31,129
,, ,, various petty States	2,825
Contribution from Baroda States	25,000
,, ,, Jagirdars, Southern Maharatta Country	5,765
Tribute from Cutch	5,484

It was announced at the Coronation Durbar of 1911 that there would in future be no Nazarana payments on successions.

Foreign Possessions in India.

Portugal and France both hold small territorial possessions in the Indian Peninsula.

The Portuguese possessions in India consist of the province of Goa, situated within the limits of the Bombay Presidency, on the Arabian Sea Coast; the territory of Daman with the small territory called Pargana-Nagar Avely on the Gujarat Coast, at the entrance to the Gulf of Cambay; and the little island of Diu, with two places called Gogla and Simbor, on the southern extremity of the Kathiawar Peninsula.

GOA.

Goa forms a compact block of territory surrounded by British districts. Savantwadi State lies to the north of it, the Arabian Sea on the west and North Kanara on the south, and the eastern boundary is the range of the Western Ghats, which separates it from the British districts of Belgaum and North Kanara. The extreme length from north to south is 62 miles and the greatest breadth from east to west 40 miles. The territory has a total area of 1,301 square miles and consists of the *Velhas Conquistas*, or Old Conquests, comprising the island of Goa, acquired by the Portuguese in 1510, and the neighbouring municipalities of Salsette, Bardez, and Mormugao acquired in 1543; and of the *Novas Conquistas*, or New Conquests, comprising the municipalities of Pernem, Sanquelim, Ponda, Quepem, Canacona, Satari and Sanguem acquired in the latter half of the 18th century. The small island of Angediva situated opposite the port of Karwar, in the British district of North Kanara, forms administratively a portion of the Canacona municipality. This was acquired in 1505. The whole country is hilly, especially the eastern portion, the predominating physical feature being the Western Ghats, which besides bounding the country along the north-east and south-east, jut off westward and spread across the country in a succession of spurs and ridges. There are several conspicuous isolated peaks, of which the highest, Sonsagar, is 3,827 feet high.

The country is intersected by numerous rivers running westward from the Ghats, and the principal eight, which are all navigable, are in size of some importance. Goa possesses a fine harbour, formed by the promontories of Bardez and Salsette. Half-way between these extremities lies the *cabo*, or cape, which forms the extremity of the island of Goa. This divides the whole bay into two anchorages, known as Aguada and Mormugao. Both are capable of accommodating the largest shipping from September to May, but Aguada is virtually closed during the south-west monsoon, owing to the high winds and sea and to the formation of sand bars across the estuary of the Mandovi river, which opens into Aguada. Mormugao is accessible at all times and is therefore the harbour of commercial importance. It is the terminus of the railway running to the coast from the inland British system of lines a breakwater and port have been built there and the trade is considerable being chiefly transit trade from British territory.

The People.

The total population in the whole Goa territory was 486,752 at the census of 1910 (the latest year up to which corrections can be obtained from the Portuguese Government in Goa). This gives a density of 343 persons to the square mile and the population showed an increase of 6 per cent. since the census ten years previously. In the Velhas Conquistas 91 per cent. of the population is Christian. In the Novas Conquistas Christians and Hindus are almost equally numerous. The Moslems in the territory are numbered in a few thousands. The Christians still very largely adhere to caste distinctions, claiming to be Brahmans, Charados and low castes, which do not intermarry. The Hindus are largely Maratha and do not differ from those of the adjacent Konkan districts of Bombay. All classes of the people, with the exception of Europeans, use the Konkani dialect of Marathi with some admixture of Portuguese words. The official language is Portuguese, which is commonly spoken in the capital and the principal towns as well as by all educated people. Nearly all the Christians profess the Roman Catholic religion and are spiritually subject to an archbishop who has the titles of Primate of the East and Patriarch of the East Indies and exercises ecclesiastical jurisdiction also over a great portion of British India. (The Christians of Daman and Diu are subject to a Bishop who bears the titles of Bishop of Daman and Archbishop of Cranganore.) There are numerous churches in Goa, mostly built by the Jesuits and Franciscans prior to the extinction of the religious orders in Portuguese territory. The churches are in charge of secular priests. Hindus and Mahomedans now enjoy perfect freedom in religious matters and have their own places of worship. In the early days of Portuguese rule the worship of Hindu gods in public and the observance of Hindu usages were strictly forbidden and rigorously suppressed.

The Country.

One-third of the entire territory of Goa is stated to be under cultivation. The fertility of the soil varies considerably according to quality, situation and water-supply. The Velhas Conquistas are as a rule better cultivated than the Novas Conquistas. In both these divisions a holding of fifteen or sixteen acres would be considered a good sized farm, and the majority of holdings are of smaller extent. The staple produce of the country is rice, of which there are two good harvests, but the quantity produced is barely sufficient to meet the needs of the population for two-thirds of the year. Next to rice, the culture of cocoanut palms is deemed most important, from the variety of uses to which the products are applied. Hilly places and inferior soils are set apart for the cultivation of cereals and several kinds of fruits and vegetables are cultivated to an important extent. The condition of the agricultural classes in the Velhas Conquistas has improved during recent years,

owing to the general rise in the prices of all classes of agricultural produce and partly to the current of emigration to British territory. Stately forests are found in the Novas Conquistas. They cover an area of 116 square miles and are under conservation and yield some profit to the administration. Iron is found in parts of the territory; but has not been seriously worked. Manganese also exists and was worked to an important extent a few years ago.

Commerce.

In the days of its glory, Goa was the chief entrepot of commerce between East and West and was specially famous for its trade in horses with the Persian Gulf. It lost its commercial importance with the downfall of the Portuguese Empire and its trade is now insignificant. Few manufacturing industries or any moment exist and most manufactured articles in use are imported. Exports chiefly consist of cocoa-nuts, betel nuts, mangoes and other fruits and raw produce. A line of railway connects Mormugao with the Madras and Southern Mahratta Railway. Its length from Mormugao to Castle Rock, above the Ghats, where it joins the British system, is 51 miles, of which 49 are in Portuguese territory. The railway is under the management of the Madras and Southern Mahratta Railway administration, and the bulk of the trade of Mormugao port is what it brings down from and takes to the interior. The telegraphs in Goa territory are worked as part of the system of British India, and are maintained jointly by the British and Portuguese Governments. The Goa territory was formerly subject to devastating famines and the people now suffer heavy losses in times of drought. They are then supplied, though at great cost, with rice from British territory.

The Capital.

Nova-Goa, the present capital of Portuguese India, comprehends, Panjim and Ribandar, as well as the old city of Goa, and is six miles in extent. Old Goa is some five miles distant from the new city. Panjim occupies a narrow strip of land leading up to the Cabo, the cape dividing the Aguada bay from that of Mormugão, and mainly slopes down to the edge of the Aguada. It was selected as the residence of the Portuguese Viceroy in 1759, and in 1843 it was raised to its present rank as the capital of Portuguese India. The appearance of the city, with its row of public buildings and elegant private residences, as seen from the water is very picturesque and this impression is not belied by a closer inspection of its neat and spacious roads, bordered by decent, tidy houses. The most imposing public structures are the barracks, an immense quadrangular building the eastern wing of which accommodates the Lyceum, the Public Library and the Government Press. Other noticeable buildings are the Cathedral and various churches, the vice-regal palace, the High Court and so on. The square in the lower part of the town is adorned with a life-sized statue of Albuquerque standing under a canopy.

History

Goa was captured for the Portuguese by Alfonso de Albuquerque in 1510. Albuquerque promptly fortified the place and established Portuguese rule on a firm basis. From this time Goa rapidly rose in importance and became the metropolis of Portuguese power in the East. There was constant fighting with the armies of the Bijapur kingdom, but the Portuguese held their own and gained the surrounding territory now known as the Velhas Conquistas.

The subsequent history of the town is one of ostentation and decay. Goa reached its summit of prosperity at the end of the sixteenth century. The accounts of travellers show that the Goa of those days presented a scene of military, ecclesiastical and commercial magnificence which has had no parallel in the British capitals of India. But the Portuguese based their dominion in India on conquest by the sword and they laboured to consolidate it by a proselytizing organisation which throws the missionary efforts of every other European power in India into the shade. Old Goa, as the ruins of the old capital are called to-day, had a hundred churches, many of them of magnificent proportions, and the Inquisition which was a power in the land. The result showed how rotten was this basis and how feebly cemented the superstructure reared upon it.

Modern Times.

There was frequently recurring fighting and in 1741 the Marathas invaded the neighbourhood of Goa and threatened the city itself. An army of 12,000 men arrived from Portugal at the critical moment. The invaders were beaten off, and the Novas Conquistas were added to the Portuguese possessions. In 1844 the shelter given by Goa to fugitives from justice in British territory threatened to bring about a rupture with the British Government at Bombay. In 1852 the Ranes of Satari, in the Novas Conquistas revolted. In 1871 the native army in Goa mutinied and the King's own brother came from Lisbon to deal with the trouble and having done so disbanded the native army, which has never been reconstituted. But another outbreak among the troops took place in 1895 and the Ranes joining them the trouble was again not quieted until the arrival of another special expedition from Lisbon. The Ranes again broke out in 1901 and again in 1912, troops being again imported to deal with the last outbreak, which was only reported concluded in the summer of 1913.

Administration.

The Lisbon Government by Decree No. 3266, dated 27th July 1917, enacted new rules regarding the administration of Portuguese India under an Organic Charter (Carta Organica) in force since 1st July 1919. This Charter, regarding civil and financial administration of the colony, was modified by rules Nos. 1005 and 1022, dated 7th and 20th August 1920, and decrees Nos. 7008 and 7030, dated 9th and 16th October.

As the principal organ of administration next to the Governor-General, and in collaboration with him, are working two councils—Legislative and Executive. The Executive Council is composed by the Governor-General, His Excellency Jaime Alberto de Castro Morais, Attorney-General and four chiefs of Services appointed yearly by the

Governor-General subject to the approval of the Executive Power, and a member appointed yearly under identical circumstances. These chiefs in the present year are the Secretary General, the Director of Customs, the Head of Military Department and the Director of Finances.

The Legislative Council is constituted by the member of the Executive Council and by non-official members. These members are: one representative for the Ilhas Municipality, one for the Bardez Municipality, one for the Mormugao and Salsette Municipalities, one for the Novas Conquistas Municipalities, one for the district of Daman and one for district of Diu; one citizen elected by the Commercial and Industrial Associations; one citizen elected by 90 highest tax payers; one citizen elected by the Associations of Agriculture and of Landowners; one citizen elected by the Attorneys of the Communities and one citizen elected by the Associations of Class.

Under the Presidency of the Governor of each district here is District Council, which in Goa is composed of—the Secretary General, President; the Attorney General's Delegate at the Civil Court of the Islands; the Deputy Chief Health Officer; the Engineer next to the Director of Public Works: the Deputy Director of Finances; the Chairman of the Municipal Corporation of the Islands; one member elected by the Commercial and Industrial Associations of the district: one member elected by the 60 highest tax payers of Goa; one member elected by the Associations of Landowners and Farmers of the District and one member advocates elected by the Legislative Council among the legally qualified.

At Daman and Diu the corresponding body is composed of the local Governor as President, the Delegate of the Attorney General, the Chief of the Public Works Department, the Health Officer, the Financial Director of the district, the Chairman of the Municipal Corporation, two members elected by 40 highest tax payers of the District and one member elected by the Merchants, Industrialists and Farmers of the district.

Under the provisions of the above quoted Decree is also officiating in the capital of Portuguese India a special tribunal to take cognizance and decide all litigious administrative matters, fiscal questions and accounts. It is named *Tribunal Administrativo Fiscal e de Contas* and is composed of the Chief Justice as President, two High Court Judges, the Fiscal Auditor and the citizens who are not Government officers nor belong to the administration, bodies of corporations, whether they may be or may not be on actual duty, elected by the Legislative Council, two of whom are advocates and the third a merchant, industrialist or landowner or a highest tax payer. In the decision of matters of account the Director of Finances also sits on the special tribunal.

Under the presidency of the Governor-General the following bodies are also working:—

Technical Council of Public Works.—Its members are all engineers on permanent duty in the head office, a military officer of highest rank in the army or navy, the Director of Finances, the Attorney-General, the Chief Health Officer and a Secretary being a clerk of the Public Works Department appointed by the Director of Public Works.

Council of Public Instruction.—This is composed of three members appointed by Government and six elected among the Professors, there being one elected by the Medical College of Nova-Goa, two by the Lyceum of Nova-Goa, one by the Commercial Institute, one by the Normal School and one by the Corporation of the Professors of Primary Instruction.

There is also Financial Council composed by the Fiscal Auditor and by the Judges of both Civil and Criminal Jurisdictions of the Judicial division of Ilhas.

DAMAN.

The settlement of Daman lies at the entrance to the Gulf of Cambay, about 100 miles north of Bombay. It is composed of two portions, namely, Daman proper, lying on the coast, and the detached pargana of Nagar Aveli, separated from it by a narrow strip of British territory and bisected by the B. B. & C. I. Railway. Daman proper contains an area of 22 square miles and 26 villages and has a population (1910) of 18,300. Nagar Aveli has an area of 60 square miles and a population (1910) of 29,020. The town of Daman was sacked by the Portuguese in 1531, rebuilt by the natives and retaken by the Portuguese in 1558, when they made it one of their permanent establishments in India. They converted the mosque into a church and have since built eight other places of worship. Of the total population the number of Christians is 1,586. The number of houses is 8,271, according to the same census. The native Christians adopt the European costume, some of the women dressing themselves after the present European fashion, and others following the old style of petticoat and mantle once prevalent in Spain and Portugal.

The soil of the settlement is moist and fertile, especially in the Pargana of Nagar Aveli, but despite the ease of cultivation only one-twentieth part of the territory is under tillage. The principal crops are rice, wheat, the inferior cereals of Gujarat and tobacco. The settlement contains no minerals. There are stately forests in Nagar Aveli, and about two-thirds of them consist of teak, but the forests are not conserved and the extent of land covered by each kind of timber has not been determined. Before the decline of Portuguese power in the East, Daman carried on an extensive Commerce especially with the east coast of Africa. In those days it was noted for its dyeing and weaving.

The territory forms for administrative purposes a single district and has a Municipal Chamber and Corporation. It is ruled by a Governor invested with both civil and military functions, subordinate to the Governor-General of Goa. The judicial department is administered by a judge, with an establishment composed of a delegate of the Attorney-General and two clerks. In Nagar Aveli the greater part of the soil is the property of the Government, from whom the cultivators hold their tenures direct. A tax is levied on all lands, whether alienated or the property of the State. The chief sources of revenue are land-tax, forests, excise and customs duties.

DIU.

Diu is an island lying off the southern extremity of the Kathiawar Peninsula, from which it is separated by a narrow channel through a considerable swamp. It is composed of three portions, namely, Diu proper (island), the village of Gogla, on the Peninsula, separated by the channel, and the fortress of Simbor, about 5 miles west of the island. It has a small but excellent harbour, where vessels can safely ride at anchor in two fathoms of water and owing to the great advantages which its position offers for trade with Arabia and the Persian Gulf, the Portuguese were fired at an early period with a desire to obtain possession of it. This they gained, first by treaty with the Sultan of Gujarat and then by force of arms. Diu became opulent and famous for its commerce. It has now dwindled into insignificance. The extreme length of the island is about seven miles and its breadth, from north to south, two miles. The area is 20 square miles. The population of the town of Diu, from which the island takes its name, is said to have been 50,000 in the days of its commercial prosperity. The total population of the island, according to the census of 1910, is 14,170, of whom 271 were Christians.

FRENCH POSSESSIONS.

The French possessions in India comprise five Settlements, with certain dependent lodges, or plots. They aggregate 203 square miles, and had a total population in 1912 of 282,386. The first French expedition into Indian waters, with a view to open up commercial relations, was attempted in 1603. It was undertaken by private merchants at Rouen, but it failed, as also did several similar attempts which followed. In 1642 Cardinal Richelieu founded the first Campagnie d'Orient, but its efforts met with no success. Colbert reconstituted the Company on a larger basis in 1664, granting exemption from taxes and a monopoly of the Indian trade for fifty years. After having twice attempted, without success, to establish itself in Madagascar, Colbert's Company again took up the idea of direct trade with India and its President, Caron, founded in 1668 the Comptoir, or agency, at Surat. But on finding that city unsuited for a head establishment he seized the harbour of Trincomalee in Ceylon from the Dutch. The Dutch, however, speedily retook Trincomalee; and Caron, passing over to the Coromandel coast, in 1672, seized St. Thome, a Portuguese town adjoining Madras, which had for twelve years been in the possession of Holland. He was, however, compelled to restore it to the Dutch in 1674.

The ruin of the Company seemed impending when one of its agents, the celebrated Francois Martin, suddenly restored it. Rallying under him a handful of sixty Frenchmen, saved out of the wreck of the settlements at Trincomalee and St. Thome, he took up his abode at Pondicherry, then a small village, which he purchased in 1683 from the Raja of Gingee. He built fortifications, and a trade began to spring up; but he was unable to hold the town against the Dutch, who wrested it from him in 1693, and held it until it was restored to the French by the Peace of Ryswl, in 1697. Pondicherry became in this year and has ever since remained, the most important of the French Settlements in India. Its foundation was contemporaneous with that of Calcutta. Like Calcutta, its site was purchased by a European Company from a native prince, and what Job Charnock was to Calcutta Francois Martin proved to Pondicherry. On its restitution to the French by the Peace of Ryswick in 1697, Martin was appointed Governor, and under his able management Pondicherry became an entrepot of trade.

Chandernagar, in Lower Bengal, had been acquired by the French Company in 1688, by grant from the Delhi Emperor; Mahé, on the Malabar Coast, was obtained in 1725-6, under the government of M. Lenoir; Karikal, on the Coromandel Coast, under that of M. Dumas, in 1739. Yanam, on the coast of the Northern Circars, was taken possession of in 1750, and formally ceded to the French two years later.

Administration.

The military command and administration-in-chief of the French possessions in India are vested in a Governor, whose residence is at Pondicherry. The office is at present held by Monsieur L. Gerbinis. He is assisted by a Chief Justice and by several "Chefs de Service" in the different administrative departments. In 1879 local councils and a council-general were established, the members being chosen by a sort of universal suffrage within the French territories. Seventeen Municipalities, or Communal Boards, were erected in 1907, namely, Pondicherry, Arianoupam, Modellarpeth, Oulgaret, Villenour, Tiroubouvane, Bahour and Nettapacam, for the establishment of Pondicherry; Karikal, Neravy, Nedouncadou, Tirunalar, Grande Aldée, Cotchéry, for the establishment

of Karikal, and also Chandernagar, Mahé and Yanam. On municipal boards natives are entitled to a proportion of the seats. Civil and criminal courts, courts of first instance and a court of appeal compose the judicial machinery. The army and establishments connected with the Governor and his staff at Pondicherry, and those of administrators at Chandernagar, Yanam, Mahe and Karikal, together with other headquarters charges, necessarily engross a large proportion of the revenue. All the state and dignity of an independent Government, with four dependent ones, have to be maintained. This is effected by rigid economy, and the prestige of the French Government is worthily maintained in the East. Pondicherry is also the scene of considerable religious pomp and missionary activity. It forms the seat of an Archbishop, with a body of priests for all French India; and of the Missions Etrangeres, the successors of the Mission du Carnatic founded by the Jesuits in 1776. But the chief field of this mission lies outside the French Settlements, a large proportion of its Christians are British subjects and many of the churches are in British territory. The British rupee is the ordinary tender within French territories. A line of railway running *via* Villenour, from Pondicherry to Villupuram on the South Indian Railway, maintains communication with Madras and the rest of British India, and Karikal is linked to the same railway by the branch from Peralam. A Chamber of Commerce consisting of fifteen members, nine of them Europeans or persons of European descent, was reorganised by a decree of 7th March, 1914. The capital, Pondicherry, is a very handsome town, and presents, especially from the sea, a striking appearance of French civilisation.

People and Trade.

The Settlements are represented in Parliament at Paris by one senator and one deputy. The Senator is Mons. H. Caebele. The Deputy is Mons. P. Bluysen. There were in 1922, 54 primary schools and 3 colleges, all maintained by the Government, with 240 teachers and 8,009 pupils. Local revenue and expenditure (budget of 1923) Rs. 28,62,470. The principal crops are paddy, groundnut, and ragi. There are at Pondicherry 5 cotton mills, and at Chandernagar 1 jute mill; the cotton mills have, in all, 1,628 looms and 70,532 spindles, employing 7,885 persons. There are also at work one oil factory and a few oil presses for groundnuts, one ice factory, one iron works and a cocotine factory. The chief exports from Pondicherry are oil seeds. At the ports of Pondicherry, Karikal, and Mahé in 1922 the imports amounted to 2,65,05,384 francs and the exports to 2,81,66,573 francs. At these three ports in 1922, 223 vessels entered and cleared. Tonnage 58,333 T2?6. Pondicherry is visited by French steamers, sailing monthly between Colombo and Calcutta in connection with the Messageries Maritimes. The figures contained in this paragraph are the latest available and are corrected up to December 1922.

PONDICHERRY.

Pondicherry is the chief of the French Settlements in India and its capital is the headquarters of their Governor. It is situated on the Coromandel Coast, 105 miles from Madras by road and 122 by the Villupuram-Pondicherry branch of the South Indian Railway. The area of the Settlement is 115 square miles and its population in 1922 was 172,413. It consists of the four communes of Pondicherry. The Settlement was founded in 1674 under Francois Martin. In 1693, it was captured by the Dutch but was restored in 1699. It was besieged four times by the English. The first siege under Admiral Boscawen in 1748 was unsuccessful. The second, under Eyre Coote in 1761, resulted in the capture of the place, which was restored in 1765. It was again besieged and captured in 1778 by Sir Hector Munro, and the fortifications were demolished in 1779. The place was again restored in 1785 under the Treaty of Versailles of 1783. It was captured a fourth time by Colonel Braithwaite in 1793, and finally restored in 1816.

The Settlement comprises a number of isolated pieces of territory which are cut off from the main part and surrounded by the British District of South Arcot, except where they border on the sea. The Collector of South Arcot is empowered to deal with ordinary correspondence with the French authorities on these and kindred matters, and in this capacity is styled the Special Agent. At Pondicherry itself is a British Consular Agent accredited to the French Government, who is usually an officer of the Indian Army. The town is compact, neat and clean, and is divided by a canal into two parts, the Ville blanche and the Ville noire. The Ville blanche has a European appearance, the streets being laid at right angles to one another with trees along their margins reminding the visitor of continental boulevards, and the houses being constructed with courtyards and embellished with green venetians. All the cross streets lead down to the shore, where a wide promenade facing the sea is again different from anything of its kind in British India. In the middle is a screw-pile pier, which serves, when ships touch at the port, as a point for the landing of cargo, and on holidays as a general promenade for the population. There is no real harbour at Pondicherry; ships lie at a distance of about a mile from the shore, and communication with them is conducted by the usual *masula* boats of this coast. Facing the shore end of the pier is a statue of the great Dupleix, to whom the place and the French name owed so much.

CHANDERNAGAR.

Chandernagar is situated on the bank of the Hooghly, a short distance below Chinsura. Population (1922) 25,153. The town was permanently occupied by the French in 1688, though previously it had been temporarily occupied by them at a date given as 1672 or 1676. It did not, however, rise to any importance till the time of Dupleix. It changed hands between British and French various times during the Napoleonic wars and was finally restored to the French in 1816.

The former grandeur of Chandernagar has disappeared, and at present it is little more than a quiet suburban town with little external trade. The railway station on the East Indian Railway is just outside French territory 22 miles from Calcutta (Howrah). The chief administrative officer is the Administrator who is subordinate to the Governor of the French Possessions. The chief public institution is the College Dupleix, formerly called St. Mary's Institution, founded in 1882 and under the direct control of the French Government.

KARIKAL.

Karikal lies on the Coromandel Coast between the Tanjore District of Madras and the Bay of Bengal. The settlement is divided into three communes, containing 110 villages in all, and covering an area of 53 square miles. It is governed by an Administrator subordinate to the Governor at Pondicherry. The population has in recent years rapidly decreased. In 1883 it was 93,055; in 1891, 70,526; in 1901, 56,595; in 1912, 56,579; in 1921, 54,356; and in 1922, 54, 603; in 1915, 56,867; but the density is still very high, being 1,008 persons per square mile. Kumbakonam is the only taluk in Tanjore District which has a higher density. Each of the three communes—namely, Karikal, La Grande Aldee, and Nedungadu—possesses a mayor and council. The members are all elected by universal suffrage, but in the municipality of Karikal half the number of seats are reserved for Europeans or their descendants. The country is very fertile, being irrigated by seven branches of the Cauvery, besides many smaller channels.

The capital of the settlement is situated on the north bank of the river Arasalar, about 1½ miles from its mouth. It has a brisk trade in rice with Ceylon, and to a less extent with the Straits Settlements. It has no commerce with France, and very little with other French colonies. The port is merely an open roadstead, provided with a light-house 142 feet high, the light in which has a range of from 8 to 10 miles. In 1899 Karikal was connected with Paralem on the Tanjore District Board Railway. Karikal finally came into French possession on the settlement after 1815.

The Frontiers.

By those who take a long view of politics in the wide sense of the term, it will be seen that the Indian Frontier Problem, which has loomed so large in the discussion of Indian questions, has always borne a two-fold character—the local issue and the international issue. For almost a century the international issue was the greater of the two, and the most serious question which the Indian Government, both directly and as the executors of British Imperial policy, had to face. But the tendency of recent times has been for the international aspect to recede and for the local aspect to grow in importance, until now it may be said, with as much truth as characterises all generalisations, that the local issue dominates, if it does not absorb the situation.

The Local Problem.—The local problem, in its broadest outlines, may be briefly indicated before proceeding to discuss it in detail. From the Arabian Sea on the West to the confines of Nepal is a wild and troublous sea of the highest mountains in the world. The thin valleys in these immense ranges are poorly populated by hardy, brave, militant mountaineers, rendered the fiercer and the more difficult by professing the martial Moslem faith, accentuated by the most bitter fanaticism. But sparse as the population is, it is in excess of the supporting power of the country. Like mountaineers in all parts of the world, these brave and fearless men have sought to eke out their exiguous agriculture by raiding the rich plains of Hindustan. We may find a fairly close parallel to the situation in the position of the Highlands of Scotland. Until after the rebellion of 1745 the English Government of the day sought a permanent remedy by opening for the warlike Highlanders a military career in the famous Highland regiments, and in rendering military operations easier by the construction of Wade's road. The Highland problem has disappeared so long from English politics that its pregnant lessons are little realised, but if the curious student will read again that brilliant novel by Neil Munro, "The New Road," he will appreciate what Wade's work meant for the Highlands of Scotland, and what lessons it teaches those who are called upon to face, in its local aspect, the Indian frontier problem. So far as the area with which we are dealing was concerned, two policies were tried. In Baluchistan, the genius of Sir Robert Sandeman devised the method of entering into military occupation of the principal points, and thence controlling the country. At the same time close engagements were entered into with the principal chiefs, through whom the tribesmen were kept in order. That policy was so successful that whilst the administration was expensive the Baluchistan frontier did not seriously embarrass the Government of India from the time when Sandeman set his mark on the land. Not that the country was entirely peaceful. Occasional tribal raids or risings necessitated occasional military operations, and the Gomal Pass was involved in the general tribal disturbances which followed the wanton declaration of war by Afghanistan in 1919. But speaking broadly, Sandeman brought peace to Baluchistan, and to the large frontier area which is embraced in that generic term. So far as this section of the frontier is concerned it may be said that no frontier problem exists, save the need for an economical and constructive policy.

Towards Afghanistan.—Far otherwise is it with the section of the frontier which stretches from Baluchistan to the confines of Nepal. That has, for three quarters of a century, been the scene of almost ceaseless military operations, which have constituted a devastating drain on the Indian exchequer. One seeks in vain for a clear and definite policy guiding the actions of the Government of India. One explanation of these inconsistencies is found in the existence of two schools of thought. Once the frontier with Afghanistan had been delimited, the soldiers naturally pressed for the armed occupation of the whole country right up to the confines of Afghanistan, or at any rate, for military posts, linked with good communications, which would dominate the country. But those who looked at policy not only from the military standpoint, were conscious of two considerations. They saw that occupation up to the Afghan frontier only meant the shifting of the frontier problem farther North. Instead of the differing tribes, we should have to meet the Afghan on our border line. If Afghanistan were a strong, homogeneous State, that would be a matter of little account. But even under the iron rule of Abdurrahaman Khan, the Amir's writ ran but lightly on the southern confines of his kingdom. Under his successor, Habibullah Khan, whose policy was generally wise and successful, it ran still less firmly. The Amir was unable to control the organisation of the tribal gatherings which involved us in the Zakka Khel and Mohmand expeditions during the Indian secretaryship of that arch pacifist, Lord Morley. Nor did it enable Habibullah to deal effectively with a rising against his own Governor in Khost. The Afghan forces melted away under transport difficulties when they were moved against the rebellious Khostwalls, and the Amir had to make peace with his troublous vassals. Therefore the occupation of the frontier up to what is called the Durand Line, because it is the line demarcated by Sir Mortimer Durand as the British Plenipotentiary, would simply have meant that in time of trouble we should have to deal with Afghanistan instead of a tribe or two, and with the irreconcilable tribesmen along our difficult line of communications. There was the further consideration that financiers were of the sound belief that even if the Forward Policy was wise from the military standpoint, it would involve charges over an indefinite period greater than the Indian finances would bear. Moreover on this section of the Frontier, the position was complicated by the expansion of Russia in Central Asia. The easiest passes, and the passes down which for centuries from the time of Alexander the Great invaders have swept from Persia and Central Asia to loot the fat plains of Hindustan, traverse this region. Therefore it was deemed essential to control, if not to occupy them, in the interests of the Imperial situation. In this zone therefore policy ebbed and flowed between the Forward School, which would have occupied, or dominated, the whole Frontier up to the Durand Line, that is to say up to the Afghan frontier; and the

Close Border School, which would have us remain out of the difficult mountainous zone and meet the tribesmen on the plains if they sallied forth. The extreme advocates of this school would even have had us return to the line of the Indus.

The Two Policies—The result of this conflict of opinion was a series of wavering compromises, which like all compromises was profoundly unsatisfactory. We pushed forward posts here and there, which irritated the Tribesmen, and made them fearful of their prized independence, without controlling them. These advanced posts were in many cases inadequately held, and rarely were they linked with their supporting posts by adequate means of communication. We preserved between our administrative frontier, and the Durand Line which demarcated our frontier with Afghanistan an irregular belt of land called The Independent Territory, in which neither we nor the Afghan Government exercised jurisdiction. This was left entirely under the control of the tribes who peopled it. Now it has often been asked why we did not follow the precedent of Baluchistan and "Sandemanise" the Independent Territory. That is one of the perennial topics of Frontier discussions. It is however important to bear in mind that there were essential differences between this zone and Baluchistan. Sir Robert Sandeman found a strong tribal system existing in Baluchistan, and he was able to enter into direct engagements with the tribal chiefs. There is no such tribal organisation in the Independent Territory. The tribal chiefs, or maliks, exercise a very precarious authority, and the instrument for the collective expression of the tribal will is not the chief, but the jirgah, or tribal council, of the most democratic character, where the voice of the young men of the tribe often has the same influence, in time of excitement perhaps more influence, than the voice of the wiser greybeard. The bitter fruit of this policy of compromise was reaped in 1897, when following a minor outbreak in the Tochi Valley the general uneasiness flamed into a rising which involved the whole of the North-West Frontier, from the Gomal to the borders of Nepal. A force over thirty thousand strong had to be mobilised to deal with it. Even this large force, owing to the immense difficulties of transportation, was unable effectively to deal with the situation though peace was made. The emergency thus created synchronised with the advent of Lord Curzon as Viceroy. He dealt with it in masterful fashion. In the first place, he separated the frontier zone from the Government of the Punjab, which had hitherto been responsible for its administration, and had organised for the purpose a special force of Frontier soldiers, known as the Punjab Irregular Frontier Force. This was the revival of a scheme as old as the viceroyalty of Lord Lytton, though no other Viceroy had been able to carry it through, in the face of the strong opposition of successive Punjab Governments. The area so separated was constituted into a separate administrative zone under the direct authority of the Government of India, exercised through a Chief Commissioner. Then Lord Curzon withdrew the advanced military posts and concentrated the Regular troops in bases better linked with the main military centres of India by roads and railways. The advanced posts, and especially important passes like the Tochi, the Kurram and the Khyber, were entrusted to the defence of local militia, recruited from the tribesmen themselves, and officered by British officers drawn from the ranks of the Indian Army. Later it was supplemented by a fine development policy. The construction of the Upper Swat Canal, afterwards developed into the Swat Canal (*q.v.* Irrigation) led to such an increase in cultivation that the tribesmen were given a means of livelihood and were invested with the magic charm of valuable property. The irrigated part of the Frontier has since been one of the most peaceful in the whole border line.

Lord Curzon's Success.—Judged by every reasonable standard the Curzon policy was successful. It did not give us complete peace. There were occasional punitive expeditions demanded, such as for instance the Zakka Khel and Mohmand expeditions, and the Waziris, and in particular the truculent Mahsud Waziris, never ceased raiding. But in comparison with what had gone before, it gave us relative peace. It endured throughout the War, though the Waziris built up a heavy bill of offences, which awaited settlement when Government were free from the immense preoccupations of the war. It broke down under the strain of the wanton invasion of India by the Afghans in the hot weather of 1919. On February 20th the Amir Habibullah Khan was assassinated in his sleep near Jelalabad. Although he does not figure so prominently in frontier history as his iron father Abdurrahaman Khan, he nevertheless has high claims on the favourable verdict of history. None anticipated that any successor to Abdurrahaman Khan could hold in the leash of a single State the fractious, fanatical tribes who make up the population of the Afghan kingdom. Yet this Habibullah did. On occasion his attitude seemed to be equivocal, as when armed gatherings of the tribes called lashkars were permitted to assemble in Afghan territory and to invade the Independent Territory, causing the Zakka Khel and Mohmand expeditions. But we must not judge a State like Afghanistan by European standards; the Amir had often to bow before the fanatical elements amongst his own people until they had burnt their fingers by contact with the British troops. At the outset of the War he warned the Government that he might often have to do things which seemed unfriendly, but they must trust him. In truth, the position of the Amir when Turkey entered on the war, and called Moslems everywhere to arms on the side of Germany was extraordinarily difficult; he received Turkish, German and Austrian missions in Kabul, from which British representatives were still excluded. But he kept Afghanistan out of the war, and with the complete defeat of the Central Powers and their satellites, his policy was justified up to the hilt. Indeed, his success was the cause of his assassination. The irreconcilable elements in the Kingdom saw that the day of reckoning had come and strove to avert the settlement of their account by the murder. When he was done to death, his brother, Nasrullah Khan, was proclaimed Amir by the assassins. But the conscience of Afghanistan revolted against the idea of Nasrullah, the arch-fanatic of the ruling House of Kabul, ascending the throne over the blood stained corpse of his brother. A military movement in Kabul itself

brushed him aside and installed the son of Habibullah, Amanulla Khan, on the throne But Amanulla Khan soon found it was a thorny bed on which he lay, and encouraged by the disorders in India which followed the passing of stringent measures to deal with anarchical crime, set his troops in motion in April 25,1919, and preaching a *jehad* promised his soldiery the traditional loot of Hindustan. The Indian Army was at once set in motion, and as has always been the case the regular Afghan Army was easily beaten. Dacca was seized, Jelalabad and Kabul were frequently bombed from the air, and there was nothing to prevent our occupation of Kabul, save the knowledge gleaned from the bitter heritage of the wars of 1838 and 1878, that it is one thing to overset a government in Afghanistan, but it is quite another to set up a stable government in its stead. The Government of India wisely held their hand, and the Afghans having sued for peace, a treaty was signed on the 8th August 1919.

But an untoward effect of this wanton war was to set the Frontier from the Gomal to the Khyber ablaze. With one or two exceptions, the Tribal Militia could not stand the strain of an appeal from their fellow tribesmen, and either melted away or joined the rising. This has often been described as the failure of the Curzon policy, which was based on the tribal militia. But there is another aspect to this issue, which was set out in a series of brilliant articles which Mr. Arthur Moore, its special correspondent, contributed to *The Times*. He pointed out that the militia was meant to be a military police force, The lapse of time, and forgetfulness of its real purpose, had converted the militia into an imitation of the regular army. The Militia was meant to be a police. When the war broke out its units were treated as a covering force behind which the Regular Army mobilised. This is a role which it was never intended they should serve; exposed to a strain which they should never have been called upon to discharge bear, they crumpled under it. If this reasoning is correct—and a strong case can be marshalled in support of it—then what has been called the failure of the Curzon policy arose from the misconception and misdirection of that policy.

Russia and the Frontier.—On the other hand, if it be admitted that the Curzon policy was sound, and that its success was marked—a proposition with which we are in general agreement—it can also be claimed that the Curzon policy owed no small measure of its success to extraneous events. The greatest external force in moulding Indian frontier policy was the long struggle with Russia. For nearly three quarters of a century a veiled warfare for predominance in Asia was waged between Great Britain and Russia. There are few pages in British foreign policy less attractive to the student of Imperial affairs. Russia was confronted in Central Asia with precisely the same conditions as those which faced England in India when the course of events converted the old East India Company from a trading corporation into a governing body. The decaying khanates of Central Asia were impossible neighbours. Confronted with an inferior civilisation, and with neighbours who would not let her alone, Russia had to advance. True the adventurous spirits in her armies, and some of the great administrators in the Tsarist capital, were not adverse to paying off on the Indian Borderland the score against Great Britain for the Crimean War, and for what the Russians thought was depriving them of the fruits of their costly victory over Turkey in 1877-78. The result was a long and unsatisfactory guerilla enterprise between the hardiest spirits on both sides, accompanied by periodic panics in the British Press each time the Russians moved forward, which induced the coining, after the Russian occupation of Merv, of the generic term "Mervousness." This external force involved the Government of India in the humiliations of the Afghan War of 1838, with the tragic destruction of the retiring Indian force between Kabul and Jelalabad, slightly relieved by the heroic defence of Jelalabad and the firmness of General Pollock in refusing to withdraw the punitive army until he had set his mark on Kabul by the razing of the famous Bala Hissar fortress. It involved us in the second Afghan War of 1878, which left the baffling problem of no stable government in Afghanistan. There was a gleam of light when Adburrahaman Khan, whom we set up at Kabul to relieve us of our perplexities, proved himself a strong and capable ruler, if one ruthless in his methods. But in the early eighties the two States were on the verge of war over a squabble for the possession of Penjdeh, and then men began to think a little more clearly. There began a series of boundary delimitations and agreements which clarified the situation, without however finally settling it. The old controversy broke out in another form when intrigues with a Buriat monk, Dorjieff, during Lord Curzon's viceroyalty, gave rise to the grave suspicion that the scene had only shifted to Tibet. An expedition to Lhasa rent the veil which had so long concealed the mysterious city and dispersed the miasma of this intrigue. But it was not until the conclusion of the Anglo-Russian agreement of1907 that the two countries arrived at a stage long sought by those who looked beyond their noses. The actual authors of the Agreement were Lord Grey, the Foreign Secretary, and Lord Hardinge, formerly British Ambassador in Petrograd, but it had been desired by their predecessors, whose efforts were rendered nugatory by the intransigent attitude of the dominant forces in Petrograd. It was not until Russia was chastened on the battlefields of Manchuria by Japan, and disappeared as a sea power in the decisive battle of Tsushima, that an atmosphere was created favourable to the conclusion of an Agreement. This embraced the whole frontier zone. There were many unsatisfactory features in the Agreement, especially in regard to Persia, for which we had to pay a considerable price in the attitude of Persians in the War. But again taking long views, the Agreement fully justified itself in a broad definition of the interest of the two countries, which put an end to the period of excursions and alarms up to the outbreak of the War. Henceforward Russia ceased to be a material factor in the Indian Frontier Problem, with the exception of a brief period when the Red Army was trotted out as another bogey.

Lord Kitchener's work.—It is a strange coincidence that the Russian menace should have paled just when we were most fitted to

deal with it. Although for nearly three generations the idea of war with Russia had always been in the minds of the directors of the Indian Army, it is a plain truth that there was no organisation definitely designed to deal with it, it is almost true to say there was no plan of campaign. We have authority for asserting that when hostilities seemed inevitable over the Penjdeh incident officers gamed for high command could extract from Army Headquarters no clear idea how they were to proceed. The forces in India were scattered in unrelated cantonments; they were frequently maintained as local troops, with the inevitable deficiencies of local troops. Lord Kitchener changed all that. Under our engagements with Afghanistan we were committed to the armed support of that State if, in the event of hostilities with Russia, she demanded our aid. It was generally assumed that the line on which our troops would be posted was that from Kabul to Ghazni. Lord Kitchener reorganised the Indian Army in eight Divisions, each one of which would be fit to take the field as a cohesive unit, leaving in cantonments a sufficiency of troops for internal defence, on the order to mobilise. These Divisions were echeloned so as to move forward in rotation to our great advances bases, Quetta on the West, for Kandahar and Ghazni, and Peshawar in the north, for the support of Kabul. Again, a distressing feature in British policy has been over and over again to assume immense responsibilities, without any clear idea how they were to be defended in an emergency, indeed often without any idea of making them good in a crisis. Lord Kitchener would have none of this sloppy thinking. When the Anglo-Russian Agreement was under consideration, he fixed the line of our definite territorial responsibilities at the line he was prepared to defend at all hazards by armed force, the line from Ghazik to Bunder Abbas. That line had one notable defect; it left outside our zone in the Persian Gulf the Clarence Straits, which owing to the shelter they can afford to a considerable fleet in a possible theatre of war almost destitute of good harbours, constitute, according to good naval authority, the naval key to the Persian Gulf. Nevertheless the decision of Lord Kitchener formed a notable landmark in British policy—the refusal to accept territorial responsibilities which we were not prepared to defend.

Another Bogey.—In the cold fit following the economic depression which inevitably set in after the signing of the Treaty of Versailles, and the passing of the very temporary industrial boom, the British Empire was urged to cower before the spectre of immense armies of Russian Bolshevists destroying what remained of European and Asiatic civilisation. An emotional Prime Minister, sought to stampede Europe into economic recovery along lines which were neither practicable nor even reasoned; excited publicists tried to make our flesh creep by conjuring up visions of hordes of Red Russians sweeping over Eastern Europe and Persia, even to the plains of Hindustan, in search of the food which their own country could not supply. Journalists who ought to have known better having seen a few picked regiments manœuvre in Moscow, imagined that the whole of the Russian Army was organised, drilled and equipped on this new model. But others, remembering Napoleons, maxim that an army marches on its belly, refused to be frightened. Having regard to the semi-paralysis of the Russian railways, which diminished in efficiency with unimpeded regularity after the Revolution, they did not believe that these troops, even if trained and equipped, could be marched to any distant scene of war. They argued that a few picked regiments, maintained in the capital for the purpose of overawing the populace, did not constitute a modern army in any sense of the term. Moreover, having regard to the miserable exhibition of the Russian armies in the war with Poland, and in particular the manner in which the Indian troops scattered Bolshevist battalions like chaff in the fighting in Central Asia during the last year of the war, they felt convinced that whilst the Bolshevist armed forces might be effective against the loose battalions of Koltchak and Denikin and Wrangel, scattered over an unending front, they would never make a stand against disciplined troops operating with all the scientific paraphernalia of war in any more limited zone. But these opinions, though strongly held, were for long only opinions. In the early part of 1923 however *The Times* published a series of articles on modern Russia, stamped with the impress of high authority and intimate knowledge in which the writer dealt in detail with the organisation and state of the Russian armies, and we shall now indicate the general tenour of his conclusions.

The Red Armies.—According to this eminent authority the Red Army has been reduced to a strength of six hundred thousand, on a decision reached at a conference of military commanders held in Moscow in May 1922. This conference worked out a remarkably simple and efficient reorganisation scheme which facilitates mobilisation plans, reduces the administrative machinery, increases the proportion of artillery and machine guns, and purifies the corrupt supply service. This reorganisation, which will greatly increase the efficiency of the army, is being rushed through with much energy and ability. The Reds are devoting much attention to cavalry, being convinced that cavalry will play a great role in the next war with Poland. The cavalry is the most efficient part of the Red Army, and its efficiency has been increased by changes enhancing its fire power and mobility, by the reduction of impedimenta and by an increase in the number of machine guns. The Reds have now fifteen cavalry divisions and seven independent cavalry brigades, each brigade having nearly three thousand men, with four guns and forty-eight light machine guns. The cavalry is supposed to be ready for action within twenty-four hours after mobilisation. The troops are being slowly armed with a remarkably light and efficient machine gun, called the Federov. They have a new species of Tank capable of going by railway or across country. A gas and anti-gas service has been elaborately organised. But here, as in other respects, the Bolshevists are handicapped by the absence of technical material, and suspicion of foreign spies has prevented them from employing German experts. The core of the Army is made up of what are called the "Chon"

troops, all trusted Communists recruited territorially, but as they are meant to protect the Bolshevist administration from internal enemies, they need not be treated seriously as part of the striking power of Bolshevist Russia, because they could never be withdrawn from guarding the administrative headquarters. The final conclusions of this able writer are that the Soviet can summon innumerable soldiers from out the Russian vastness, but cannot arm them, and has now only twenty million gold roubles in its treasury. All the great schemes which the Red War Office has in its pigeon holes are not worth the paper they are written upon. One great scheme relates to the throwing of hordes of cavalry into Poland and Rumania, in the expectation that the Communists in those countries will join the invaders; but the last Polish war showed that this is based on a misapprehension. Moreover, the bad state of the railways would prevent a rapid mobilisation. If this is true, as there is every reason to believe that it is true of the Border States of Russia, relatively close to the Soviet military centres, and served by the best strategic railways, how much more true is it of distant zones like Persia, Central Asia and the Indian Borderland, ill-served with means of communication, producing nothing with which to feed and equip armies, and in Central Asia at any rate peopled by races held in subjection by armed force? We claim with all the weight of evidence to support us, that so far as Russia is concerned, the external element in frontier policy has disappeared for so far ahead as we can see.

German Influence.—But as nature abhors a vacuum, so in the case of States bordered by higher civilisations, no sooner does one strong influence recede than some other takes its place. Long before the signing of the Anglo-Russian Agreement the shadow of the German menace had begun to appear on the horizon. Imitative, not creative, in this, as in most other activities, the Germans adapted their methods from the penetration by railway which was so marked a feature of Russian expansion in Manchuria, brought to an end by the disastrous issue of the war with Japan. The seeds of the German effort were sown when the Kaiser, extending the hand of Christian fellowship to the Sultan of Turkey, Abdul-Hamed, at a time when that sovereign was ostracised by Europe for his direct complicity in the massacre of Armenians, or rather one of the massacres of Armenians, made German influence supreme at Constantinople. His theatrical tour through Palestine, which was generally treated in Europe as an exhibition of opera bouffe, soon bore fruit in the acquisition by German interests of the principal railways in Anatolia. Later it fructified more effectively in the Baghdad Railway concession, under which German interests secured the right of extending the Anatolian lines from the port of Haidar and Pasha, opposite Constantinople, to a port in the Persian Gulf. Now successive British Statesmen of both parties had declared that the acquisition of a territorial foot-hold in the Persian Gulf by any power—Russia and the port of Bunder Abbas being then in view—would be regarded as an unfriendly act. There followed a replica of the period of alarums and excursions which had disfigured our relations with Russia. Undaunted, even when their endeavour to secure British co-operation in the enterprise failed, and when the Revolution in Turkey which set the Committee of Union and Progress in power entailed a temporary interruption of their influence at Constantinople, the Germans pressed forward with their enterprise. They pushed the Anatolian railways as far east as Bourgulu, and constructed a line northwards from Baghdad to Samara. They sent a mission to explore the potentialities of the port of Koweit in the Persian Gulf, and set the Turks in motion to subordinate the Sheikh of Koweit to direct Turkish sovereignty, with a nominal view to extending the Baghdad railway from Basra to Koweit, or the vicinity of Koweit at the deep water inlet behind Bubian Island. They commenced the most difficult part of the work in piercing the Amanus and Taurus ranges by a series of tunnels, and laid the rails on the other side of the mountains across the Euphrates to Ras-al-Ain. Behind this railway activity stood a grandiose policy, which is indicated in what became known in Germany as "B.B.B."—Berlin, Byzantium, Baghdad. Throughout the progress of these schemes, which did not stop short of Baghdad, but were directed through a port in the Persian Gulf, at India, the Germans were anxious to secure the co-operation of Great Britain, if they could do so on their own terms, that is to say without affecting the enterprise as a dominant German adventure. Shortly before the commencement of the war the protracted negotiations with London which had this end in view ended a definite agreement between the two Powers. Under this agreement the Gulf section of the line was to have been British, and the other portion German. But this agreement which had not been signed became waste paper with the outbreak of the war, and the German plans vanished in thin air with the complete defeat of Turkey and Germany. Nevertheless the railway did not stand still during the war. Germany made immense efforts to complete the difficult tunnel sections and the work was substantially finished when the Armistice was signed.

The Significance of the Baghdad Railway.—The real significance of the Baghdad Railway was little appreciated in Great Britain. It was constantly pictured as a great trunk line, which would short-circuit the traditional British dominance by sea, and absorb the passenger and goods traffic from the East. This idea could only be nourished by those completely ignorant of the conditions of the Indian passenger service and the essentials of a competitive route for the carriage of merchandise. The rush of passenger traffic from India is from April to June, in order to escape the hot weather in India, and the return traffic is chiefly concentrated in October and November. From April to June the heat in Mesopotamia is appalling. To imagine that the passenger traffic from India would turn from the easy and comfortable, as well as fairly expeditious sea route from Bombay to Marseilles and thence by the easiest railway travelling outside the British Isles to Boulogne and London, for such a land route was an amazing chimera. The Baghdad route would have involved a sea voyage from Bombay or Karachi to Koweit or Basra, then a journey across the burning plains of Mesopotamia and Asia Minor to Haidar Pasha, then across the Straits to

Constantinople, and finally right across Europe to a North Sea port. This would in any circumstances have been a costly freak journey in comparison with the sea route. Then as for the commercial aspect of the line, the natural port of the Middle East is Basra. The sea freight from England or Germany to Basra, is about one pound sterling a ton; before the war it was often down to fifteen shillings. The freight from Basra to Baghdad was from thirty shillings to two pounds a ton. To imagine again that merchandise would desert this route for a land and sea route, which would have involved a double break of bulk at Constantinople and Haidar Pasha, is again a chimera; the freight charges could not have been less than fifteen to twenty pounds a ton.

As a through route the primary purpose of the Baghdad Railway was strategic. It was designed to make the Power seated at Constantinople—and that Power the Teutons were resolved should be Germany—complete master of Asia Minor and The Middle East, and the route selected, often criticised, was the best for the rapid movement of troops to the strategic centres. As a commercial line, the Railway, if completed, would have served three zones. The western area of Turkey in Asia at Haidar Pasha. The rich lands of Anatolia at Alexandretta. The eastern zone at Basra. The Germans, it is understood, attached immense importance to the subsequent engagements with Turkey which placed them in maritime command at Alexandretta. They began to inaugurate a commercial position in the Persian Gulf through the establishment of a subsidized line of steamers run by the great Hamburg-America corporation. They strove to obtain an actual footing in the Gulf through the German house of Wonkhaus. We doubt if the Germans were ever serious in their alleged designs on Koweit, which could never have borne a more definite relation to the commerce of the Gulf than Flushing to Antwerp or Cuxhaven to Hamburg; that was one of the red herrings they drew across their trail to divert attention from their real objective, Basra, which is destined by virtue of an unchallengeable geographical and natural position to be the great port of The Middle East. These considerations have no more than an academic value now. Germany has been defeated. The Turks, now they are emerging from an isolated military despotism based on Angora, are confronted with the immense problem of re-building their bankrupt State, deprived of the most intelligent section of the old population—the Greeks and the Armenians, by massacre and expulsion—are a very uncertain factor. The completion of the through line is indefinitely postponed. But as the advantages of the route, for the purposes we have indicated, are many and great, the ultimate construction of the through line is only a matter of time, so we have placed these authoritative characterists on record for the guidance of opinion when the project of the through route is revived, as it must be.

Turkey and the Frontier.—The position of Turkey on the Indian frontier was never of any considerable importance in itself, and never assumed any significance, save as the *avant courier* of Germany, when she passed under the tutelage of that Power, and for a limited period during the war. Although so long established in Mesopotamia, Turkey was not very firmly seated in that country; the Arabs tolerated rather than accepted Turkish rule so long as they were substantially left alone, and the administration it is understood never paid its way. For a brief period Midhat Pasha raised the status of Mesopotamia, and after the Revolution that fine soldier Nazim Pasha became a power in the land. But speaking broadly Turkey remained in Mesopotamia because it was no-one's interest, even that of the Arab, to turn her out. When however Germany developed her "B.B.B." policy, Turkey was used as a stalking horse. She moved a small force to the Peninsula of Al-Katr in order to frighten the Sheikh of Bahrein, and tried to convert the nominal suzerainty exercised, or rather claimed, over the Sheikh of Koweit into a *de facto* suzerainty, exercised by military force. These efforts faded before the vigorous action of the British Government which concluded a binding arrangement with the Sheikh of Koweit, and the position of the Turks at Al Katr was always very precarious. On the outbreak of the war however the situation changed. When the sound and carefully-executed expedition to Basra and its strategic hinterland was developed into the insane enterprise to capture Baghdad by *coup de main*, with very inadequate forces, and still more inadequate transport, we found ourselves involved in military operations of the most extensive and unprofitable character. These were completely successful with General Maude's occupation of Baghdad. After the Russian *debâcle* we found ourselves involved in a new front, which stretched from the Euphrates to the wildest part of Central Asia, producing military exploits of an almost epic character, but exercising little influence on the war. They were brought to an end by pressure not on extensive wings, but at the heart of Turkish Power in Palestine, where Lord Allenby scattered the Turks like chaff. But the aftermath of the war left us in an indefinite position in Mesopotamia, with indefinite frontiers. This enabled the Turks, if they were so disposed, to be troublesome through guerilla warfare in the Mosul Zone, and by stirring up the Kurds, who are the Ishmaelites of Asia Minor. The signing of the Treaty of Lausanne in 1923, and its subsequent ratification by the Turkish National Assembly, promise to remove these difficulties. The Turks recognised that the Arab states were outside their zone of administration, and the boundaries between Turkey and the Arab administration set up in Mesopotamia under King Feisul were left to be determined by the League of Nations. Therefrom Turkey, we have reason to hope, will cease to be a factor in Indian frontier policy.

France and the Frontier.—If we touch for a few sentences on the position of France on the frontiers of India, it is not because they have any present day significance, but in order to complete this brief survey of the waxing and waning of external influences on Indian frontier policy. It is difficult to find any sound policy behind the efforts of France to obtain a coaling station at Maskat, in the Persian Gulf, and her long opposition to the steps necessary to extirpate the slave trade, and hold in check the immense traffic in arms which was equipping all the tribesmen on our North-West Frontier with rifles of precision and a large supply of

ammunition. We can find no more definite purpose in it than a general pin-pricking policy, a desire to play the part of Russia, and perhaps a source of annoyance to Great Britain, which would form a useful lever for the exaction of considerable cessions in West Africa, particularly in the neighbourhood of Gambia, as the price of abstention. These embarrassments were slowly removed one by one after the conclusion of the Anglo-French Entente. Far otherwise was it in the East. The consolidation of French authority in French Indo-China was the prelude to designs for the expansion of this authority at the expense of Siam and to find compensation there for the veiled British protectorate of Egypt. There had earlier been mutterings in Burma. We were established in Lower Burma in the thirties, and in the eighties the foolish and tyrannical King Theebaw, in Upper Burma, became an impossible neighbour, and ambitious Frenchmen were not averse to fanning his opposition to the British. However, if any hopes were entertained of extending the Asiatic possessions of France in this direction, they were dissipated by the Second Burmese War and the firm establishment of British rule. Far otherwise was it on the confines of Siam. It was the fixed purpose of British policy to preserve Siam as a buffer state between Burma, then a regular Province of the Indian Empire, and French Indo-China. This policy was definitely challenged by French encroachments on Siam. Matters approached a crisis in 1894, and we were within measurable distance of a situation which might have ended in open war between the two States. But as in the case of Penjdeh, and later when Major Marchand marched across Africa to Fashoda, the imminence of hostilities made statesmen on both sides ask themselves what they might be going to fight about. They found there was nothing essential and an agreement was negotiated between the two Powers, which secured the independence and integrity of Siam. That agreement has been consolidated by wise and progressive rule in Siam itself, under its own independent sovereign, who is imbued with a strong friendship for Great Britain, whilst at the same time maintaining good relations with French neighbours.

The New Frontier Problem.—The whole purpose of this brief sketch has been to show that for three generations—most assuredly since the events leading to the Afghan War of 1838—the Indian frontier problem has never been a local problem. It has been dominated by external influences—in the main the long struggle between Great Britain and Russia, for a brief period the German ambition to build up a dominant position in the East through the revival of the land route, and to a much lesser extent by the ambitions of France and Turkey. All these external influences have disappeared. There is no such prospect of their revival as justified us in taking them into consideration in the measures which are forced on the Governments responsible. The Indian frontier question has therefore developed from an Imperial into a local question—a condition on which we must lay fast hold, because people are tenacious of old ideas, especially when they are nearly a century old, and no proper understanding of the present position is possible, unless our consideration of it is governed by this essential fact, that the frontier question is purely local. But whilst these world changes were taking place, others were in progress which powerfully influence the difficulties of the situation. The tribesman was always an opponent to be respected. Brave, hardy, fanatical, he has always been a first-class fighting man. Knowing every inch of the inhospitable country in which punitive operations must of necessity take place he has hung on our rearguards and given them an infinity of trouble. Even when armed with a jeza'l, and when every cartridge had to be husbanded with jealous care, the tribesman was a respectable antagonist. Now the tribesmen are everywhere armed with magazine rifles, either imported through the Persian Gulf when gun-running was a thriving occupation, stolen from British magazines, or secured from Russian and Afghan sources. They have an abundant supply of ammunition. Considerable numbers of the fighting men have been trained in the ranks of the Indian Army, either as Regulars in the Pathan regiments, or else in the tribal militias. We found this to our cost in the events following the Afghan War of 1919. The Afghan regular army was of little account. The tribesmen who rose at the call of the jihad, especially in Waziristan, were of great account. They gave our troops the hardest fighting they have ever had on the Frontier; their marksmanship and fire discipline were described by experienced soldiers as admirable. The tribal militia, the keystone of the Curzon system, had for all practical purposes disappeared; what was to take its place?

Immediately following the Afghan War, the frontier positions were garrisoned by regular troops, but this was only a temporary measure. It may be said that the crux of the situation was in **Waziristan**. This sector of the Frontier has always been the most difficult of the whole, because of the intractable character of the people. Besides, possessing a bolt hole into Afghanistan they had in the past evaded effective punishment. In view of the complete disappearance of the external menace, and the consequent lapsing of any necessity to preserve open lines of communication which would enable us to go to the support of Afghanistan now formally recognised in the Treaty of 1921 as a completely independent state, there were many who urged the desirability of complete withdrawal, even to the line of the Indus. This extreme school gained little support. Our position in Quetta on the one side and Peshawar on the other is fully consolidated, and no good case can be made out for withdrawing from it. On the other hand, there was a strong case made out for leaving the tribesmen severely alone from the Gomal to the Kurram, and dealing with them if they emerged from their fastnesses. The military standpoint was that the Waziris are absolutely intractable; that it was unfair to impose on troops the frequent necessity of punitive operations in most arduous conditions; and that the only solution of the question was the occupation of dominant points in Waziristan, as far north as Laddha, and linking these posts with our military bases, and particular with the termini of the Indian frontier railways, by good motor roads.

This controversy has not ended yet; indeed one feels inclined to say that it never will end. It has resulted in a typically British compromise. The present policy has been aptly described

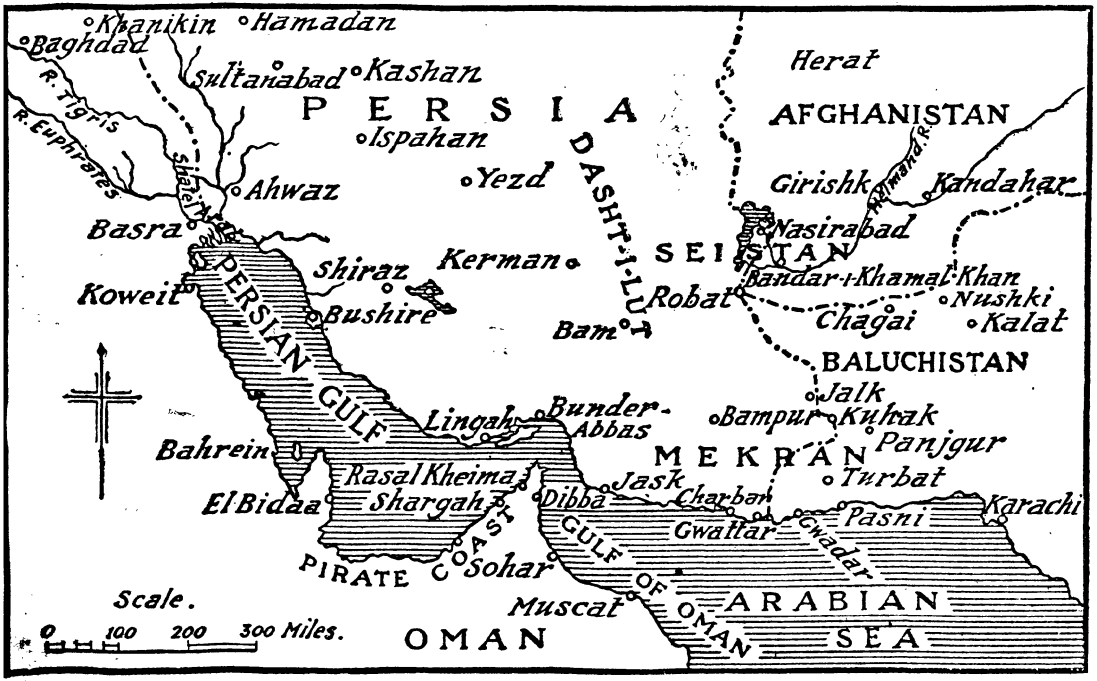
as the "half-forward" policy. There has been no withdrawal in the ordinary sense of the term, but the limits of the Waziristan occupation have been fixed at Ramzak, not at Laddha. The network of consequential roads is being pushed forward. The Indian rail-head, which for so long terminated at Jamrud, at the southern entrance to the Khyber Pass, is now being extended to Landi Kotal and the frontier between India and Afghanistan. The regular troops are being withdrawn, and their place taken by khassadars. The difference between the kassadars and the old tribal militia is material. The Militia were armed and equipped by the Indian military authorities; if they disappeared they took their arms and ammunition with them, and constituted a powerful reinforcement. The khassadars bring their own rifles with them, and therefore if they desert they do not constitute any reinforcement to those in arms against us. Many of these khassadars have already done good work in the punishment of tribal raids.

I.—THE PERSIAN GULF.

From what has gone before it will be seen that the keynote of this discussion of Indian frontier policy is that the external menace has disappeared, and that it is now a purely local question. No part of the frontier is more powerfully influenced by this consideration than the Persian Gulf. Our first appearance in the Gulf was in connection with the long struggle for supremacy with the Portuguese, the French and the Dutch, who had established trading stations there, with the capture and destruction of the great entrepot which the Portuguese had established at Ormuz, the supercession of the land by the sea route, and the appearance of anarchy in the interior the importance of the Gulf declined. The Indian Government remained there primarily to preserve the peace. This work it quietly and efficiently performed. Piracy was stamped out, the Trucial Chiefs, who occupy the Pirate Coast, were gradually brought into close relations with the Government, the vessels of the Royal Navy kept watch and ward, and our consuls regulated the external affairs of the Arab rulers on the Arab coast. In return for these services Great Britain claimed no selfish advantages. The waters of the Gulf were kept free to the navigation of the ships of all nations, and though Great Britain could have made any territorial acquisitions she pleased she retained possession of only the tiny station of Bassidu. Left to herself Great Britain desired no other policy, but for a quarter of a century the Gulf was involved in European affairs. France sought to acquire a coaling station at Jissa, near Maskat, and obstructed the efforts of the British Government to stamp out the slave trade and to check the immense traffic in arms which was equipping the tribes on our land frontier with weapons of precision and quantities of ammunition. All causes of difference were gradually removed by agreements following the Anglo-French Entente. Russia sent one of her finest cruisers to "show the flag" in the Gulf, and established consular posts where there were no interests of preserve. She was credited with the intention of occupying a warm water port, and in particular with casting covetous eyes on the most dreadful spot in the Gulf, Bunder Abbas. This menace declined after the signing of the Anglo-Russian Agreement, and disappeared with the collapse of Russian power following the Revolution. Then Turkey, either acting for herself, or as the *avant courier* of Germany, under whose domination she had passed, began to stir. She threatened the Sheikh of Bahrein by the armed occupation of the peninsula of Al Katr, and moved troops to enforce her suzerainty over Koweit, the best port in the Persian Gulf, and a possible terminus of the Baghdad Railway. Further to consolidate her interests, or to stake out a claim, Germany sent the heavily-subsidized ships of the Hamburg-America line to the Gulf, where they comported themselves as the instruments of Imperial policy rather than as inoffensive merchantmen. She also strove, through the agency of the firm of Wonkhaus, to acquire a territorial footing on the island of Shargah. These events stirred the British Government to an unusual activity in the waters of the Gulf.

Counter Measures.

The first effective steps to counter these influences were taken during the vigorous viceroyalty of Lord Curzon, who visited the Gulf during his early travels and incorporated a masterly survey of its features in his monumental work on Persia. He appointed the ablest men he could find to the head of affairs, established several new consulates, and was instrumental in improving the sea communications with the Gulf ports. The British Government also took alarm. They were fortified in their stand against foreign intrigue by the opinion of a writer of unchallenged authority. The American Naval writer, the late Admiral Mahan, placed on record his view that "Concession in the Persian Gulf, whether by formal arrangement (with other Powers) or by neglect of the local commercial interests which now underlie political and military control will imperil Great Britain's naval position in the Farther East, her political position in India, her commercial interests in both, and the Imperial tie between herself and Australasia". The Imperial standpoint, endorsed by both Parties in the State, was set out by Lord Lansdowne in words of great import—"We (*i.e.*, His Majesty's Government) should regard the establishment of a naval base or of a fortified port in the Persian Gulf by any other Power as a very grave menace to British interests, which we should certainly resist with all the means at our disposal." The negative measures following these declarations were followed by a constructive policy when the oil fields in the Bakhtiari country, with a great refinery, were developed by the Anglo-Persian Oil Company, in which the British Government has a large financial stake. But with the disappearance of these external forces on Gulf policy, as set out in the introduction to this section, the politics of the Persian Gulf receded in importance, until they are now more than they were before these external influences developed—a local question, mainly a question of police. They are therefore set out more briefly



Map of the Persian Gulf.

than in earlier editions of the Indian Year Book, and those who desire a complete narrative are referred to The Indian Year Book for 1923, pp. 178-183.

Maskat.

Maskat, which is reached in about forty-eight hours from Karachi, is outside the Persian Gulf proper. It lies three hundred miles south of Cape Musandim, which is the real entrance to the Gulf, but its natural strength and historical prestige combine to make it inseparable from the politics of the Gulf, with which it has always been intimately associated.

Formerly Maskat was part of a domain which embraced Zanzibar, and the Islands of Kishm and Larak, with Bunder Abbas on the Persian shore. Zanzibar was separated from it by agreement, and the Persians succeeded in establishing their authority over the possessions on the eastern shore.

The relations between Britian and Maskat have been intimate for a century and more. It was under British auspices that the separation between Zanzibar and Maskat was effected, the Sheikh accepted a British subsidy in return for the suppression of the slave trade and in 1892 sealed his dependence upon us by concluding a treaty pledging himself not to cede any part of his territory without our consent.

British Consul: R. E. L. Wingate.

The Pirate Coast.

Turning Cape Musandim and entering the Gulf Proper, we pass the Pirate Coast, controlled by the six Trucial Chiefs. The ill-name of this territory has now ceased to have any meaning, but in the early days it had a very real relation to the actual conditions. The pirates were the boldest of their kind, and they did not hesitate to attack on occasion, and not always without success, the Company's ships of war. Large expeditions were fitted out to break their power, with such success that since 1820 no considerable punitive measures have been necessary. The Trucial Chiefs are bound to Great Britian by a series of engagements, beginning with 1806 and ending with the prepetual treaty of 1853 by which they bound themselves to avoid all hostilities at sea, and the subsequent treaty of 1873 by which they undertook to prohibit altogether the traffic in slaves. The relations of the Trucial Chiefs are controlled by the British Resident at Bushire, who visits the Pirate Coast every year on a tour of inspection.

The commercial importance of the Pirate Coast is increasing through the rise of Debai. Formerly Lingah was the entrepot for this trade, but the exactions of the Belgian Customs officials in the employ of Persia has driven this traffic from Lingah to Debai. The Trucial Chiefs are—Debai, Abu Thabee, Sharjah, Ajman, Um-al-Gawain and Ras-el-Khcyma.

Bahrein.

North of the Pirate Coast lies the little Archipelago which forms the chiefship of the Sheikh of Bahrein. Of this group of islands only those of Bahrein and Maharak are of any size, but their importance is out of all proportion to their extent. This is the great centre of the Gulf pearl fisherv, which, in a good year, may be worth half a million pounds sterling. The anchorage is wretched, and at certain states of the tide ships nave to tie four miles from the shore, which is not even approachable by boats, and passengers, mails and cargo have to be handed on the donkeys for which Bahrein is famous. But this notwithstanding the trade of the port is valued at over a million and a quarter sterling, and the customs revenue; which amounts to some eighty thousand pounds, makes the Sheikh the richest ruler in the Gulf.

In the neighbourhood of Bahrein is the vast burying ground which has hitherto baffled archæologists. The generally accepted theory is that it is a relic of the Phœnicians, who are known to have traded in these waters.

Political Agent, Major C. K. Daly.

Koweit.

In the north-west corner of the Gulf lies the port which has made more stir than any place of similar size in the world. The importance of Koweit lies solely in the fact that it is the one possible Gulf terminus of the Baghdad Railway. This is no new discovery, for when the Euphrates Valley Railway was under discussion, General Chesney selected it under the alternative name of the Grane—so called from the resemblance of the formation of the Bay to a pair of horns—as the sea terminus of the line. Nowhere else would Koweit be called a good or a promising port. The Bay is 20 miles deep and 5 miles broad, but so shallow that heavy expense would have to be incurred to render it suitable for modern ocean-going steamers. It is sheltered from all but the westerly winds, and the clean thriving town is peopled by some 20,000 inhabitants, chiefly dependent on the sea, for the mariners of Koweit are noted for their boldness and hardihood.

Political Agent, Major J. C. More, D.S.O.

Muhammerah.

On the opposite side of the entrance to the Shatt-el-Arab lie the territories of a Sheikh who stands to the Persian Government in much the same relation as does the Sheikh of Koweit to the Government of Turkey—Sheikh Khazzal of Muhammerah. Nominally, he is subject to Teheran, on whose behalf he governs his territories as Governor; in practice he is more like a semi-independent vassal. The town, favourably situated near the mouth of the Karun River, has grown in importance since the opening of the Karun River route to trade through the enterprise of Messrs. Lynch Brothers. This route provides the shortest passage to Ispahan and the central tableland, and already competes with the older route by way of Bushire and Shiraz. This importance has grown since the Anglo-Persian Oil Company established refineries at Muhammerah for the oil which they win in the rich fields which they have tapped near Ahwaz. Its importance will be still further accentuated, if the scheme for a railway to Khorremabad by way of Dizful matures. A concession for a road by this route has long been held by a British Company.

Vice-Consul at Ahwaz, Captain E. H. Gastrell; *Consul for Arabistan* (Ahwaz), E. G. B. Peel.

Basra.

In a sense Basra and Turkish Arabistan can hardly be said to come within the scope of the frontiers of India, yet they are so indissolubly associated with the politics of the Gulf that they must be considered in relation thereto. Basra is the inevitable sea terminus of the Baghdad Railway. It stands on the Shatt-el-Arab, sixty miles from its mouth, favourably situated to receive the whole water-borne trade of the Tigris and Euphrates Rivers. The local traffic is valuable, for the richness of the date groves on either side of the Shatt-el-Arab is indescribable, there is a considerable entrepot traffic, whilst Basra is the port of entry for Baghdad and for the trade with Persia, which follows the caravan route *via* Kermanshah and Hamadan.

The Future of Basra.

The political destinies of Basra are at present wrapped up with the destinies of the new Arab State which we have set up in Mesopotamia under King Feisal. When the war was over we found ourselves committed to immense, undefined and burdensome responsibilities in that land. The sound concepts which dictated the original expedition were dislocated in the foolish advance to Baghdad; then the great military enterprises necessitated by the fall of Kut-al-Amara carried our frontier north to Mosul and the mountains of Kurdistan, east to the Persian boundary, and west to the confines of Trans-Jordania. Amongst ardent Imperialists, there was undoubtedly the hope that this immense area would be in one way or another an integral part of the British Empire. The cold fit followed when the cost was measured, and the Arabs rose in a revolt which showed that any such domination could only be maintained by force of arms and that the cost would be prodigious. Under these circumstances King Feisal was imported from the Hedjaz and installed on the throne under the aegis of Great Britain. Still, we were committed to the support of the new kingdom, and that most dangerous condition arose—responsibility without any real power unless King Feisal was to be a mere puppet, immense expenditure and indefinite military commitments. In these circumstances there was an insistent demand for withdrawal from the land. British policy moved slowly towards that end, but a definite step was taken in 1923. The Secretary of State for the Colonies announced this policy in a statement which is reproduced textually, for the purpose of reference. Addressing the House of Lords on May 3rd he said—

Your Lordships will remember that the Cabinet have been discussing this matter for some time, and decisions have now been taken. Sir Percy Cox has accordingly been authorised by His Majesty's Government to make an announcement at Baghdad, the terms of which I propose to read out to Your Lordships. This announcement was drawn up in consultation with King Feisal and his Government, and has their cordial assent. It is being published at Baghdad to-day.

The announcement is as follows :—

"It will be remembered that in the autumn of last year, after a lengthy exchange of views, it was decided between the Governments of His Britannic Majesty and His Majesty King Feisal that a Treaty of Alliance should be entered into between His Britannic Majesty and His Majesty the King of Iraq. This Treaty, which was signed on the 10th October, 1922, and the term of which was to be twenty years (subject to periodical revision at the desire of either party) provided for the establishment of an independent Constitutional Government in Iraq, enjoying a certain measure of advice and assistance from Great Britain of the nature and extent indicated in the text of the Treaty itself and of subsidiary Agreements which were to be made thereunder.

"Since then the Iraq Government has made great strides along the path of independent and stable existence and has been able successfully to assume administrative responsibility, and both parties being equally anxious that the commitments and responsibilities of His Majesty's Government in respect of Iraq should be terminated as soon as possible, it is considered that the period of the Treaty in its present form can conveniently be shortened. In order to obviate the inconvenience of introducing amendments into the body of a Treaty already signed, it has been decided to bring about the necessary modifications by means of a protocol which, like the Treaty itself, will be subject to ratification by the Constituent Assembly.

"Accordingly a protocol has now been signed by the parties in the following terms :—

"It is understood between the High Contracting Parties that, notwithstanding the provisions of Article 18, the present Treaty shall terminate upon Iraq becoming a member of the League of Nations and in any case not later than four years from the ratification of peace with Turkey. Nothing in this protocol shall prevent a fresh agreement from being concluded with a view to regulate the subsequent relations between the High Contracting Parties; and negotiations for that object shall be entered into between them before the expiration of the above period."

It will be noticed that under this protocol the Treaty in its present form is to terminate on the entry of Iraq into the League of Nations or in four years, whichever may be earlier.

The position of Iraq as regards the League is that when the Treaty has been ratified His Britannic Majesty will be bound under Article 6 to use his good offices to secure the admission of Iraq to membership of the League of Nations as soon as possible. His Majesty's Government will be in a position to take this step on the fulfilment of the two following essential conditions, namely, the delimitation of the frontiers of Iraq, and the establishment of a stable government in accordance with the Organic Law. There is every reason to hope that both these conditions will be fulfilled at no distant date.

Under the Treaty of Lausanne between Turkey and the Powers, which was signed in 1923, it was agreed that the frontier between King Feisal's State and Turkey, the important frontier because the future of Mosul was in dispute, should be settled by The League of Nations,

Suleimanie
Merivan
Kudjur
Kifri
Khosrabad
Samarra
OIL WELLS
Khanikin
Kasr-i-Shirin
To Teheran
Kizil Robat
Karind
Hamadan
Bakuba
Mendalie
KIRMANSHAH
Firosabad
BAGDAD
PERSIA
Burudjird
Bedrai
Azizle
KHOREMABAD
El Diwasa
Kut-el-Amarah
Pushti-i-Kuh
BAKTIARI
Imam Ali Sherji
Abidiz
Disful
AMARA
Dufas
Kale Sale
Shushter
Nasiriyeh
Oil Wells
Wais
Ahwaz
Hawiseh
KURNA
MEZRA
Suk-el-Shuyukh
Melihan
Tembi
Ram-Hormus
BASRA
MOHAMMERAH
Shaibah
Zobeir
Diarsun
Abadan
FAO
PERSIAN GULF
Miles
100

It is important to remember that there is a considerable difference between the vilayet of Basra and the other portions of King Feisal's State. Basra has for long been in the closest commercial contact with India, and is in many respects a commercial appanage of Bombay. Its people have not much in common with those of the North. They took no part in the Arab rising which followed the war, and they ask nothing better than to remain in close touch with India and through India with the British Government. If we are correct in the supposition that Basra is destined to be the great port of The Middle East, then its future under an Arab State, with no experience of administration in such conditions, is one of the greatest interest, which can hardly be regarded as settled by the policy underlying the declaration which is set out above.

The Persian Shore.

The Persian shore presents fewer points of permanent interest. The importance of Bushire is administrative rather than commercial. It is the headquarters of Persian authority, the residence of the British Resident, and the centre of many foreign consuls. It is also the main entrepot for the trade of Shiraz, and competes for that of Ispahan. But the anchorage is wretched and dangerous, the road to Shiraz passes over the notorious kotals which preclude the idea of rail connection, and if ever a railway to the central tableland is opened, the commercial value of Bushire will dwindle to insignificance. Further south lies Lingah, reputed to be the prettiest port on the Persian coast, but its trade is being diverted to Debai on the Pirate Coast. In the narrow channel which forms the entrance to the Gulf from the Arabian Sea is Bunder Abbas. Here we are at the key of the Gulf. Bunder Abbas is of some importance as the outlet for the trade of Kerman and Yezd. It is of still more importance as a possible naval base. To the west of the town between the Island of Kishm and the mainland, lie the Clarence Straits which narrow until they are less than three miles in width, and yet contain abundance of water. Here, according to sound naval opinion, there is the possibility of creating a naval base which would command the Gulf. The great obstacle is the climate, which is one of the worst in the world. On the opposite shore, under the shadow of Cape Musandim, lies another sheltered deep-water anchorage, Elphinstone's Inlet, where the climate conditions are equally vile. But between these two points there is the possibility of controlling the Gulf just as Gibraltar controls the Mediterranean. For many years Bunder Abbas loomed large in public discussions as the possible warm water port for which Russia was seeking. On the Mekran coast, there is the cable station of Jask, and the possible port of Chahbar.

Political Resident in the Persian Gulf—Lt.-Col. S. G. Knox, C.S.I., C.I.E.

Residency Surgeon at Bushire—Major A. W. Pierpoint, O.B.E., I.M.S.

Consul at Bunder Abbas and Assistant to the Resident—G. A. Richardson.

II.—SEISTAN.

The concentration of public attention on the Persian Gulf was allowed to obscure the frontier importance of Seistan. Yet it was for many years a serious preoccupation with the Government of India. Seistan lies midway north and south between the point where the frontiers of Russia, Persia and Afghanistan meet at Zulfikar and that where the frontiers of Persia and of our Indian Empire meet on the open sea at Gwattur. It marches on its eastern border with Afghanistan and with Baluchistan, it commands the valley of the Helmand, and with it the road from Herat to Kandahar, and its immense resources as a wheat-producing region have been only partly developed under Persian misrule. It offers to an aggressive rival, an admirable strategic base for future military operations; it is also midway athwart the track of the shortest line which could be built to connect the Trans-Caspian Railway with the Indian Ocean, and if and when the line from Askabad to Meshed were built, the temptation to extend it through Seistan would be strong. Whilst the gaze of the British was concentrated on the North-West Frontier, and to possible lines of advance through Kandahar to Quetta, and through Kabul to Peshawar, there can be little doubt that Russian attention was directed to a more leisurely movement through Seistan, if the day came when she moved her armies against India.

Whether with this purpose or not, Russian intrigue was particularly active in Seistan in the early years of the century. Having Russified Khorassan, her agents moved into Seistan and through the agency of the Belgian Customs officials, "scientific missions" and an irritating plague cordon, sought to establish influence, and to stifle the British trade which was gradually being built up by way of Nushki. These efforts died down before the presence of the McMahon mission, which, in pursuance of Treaty rights, was demarcating the boundary between Persia and Afghanistan, with special reference to the distribution of the waters of the Helmand. They finally ceased with the conclusion of the Anglo-Russian Agreement. Since then the International importance of Seistan has waned.

The natural conditions which give to Seistan this strategic importance persist. Meantime British influence is being consolidated through the Seistan trade route. The distance from Quetta to the Seistan border at Killa Robat is 465 miles, most of it dead level, and it has now been provided with fortified posts, dak bungalows, wells, and all facilities for caravan traffic. The railway was pushed out from Spezand, on the Bolan Railway to Nushki, so as to provide a better starting point for the caravans than Quetta. This line was extended to Duzdab, on the Persian Frontier, during the war as a military measure, but the traffic supports only two trains a week.

Railway Position in the Middle East.

III.—PERSIA.

From causes which only need to be very briefly set out, the Persian question as affecting Indian frontier policy has receded until it is of no account. Reference is made in the introduction to this section to the fact that the conclusion of the Anglo-Russian Agreement left us a bitter legacy in Persia. That Agreement divided Persia into two zones of influence, and the Persians bitterly resented this apparent division of their kingdom between the two Powers, though no such end was in view. German agents, working cleverly on this feeling, established an influence which was not suspected, and when the war broke out they were able to raise the tribes in opposition to Great Britain, in the South, and after the fall of Kut-al-Amara, when a Turkish Division penetrated Western Persia, they exercised a strong influence in Teheran. With the defeat of Turkey and the Central Powers this influence disappeared, but at that time there was no authority in Persia besides that of the British Government, which had strong forces in the North-West and controlled the southern provinces through a force organised under British officers and called The South Persian Rifles. It was one of the first tasks of the British Government to regularise this position, and for this purpose an agreement was reached with the then Persian Government, the main features of which were :—

To respect Persian integrity ;

To supply experts for Persian administration ;

To supply officers and equipment for a Persian force for the maintenance of order ;

To provide a loan for these purposes ;

To co-operate with the Persian Government in railway construction and other forms of transport.

Both Governments agreed to the appointment of a joint committee to examine and revise the Customs tariff.

The second agreement defined the terms and conditions on which the loan was to be made to Persia. The loan was for £2,000,000 at 7 per cent. redeemable in 20 years. It was secured on the revenues and Customs' receipts assigned for the repayment of the 1911 loan and should these be insufficient the Persian Government was to make good the necessary sums from other sources.

The Present Position :—We have given the main points in the Anglo-Persian agreement, because few documents have been more misunderstood. Those who desire to study it in greater detail will find it set out in The Indian Year Book for 1921, page 138 *et seq.* It has been explained that most Persians construed it into a guarantee of protection against all external enemies. When the British troops in the north-west retired before the Bolsheviks, the Persians had no use for the Agreement and it soon became a dead instrument. It was finally rejected and the advisers who were to have assisted Persia under it withdrew.

The South Persian Rifles were also disbanded. Thenceforth Great Britain withdrew entirely from any active participation in Persian affairs. As for the present position, all that can be said that the form of a government exists, though Ministers change so rapidly that few can say from day to day what ministers are in office. But the country does not seem much the worse. So little has government counted in Persian affairs since the assassination of Nasr-ed-Din that the country seems to get on quite well without one, or at any rate with only the pale shadow of one.

Sir Percy Lorraine assumed office as British Minister at Teheran in December 1921.

H. B. M.'s Consul General and Agent of the Government of India in Khorasan:—Lieut.-Colonel F. B. Prideaux, C.S.I., C.I.E.

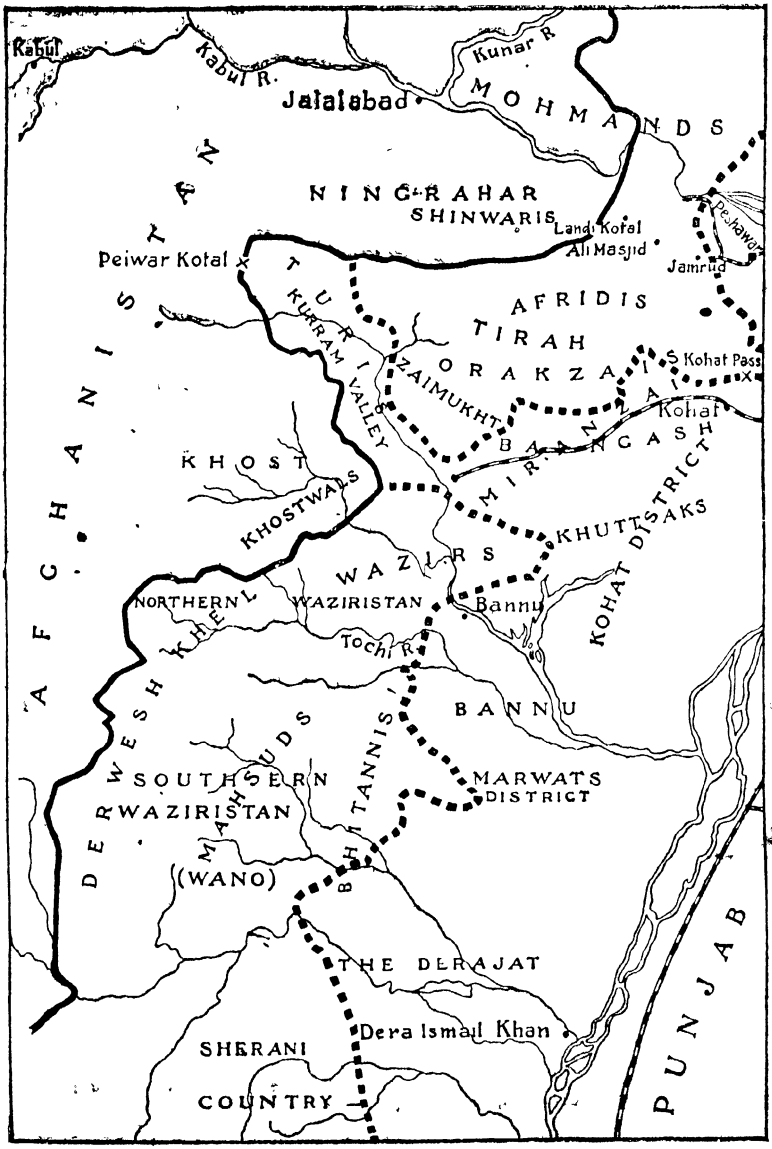
H. B. M.'s Consul in Sistan and Kain:—B. J. Gould, C.I.E.

Medical Officer and Vice-Consul:—Major R. F. D. MacGregor.

IV.—THE PRESENT FRONTIER PROBLEM.

There yet remains a small part of British India where the King's writ does not run. Under what is called the Durand Agreement with the Amir of Afghanistan, the boundary between India and Afghanistan was settled, and it was delimited in 1903 except for a small section which was delimited after the Afghan War in 1919. But the Government of India have never occupied up to the border. Between the administered territory and the Durand line there lies a belt of territory of varying width extending from the Gomal Pass in the south, to Kashmir in the north; this is generically known as the Independent Territory. Its future is the keynote of the interminable discussions of frontier policy for nearly half a century.

This is a country of deep valleys and secluded glens, which nature has fenced in with almost inaccessible mountains. It is peopled with wild tribes of mysterious origin, in whom Afghan, Tartar, Turkoman, Persian, Indian Arab and Jewish intermingle. They had lived their own lives for centuries, with little intercourse even amongst themselves, and as Sir Valentine Chirol truly said "the only bond that ever could unite them in common action was the bond of Islam." It is impossible to understand the Frontier problem unless two facts are steadily borne in mind. The strongest sentiment amongst these strange people is the desire to be left alone. They value their independence much more than their lives. The other factor is that the country does not suffice even in good years to maintain the population. They must find the means of subsistence outside, either in trade, by service in the Indian Army or in the Khassadars; or else in the outlet which hill-men all the world over have utilised from time immemorial, the raiding of the wealthier and more peaceful population of the Plains.


Kabul
Kabul R.
Kunar R.
Jalalabad
MOHMANDS
AFGHANISTAN
NINGRAHAR
SHINWARIS
Landi Kotal
Ali Masjid
Jamrud
Peiwar Kotal
TURI
KURRAM VALLEY
AFRIDIS
TIRAH
ORAKZAIS
ZAIMUKHT
Kohat Pass
Kohat
KHOST
KHOSTWALS
MIRANZAI
BANGASH
KHUTTAKS
KOHAT DISTRICT
WAZIRS
NORTHERN WAZIRISTAN
Bannu
Tochi R.
DERWESHKHEL
MAHSUDS
BHITANNIS
BANNU
SOUTHERN WAZIRISTAN
MARWATS DISTRICT
(WANO)
THE DERAJAT
Dera Ismail Khan
SHERANI COUNTRY
PUNJAB

Frontier Policy.

The policy of the Government of India toward the Independent Territory has ebbed and flowed in a remarkable degree. It has fluctuated between the Forward School, which would occupy the frontier up to the confines of Afghanistan, and the school of Masterly Inactivity, which would leave the tribesmen entirely to their own resources, punishing them only when they raided British territory. Behind both the policies lay the menace of a Russian invasion, and that coloured our frontier policy until the Anglo-Russian Agreement. This induced what was called Hit and Retire tactics; in the half century which ended in 1897 there were nearly a score of punitive expeditions, each one of which left behind a legacy of distrust, and which brought no permanent improvement in its train. The fruit of the suspicion thus engendered was seen in 1897. Then the whole Frontier, from the Malakand to the Gomal, was ablaze. The extent of this rising and the magnitude of the military measures which were taken to meet it compelled a consideration of the whole position. The broad outlines of the new policy were laid down in a despatch from the Secretary of State for India, which prescribed for the Government the "limitation of your interference with the tribes, so as to avoid the extension of administrative control over tribal territory." It fell to Lord Curzon to give effect to this policy. The main foundations of his action were to exercise over the tribes the political influence requisite to secure our imperial interests, to pay them subsidies for the performance of specific duties, but to respect their tribal independence and leave them, as far as possible, free to govern themselves according to their own traditions and to follow their own inherited habits of life without let or hindrance.

New Province.

As a first step Lord Curzon took the control of the tribes under the direct supervision of the Government of India. Up to this point they had been in charge of the Government of the Punjab, a province whose head is busied with many other concerns. Lord Curzon created in 1901, the North-West Frontier Province, and placed it in charge of a Chief Commissioner with an intimate frontier experience, directly subordinate to the Government of India. This was a revival of a scheme prepared by Lord Lytton in 1877, and often considered afterwards, but which had slipped for lack of driving power. Next Lord Curzon withdrew the regular troops so far as possible from the advanced posts, and placed these fortalices in charge of tribal levies, officered by a handful of British officers. The most successful of these was the Khyber Rifles which steadfastly kept the peace of that historic Pass until 1919. At the same time the regular troops were cantoned in places whence they could quickly move to any danger point, and these bases were connected with the Indian Railway system. In pursuance of this policy frontier railways were run out to Dargai, and a narrow-gauge line, since converted to the broad-gauge, was constructed from Kushalgarh to Kohat at the entrance of the Kohat Pass, and to Thal at the mouth of the Kurram Valley. These railways have been completed by lines to Tonk and Bannu. By this means the striking power of the regular forces was greatly increased. Nor was the policy of economic development neglected. The railways gave a powerful stimulus to trade; and the Lower Swat Canal converted fractious tribesmen into successful agriculturists This policy of economic development is receiving a great development through the completion of the Upper Swat Canal (*q. v.* Irrigation). Now it is completed there are other works awaiting attention. For many years this policy was completely justified by results.

A New Policy.

It saved us from serious complications for nearly twenty years, although the position could never be said to be entirely satisfactory particularly in Waziristan, peopled by the most reckless raiders on the whole border-line with a bolt hole into Afghanistan when pressed from the British side. It endured throughout the war and did not break down until the Amir of Afghanistan sought refuge from his internal troubles in a jehad against India. In this insane enterprise the Afghans placed less reliance in their regular troops, which have never offered more than a contemptible resistance to the British forces, than in the armed tribesmen. In this they were justified, for the most serious fighting was with the tribesmen. The tribal levies collapsed with almost universal swiftness. The Southern Waziristan Militia broke and there was serious trouble throughout the Zhob district. The Afridis, our most serious enemies in 1897, and the most powerful of the tribes on the North-West Frontier, remained fairly quiet throughout the actual hostilities with Afghanistan, but later, it was necessary to take measures against a leading malcontent and destroy his fort at Chora. But the Mahsuds and the Waziris broke into open hostilities. Their country lies within the belt bounded by the Durand Line and the Afghan frontier on the west, and by the districts of Bannu and Dehra Ismail Khan on the east. Amongst them the Afghan emissaries were particularly active and as they could put in the field some 30,000 warriors, 75 per cent. armed with modern weapons of precision, they constituted formidable adversaries. They refused to make peace, even when the Afghans caved in. They rejected our terms and active measures were taken against them. The fighting was the most severe in the history of the Frontier. The Mahsuds fought with great tenacity. Their shooting was amazingly good; their tactics were admirable, for amongst their ranks were many men trained either in the Militia or in the Indian Army; and more than once they came within measurable distance of considerable success. They were assisted by the fact that the best trained troops in the Indian Army were still overseas and younger soldiers were opposed to them. But their very tenacity and bravery were their own undoing; their losses were the heaviest in the long history of the Borderland and when the Mahsuds made their complete submission in September 1921 they were more severely chastened than at any time during their career.

A New Chapter.—As the result of the Afghan War of 1919, Indian frontier policy was again thrown into the melting pot. There was much vague discussion of the position in the course of the months which followed the Afghan War and the troubles in Waziristan which succeeded it, but this discussion did not really come to a head until February-March 1922. The Budget then presented to the country revealed a serious financial position. It showed that despite serious increases in taxation, the country had suffered a series of deficits, which had been financed out of borrowings. Further heavy taxation was proposed in this Budget, but even then the equilibrium which the financial authorities regarded as of paramount importance was not attained. When the accounts were examined, it was seen that the heaviest charges on the exchequer were those under Military Expenses, and that there was an indefinitely large, and seemingly unending expenditure on Waziristan. This forced the Military, and allied with it the Frontier, expenditure to the front. In actual practice the discussion is really focussed on Waziristan. In essentials it is the aged controversy—shall we deal with this part of the Frontier on what is known as the Sandeman system, namely, by occupying commanding posts within the country itself, dominating the tribesmen but interfering little in their own affairs; or shall we revert to what was known as the close border system, as modified by Lord Curzon, of withdrawing our regular troops to strategic positions outside the tribal area, leaving the tribesmen, organised into militia, to keep the passes open, and punishing the tribesmen by expeditions when their raiding propensities become unbearable.

The Curzon Policy.—The Curzon policy, adopted in 1899, to clear up the aftermath of the serious and unsatisfactory Frontier rising in 1897, was a compromise between the "occupation" and the "close border" policies. It was based on the withdrawal of the regular troops so far as possible to cantonments in rear whilst the frontier posts, such as those in the Tochi at Wana and in the Khyber and Kurram were held by militia, recruited from amongst the tribesmen themselves. The cantonments for regular troops were linked so far as possible with the Indian railway system, so as to permit of rapid reinforcement. But it must be remembered that like all Frontier students, Lord Curzon did not regard this as the final policy. He wrote in the Memorandum formulating his ideas: "It is of course inevitable that in the passage of time the whole Waziri country up to the Durand line will come more and more under our control. No policy in the world can resist or greatly retard that consummation. My desire is to bring it about by gradual degrees and above all without the constant aid and presence of British troops." The Curzon policy, though it was not pursued with the steadfastness he would have followed if he had remained in control, gave us moderate—or rather it should be said bearable—frontier conditions until the Afghan War. It then broke down, because the tribal militia, on which it was based, could not withstand the wave of fanaticism, and other conditions set up by the Afghan invasion of 1919. The Khyber militia faded away; the Waziri militia either mutinied, as at Wana, or deserted. The pillar of the Curzon system fell; in the military phrase of the hour, it could not stand the test of religious fanaticism or an Afghan War. The very word Militia became anathema.

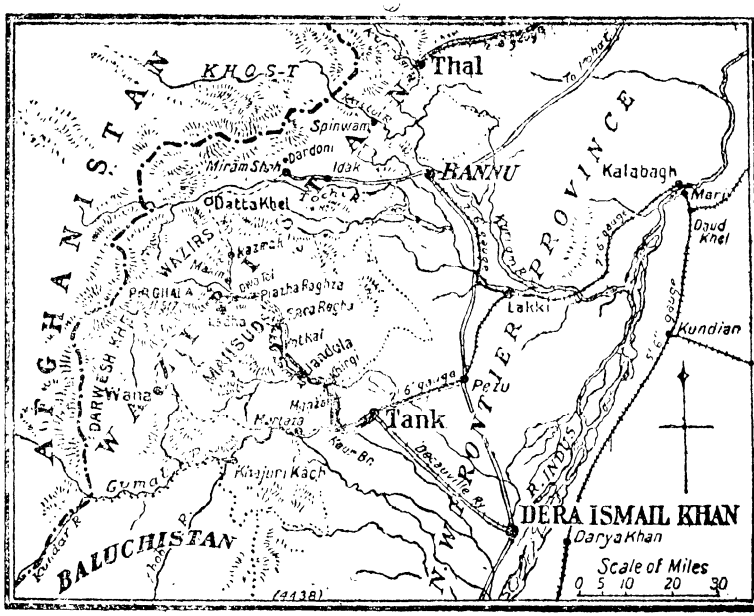
The Policy.—The new policy adumbrated to meet these changed conditions was outlined by Lord Chelmsford, the then Viceroy, in a speech which he addressed to the Indian Legislatures. He said it had been decided to retain commanding posts in Waziristan; to open up the country by roads; to extend the main Indian railway system from its then terminus, Jamrud, through the Khyber to the frontier of Afghanistan, and to take over the duties of the Militia by regular troops. That immediate policy was soon modified so far as the garrisoning of these frontier positions by Regular troops was concerned. Such duties are immensely unpopular in the regular army, which is not organised and equipped for work of this character. Irregulars have always existed on the frontier, and as they had disappeared with the Militia, it was necessary to recreate them. The new form of irregular was what have been called Khassadars and Scouts. The Khassadar is an extremely irregular irregular. He has no British officers and no uniform, except a distinguishing kind of *pugri*. In contradistinction to the old Militia, he finds his own rifle. As one informed observer remarked, the beauty of the system is that so long as the Khassadars, under their own headmen, secure the immunity of the caravans and perform their other police duties, they draw their pay and no questions are asked. If they desert in the day of trouble, they lose their pay but the Government loses no rifles, nor does it risk mutiny or the loss of British and Indian officers. But the application of this policy produced an acute controversy. It was one thing to say that commanding posts in Waziristan should be retained; it was another to decide what these posts should be. We must therefore consider the special problem of Waziristan.

V.—WAZIRISTAN.

We can now approach the real frontier question of the day, the future of Waziristan. What follows is drawn from an admirable article contributed to the January number of "The Journal of the United Service Institution of India," written by Lt.-Col. G. M. Routh, D.S.O.

Geographically Waziristan is a rough parallelogram averaging 60 miles from East to West and 160 from North to South. The western half consists of the Suleiman Range gradually rising up to the ridge from five to ten thousand feet high, which forms the water-shed between the Indus and the Helmund Rivers and corresponds with the Durand Line separating India from Afghanistan. This is the western boundary. On the east is the Indus. North is the water-shed of the Kurram River running East and West about 30 miles north of Bannu separating

WAZIRISTAN.


AFGHANISTAN
KHOST
Thal
Spinwam
Bardoni
Idak
Miram Shah
BANNU
Kalabagh
Mari
Daud Khel
Datta Khel
WAZIRISTAN
Kazmak
Piazha Raghza
Lakki
Kundian
Tochai
Mandola
Wana
Peiu
Tank
DARWESH KHEL
MAHSUDS
Kaur Ra
Gumal
Khajuri Kach
DERA ISMAIL KHAN
Daryakhan
BALUCHISTAN
INDUS
Scale of Miles
0 5 10 20 30

Waziristan from the Kohat District. South is a zigzag political boundary from the Durand Line running between Wana and Fort Sandeman in Baluchistan with a turn southwards to the Indus.

The western half is a rugged and inhospitable medley of ridges and ravines straggled and confused in hopeless disarray. The more inhabited portions lie well up the slope at heights of four to six thousand feet. Here are our outposts of Wana and Ladha some 15 and 20 miles respectively from the Durand Line, in the centre of the grazing district, the latter within five miles of important villages of Kaniguram and Makin.

The submontane tracts from the hills to the Indus vary from the highly cultivated and irrigated land round Bannu to the sandy desert in the Marwat above Pezu.

Where irrigation or river water is obtainable, cultivation is attempted under conditions which can hardly be encouraging. Other tracts like that between Pezu and Tank, usually pastoral, can only hope for an occasional crop after a lucky rainfall.

Inhabitants.—The inhabitants, unable to support existence on their meagre soil, make up the margin by armed robbery of their richer and more peaceful neighbours. The name originates according to tradition from one Wazir, two of whose grandsons were the actual founders of the race. Of the four main tribes Darweshkhel, Mahsuds, Dawars and Batanni, only the first two are true Wazirs Their villages are separate though dotted about more or less indiscriminately, and inter-marriage is the exception—in fact all traditionally are in open strife, a circumstance which, until some bright political comet like the Afghan War of 1919 joined them together, as materially aided our dealings with them.

Unlike other parts of India, however, these wild people acknowledge little allegiance to maliks or headmen. No one except perhaps the Mulla Powindah till his death in 1913 could speak of any portion of them as his following.

Policy.—The policy of the British was at first one of non-interference with the tribes. Even now only part of the country is administered. Gradually it was found that more and more supervision became necessary to control raiding and this was attempted by expeditions to portions of the country with Regulars, followed by building posts and brick towers to be held by Militia. These posts were at first placed at the points where raiders usually debouched. The Political Officers, at first supported by Regulars, built up from 1904 onwards a force of some 3,000 Militia with British Officers at their disposal, who were backed up by the garrisons at Bannu and Dera Ismail Khan. In addition certain allowances were made to the tribes for good behaviour, prevention of raids and surrender of offenders when required; also for tribal escorts as necessary. Gradually, as occasion required, posts were occupied. Wana was occupied in 1895 at the request of the Wana Wazirs. Similarly the Tochi in 1896. In the comprehensive expedition of 1895-96 when this policy was put into effect, the British arms were shown in every remote valley in the vain hope of taming the Mahsuds It was hoped the various posts would prove a pacifying influence and a rallying ground for Government supporters. From 1904 to 1919, they were held by Militia. Roads and communications were improved and tribal allowances augmented by sales of produce to the troops on a liberal scale.

A Programme.—Lt.-Col. Routh then outlined a possible policy for Waziristan. We give it textually, because we believe it substantially reflects military opinion in India:—

To the unprejudiced mind it appears more practical to grasp the nettle firmly and dominate the inhabited tracts. Why should not the road now being made to Ladha be continued 36 mile north to the Tochi road at Datta Khel and 29 miles south to Wana? Why should we not occupy the healthier portions of Waziristan rather than the foothills or Cis-Indus zones? The Razmak district round Makin 6000 feet up is both healthy and fertile. The same applies to the Shawal valley laying behind Pir Gul, the national peak near Ladha rising to a height of 11,556 feet above the sea. The Wana plain, 5,000 feet up, 30 miles by 15, could with railways support an army corps; there is no doubt that a forward railway policy will help to solve the problem. A line has been surveyed from Tank to Drabau and thence up the valley to Fort Sandeman, so connecting with the Zhob and perhaps later to Wana. The Gumal Tangi from Murtaza to Khajuri Kach is the apparently obvious route, but would be prohibitively expensive in construction and require much tunnelling. Beyond Khajuri Kach *via* Tanai and Rogha Kot to Wana, some 23 miles, offers no difficulty. The old policy of the raiders working westwards and our retributive expeditions stretching their very temporary tentacles eastwards seems to suggest better lateral communications. The broad gauge at Konat might without undue cost be extended to Thal and thence to Idak *via* Spinwam. From here till further extension proved desirable, a motor road through Razmak, Makin and Dwatoi to link up with that now surveyed to Ladha sounds possible to the looker on. Eventually such communications, road, rail, or both, could continue to Wana, Fort Sandeman and Quetta *via* Hindu Bagh, a strategic line offering great defensive possibilities substituting Razmak, which resembles Ootacamund, and healthy uplands for the deadly fever spots now occupied. The very fact of employing the tribesmen on these works with good pay and good engineers tends to pacify the country as well as providing healthy accessible hill stations in place of the proverbially comfortless cantonments which now exist in this part of the Frontier.

The Compromise.—The new policy, which has been called "the half forward policy," was announced in 1923. It was a compromise between the two extreme schools of thought.

This involves the completion of various roads fit for mechanical transport within Waziristan and along the Derajat border; the holding of certain posts, Jandola and Razmak, by Regular troops until this road programme is completed; and thereafter the location of Scouts, who are *mutato nomine* militia, at certain points on the roads within Waziristan, assisted by *Khassadars*, or local levies, finding their own arms and led

by their own leaders. The advantages of this scheme, remarked *The Times*, are, first, that it saves our face and obviates the necessity of withdrawal in the face of an unbeaten enemy; secondly, that it should place our forces in dominant interior positions to deter and intercept raiding gangs; thirdly, that it admits eventually of the dignified withdrawal of the Regular troops; fourthly, that it provides roads which will facilitate punitive measures against the tribesmen, should they again transgress the reasonable limit of tribal lawlessness; fifthly, that the *Khassadar* scheme provides honourable employment and livelihood for a large number of the tribal hot-heads, and interests the tribes themselves in the maintenance of order and the prevention of raiding.

Some Criticisms.—This compromise secured no more general acceptance than any of the policies which preceded it. It was subject to a somewhat severe analysis by *The Times*, in a passage which we reproduce somewhat fully, because it summarises the general objections to a forward, or a half forward policy. The journal wrote:—

First, the location of posts within Waziristan—at Razmak especially—with the country still untamed, does not seriously stop raiding; secondly, lines of communication largely dependent on the loyalty of *Khassadars* are unstable, and ask too much of the Scouts and their British officers; thirdly, roads in such a mountainous region require constant repair and are very vulnerable—particularly the culverts and bridges; fourthly, in the event of another general frontier conflagration it might again be impossible for the troops to support the advanced Militia posts, and we might again be confronted with such tragedies as the withdrawal from Wana during the last Afghan War. There is no panacea for the North-West Frontier; we must not expect complete peace, and we must not make too heavy weather of inevitable tribal lawlessness. Each section of the frontier presents its own problems and calls for its own specifics. But a general survey of the Waziristan problem, in the light of the present financial stringency, suggests that the present decision cannot be final. By all means employ *Khassadars* in large numbers within tribal territory, as is done on the Afridi border of the Peshawar district, but do not mix them up with militia and render their task more difficult, if not impossible, by the constant irritant of advance posts. The truth is that there is no really satisfactory half-measure between the old "close border," with an occasional "raid and scuttle" and the full forward policy of subjugation, effective occupation, disarmament, and direct administration. But, neither of these being practical politics, we can only hope that the present compromise will prove effective.

On a subsequent occasion Sir A. Hamilton Grant, who was associated with the Indian frontier for the greater part of his official career, and was also Foreign Secretary to the Government of India, subjected this policy to further criticism. In a paper read before the East Indian Association he dealt with the advocates of the "forward policy," who asked, if the tribes gave so much trouble, "why not go in and conquer them once for all and occupy the country up to the Durand line"? It sounded an attractive solution, but the truth was that to advance our frontier only meant to advance the seat of trouble. We had gone back to what might be called the "half-forward policy"—that was, the occupation by militia of a point in trans-border territory, supported by *Khassadars*, or local levies, and by troops behind. Whether or not this experiment would succeed any better than similar experiments had in the past it was difficult to say. His own view was that the occupation of trans-border outposts merely acted as an irritant without dominating the tribes, and sooner or later those outposts would necessitate further military operations.

Our policy should be to remove all removable irritants, such as the trans-border posts. We should clear out of Waziristan altogether, except the lower Tochi, where we had commitments, and the Thal-Idak road. We should do everything possible to provide honourable employment for the tribesmen, for the problem was largely economic. We should do all that was possible to establish friendly relation with tribal elders, and give them, by means of subsidies for service, an interest in maintaining law and order. We should extend the *Khassadar* system—that is, that we should pay for tribal corps to police their own borders, arming themselves and providing their own munitions and equipment. This experiment proved most successful on the Afridi border of the Peshawar district.

We should in the case of lawlessness deal with it promptly by the arrest of members of the tribe concerned, in British territory by blockade, and by the swift rounding up of recalcitrant villages beyond the border, and by the use of aeroplanes.

Official Optimism.—The official view is one of extreme optimism. Although the year was marked by outrages of a peculiar and novel brutality, the Government is of opinion that the policy has so far succeeded. These outrages occurred in the Khost sector, and involved the murder of Major Orr and Major Anderson, the murder of Mrs. Ellis and the abduction of her daughter, who was rescued by the courage and address of a missionary lady, Mrs. Starr. The murderers sought a refuge in Afghanistan, and, after being arrested, escaped from jail. The Under Secretary of State for India, Earl Winterton, introducing the India Office estimates, claimed that the new policy has proved in every way successful. Raiding has been reduced to a minimum. Razmak has been occupied with the consent of the Wazirs and the road construction programme is going on satisfactorily. It is hoped that by the end of the year a lateral road will have been constructed from Thal in the north by Idak and Ramzak to the rail-head at Khirgi. In addition, a road is being built from Jandola, near Khirgi, to Sarwekai, and Ramzak and Jandola are occupied by regular troops, while scouts and tribal levies hold the more forward positions within supporting distance of the regulars. One great advantage in that policy is that the regular troops will be stationed in the cool highlands of Central Waziristan instead of the low, unhealthy country in which they were quartered previous to the last Afghan War. "In no period during the last sixty years

have we been in such a good position to ensure peace as we are now and if raiding continues and of course it is very difficult to give any definite guarantee on the subject it can only continue on a relatively minor scale."

Lord Chelmsford's Views.—Before we leave this section, we desire to draw attention to a notable speech which Lord Chelmsford made in the House of Lords on May 3rd, 1923. He spoke with the authority of an ex-Viceroy of India and the freedom which comes from being no longer in office. It is one of the clearest expositions of frontier policy that has yet been made, and we reproduce it somewhat fully, calling attention to the veiled reference to the influence of air raids on frontier ethics. He said: —

Frontier policy really, in the main, resolves itself into a question where the frontier line of an administrative territory is going to be, and, if the House will bear with me, I will in a very broad fashion indicate the salient features of the problem. There are two possible frontier lines which can be advocated or defended as geographical, military, or strategic grounds. There is the line of the Indus, and there is the Durand Line. As regard the Indus, there are those who say we ought never to have gone beyond the Indus and that if we had not gone beyond the Indus we should have been spared much expenditure, both in men and in money. But the logic of events has proved too strong for us in this matter, and we have now incurred commitments and responsibilities which would make a retirement back to the Indus line both unthinkable and impossible.

Then we come to the Durand Line. That was negotiated by Sir Mortimer Durand as long ago as 1893, between Afghanistan and ourselves, and that marks the frontier between the two countries. But it is not completely demarcated throughout its whole length. It was based in the main on tribal lines, so that so far as possible there should be no tribal division along that line, but that the tribes or sects of tribes should find themselves on one side or the other of that line. I think I shall not be incorrect when I say that as soon as that Treaty was made the Amir Abdur-Rahman brought the tribes on his side of the line immediately under control and subjection. We, however, took no steps, and except at certain points the Khyber, the Kurram, and Baluchistan—our frontier does not touch the Durand Line, and does not run up to that line.

There are, of course, those who say that we ought to carry our administered territory up to that line, to disarm and control the tribes. But I think it is sufficient answer, for the present purpose, to those who advance that view that for thirty years no Viceroy has ever found himself able to face such a policy. The expenditure in men and money which would be involved in such a policy is, I think, a reasonable explanation, why every Viceroy for the past thirty years has shrunk from attempting to go forward with such a policy. There are two clear possible frontier lines. There is the backward frontier line geographically, the Indus, and there is the possible frontier line under the Durand Treaty. Our present line, except at points which I named just now, runs somewhere between those two lines. But the present line of frontier is based on no geographical, no military, and no strategic ground. It is largely the result of historical accident.

Sometimes, the Close Border policy is mentioned. If by that is meant that we should maintain our position on the frontier and that we should not penetrate tribal area, it is a policy I think to which all would subscribe. No one would willingly push further into that terrible welter of hills which forms the frontier unless absolutely forced to do so. If it means that the line which has existed until quite recently should remain without readjustment although circumstances arise which suggest a better line, then I cannot subscribe to what is called the Close Border line, because that line has no military or strategic reasons to support it.

Now, if, by the forward policy, it is meant an advance towards the Durand Line, it is not a forward policy at all. Since 1894, broadly speaking, two places Datia Khel in the north of this district, and Wana in the south—have been almost continuously occupied by troops, whether regulars or irregulars. And Razmak which is now going to be the principal point of occupation in that country, is further from the Durand Line than either of those places. The policy is not to be a forward one, but one of re-adjustment in the light of experience, and I believe it is the policy that should be followed in these matters. There should be no hard-and-fast line, because you cannot draw a hard-and-fast line which can be shown to have military or geographical advantages, and, if possible, there should be no invasion of, or interference with, tribal territory. But there should be an occupation of such posts as experience suggests may bring about peace and quiet.

I shall allude to another matter only very briefly because I should like to make a suggestion for the consideration of the Secretary of State for India in reference to that lamentable affair at Kohat.

There has always been great chivalry on the border with regard to women, and the first occasion on which there was an outrage against a white woman on the frontier took place just at the end of my time. I asked a frontier officer of great experience about this and he said: "There has always been great chivalry on the part of tribesmen towards women, but you must remember this. In all frontier expeditions up to now the women and children were able to withdraw from their homes and their villages before the invading forces ever came near them. That has been wiped out. The purdah has been lifted. In a moment you have an aeroplane over a village, and women and children get killed. Can you wonder that their attitude will change and that they will think of reprisals."

VI.—AFGHANISTAN.

The relations of Afghanistan with the Indian Empire were for long dominated by one main consideration—the relation of Afghanistan to a Russian invasion of India. All other considerations were of secondary importance. For nearly three-quarters of a century the attitude of Great Britain toward successive Amirs has been dictated by this one factor. It was in order

to prevent Afghanistan from coming under the influence of Russia that the first Afghan War of 1838 was fought—the most melancholy episode in Indian frontier history. It was because a Russian envoy was received at Kabul whilst the British representative was turned back at Ali Masjid that the Afghan War of 1878 was waged. After that the whole end of British policy toward Afghanistan was to build up a strong independent State, friendly to Britain, which would act as a buffer against Russia, and so to order our frontier policy that we should be in a position to move large forces up, if necessary, to support the Afghans in resisting aggression.

Gates to India.

A knowledge of the trans-frontier geography of India brought home to her administrators the conviction that there were only two main gates to India—through Afghanistan, the historic route to India, along which successive invasions have poured, and by way of Seistan. It was the purpose of British policy to close them, and of Russia to endeavour to keep them at any rate half open. To this end having pushed her trans-Persian railway to Samarkand, Russia thrust a military line from Merv to the Kushklinsky Post, where railway material is collected for its immediate prolongation to Herat. Later, she connected the trans-Siberian railway with the tran-Caucasian system, by the Orenburg-Tashkent line, thus bringing Central Asia into direct touch with her European magazines. Nor has Great Britain been idle. A great military station has been created at Quetta. This is connected with the Indian railway system by lines of railway which climb to the Quetta Plateau by the Bolan Pass and through the Chapper Rift, lines which rank amongst the most picturesque and daring in the world. From Quetta the line has been carried by the Khojak tunnel through the Khwaja Amran Range, until it leads out to the Afghan Border at New Chaman, where it opens on the route to Kandahar. The material is stocked at New Chaman which would enable the line to be carried to Kandahar in sixty days. In view of the same menace the whole of Baluchistan has been brought under British control. Quetta is now one of the great strategical positions of the world, and nothing has been left undone which modern military science can achieve to add to its natural strength. In the opinion of many military authorities it firmly closes the western gate to India, either by way of Kandahar, or the direct route through Seistan.

Further east the Indian railway system has been carried to Jamrud and is being pushed up to the Khyber Pass. A first class military road sometimes double, sometimes treble, threads the Pass to our advanced post at Landi Kotal, and then descends until it meets the Afghan frontier at Landi Khana. Later, a commencement was made with the Loi Shilman Railway, which, starting from Peshawar, was designed to penetrate the Mullagori country and provide an alternative advance to the Khyber for the movement of British troops for the defence of Kabul. For unexplained reasons, this line was suddenly stopped and is now thrust in the air. In this wise the two Powers prepared for the great conflict which was to be fought on the Kandahar-Ghazni-Kabul line.

Relations with India.

Between the advanced posts on either side stands the Kingdom of Afghanistan. The end of British policy has been to make it strong and friendly. In the first particular it has largely succeeded. When the late Abdurrahaman was invited to ascend the throne, as the only means of escape from the tangle of 1879, none realised his great qualities. Previously the Amir of Afghanistan had been the chief of a confederacy of clans. Abdurrahaman made himself master in his own kingdom. By means into which it is not well closely to enter; he beat down opposition until none dared lift a hand against him. Aided by a British subsidy of twelve lakhs of rupees a year, increased to eighteen by the Durand Agreement of 1893, and subsequently to over 20 lakhs, he established a strong standing army and set up arsenals under foreign supervision to furnish it with arms and ammunition. Step by step his position was regularised. The Anglo-Russian Boundary Commission,—which nearly precipitated war over the Penjdeh episode in 1885,—determined the northern boundaries. The Pamirs Agreement delimited the borders amid those snowy heights. The Durand Agreement settled the border on the British side, except for a small section to the west of the Khyber which remained a fruitful source of trouble between Afghanistan and ourselves until 1919, when the Afghan claims and action upon the undemarcated section led to war. That section was finally surveyed and the frontier determined shortly after the conclusion of peace with Afghanistan. Finally the McMahon award closed the old feud with Persia over the distribution of the waters of the Helmand in Seistan. It was estimated by competent authorities that about the time of Abdurrahaman's death, Afghanistan was in a position to place in the field, in the event of war, one hundred thousand well-armed regular and irregular troops, together with two hundred thousand tribal levies, and to leave fifty thousand regulars and irregulars and a hundred thousand levies to maintain order in Kabul and the provinces. But if Afghanistan were made strong, it was not made friendly. Abdurrahaman Khan distrusted British policy up to the day of his death. All that can be said is that he distrusted it less than he distrusted Russia, and if the occasion had arisen for him to make a choice, he would have opposed a Russian advance with all the force at his disposal. He closed his country absolutely against all foreigners, except those who were necessary for the supervision of his arsenals and factories. He refused to accept a British Resident, on the ground that he could not protect him, and British affairs were entrusted to an Indian agent, who was in a most equivocal position. At the same time he repeatedly pressed for the right to pass by the Government of India and to establish his own representative at the Court of St. James.

Afghanistan and the War.—These relations were markedly improved during the reign of His Majesty the Amir Habibullah

Khan. It used to be one of the trite sayings of the Frontier that the system which Abdurrahman Khan had built up would perish with him, for none was capable of maintaining it. Habibullah Khan more than maintained it. He visited India soon after his accession and acquired a vivid knowledge of the power and resources of the Empire. He strengthened and consolidated his authority in Afghanistan itself. At the outset of the war he made a declaration of his complete neutrality. It is believed—a considerable reticence is preserved over our relations with Afghanistan—that he warned the Government of India that he might be forced into many equivocal acts, but they must trust him; certainly his reception of Turkish, Austrian and German "missions" at Kabul, at a time when British representatives were severely excluded, was open to grave misconstruction. But a fuller knowledge induced the belief that the Amir was in a position of no little difficulty. He had to compromise with the fanatical and anti-British elements amongst his own people, inflamed by the Turkish preaching of a jehad, or holy Islamic war. But he committed no act of hostility; as soon as it was safe to do so he turned the members of these missions out of the kingdom. At the end of the war his policy was completely justified; he had kept Afghanistan out of the war, he had adhered to the winning side; his authority in the kingdom and in Central Asia was at its zenith.

Murder of the Amir.—It is believed that if he had lived Habibullah Khan would have used this authority for a progressive policy in Afghanistan, by opening up communications and extending his engagements with India. He was courted by the representatives of Persia and the Central Asian States as the possible rallying centre of a Central Asian Islamic confederation. At this moment he was assassinated on the 20th February 1919. The circumstances surrounding his murder have never been fully explained; but there is strong ground for the belief that it was promoted by the reactionaries who had harassed him all his reign. These realised that with his vindication by the war their time of reckoning had come; they anticipated it by suborning one of his aides to murder him in his sleep. His brother, Nasrullah Khan, the nominee of the fanatical element, was proclaimed Amir at Jelalabad in his stead, but public opinion in Afghanistan revolted at the idea of the brother seizing power over the corpse of the murdered man. His sons, Hayat and Amanullah, were not disposed to waive their heritage. Amanullah was at Kabul, controlling the treasury and the arsenal and supported by the Army. Nasrullah found it impossible to make head against him and withdrew. The new Amir, Amanullah, at once communicated his accession to the Government of India and proclaimed his desire to adhere to the traditional policy of friendship. But his difficulties at once commenced; he had to deal with the war party in Afghanistan; he was confronted with the dissatisfaction arising from the manner in which the murderers of Habibullah had been dealt with; the fanatical element was exasperated by the imprisonment of Nasrullah; and the Army was so incensed that it had to be removed from Kabul and given occupation to divert its thoughts. A further element of complexity was introduced by the political situation in India. The agitation against the Rowlatt Act was at its height. The disturbances in the Punjab and Gujarat had taken place. Afghan agents in India, of whom the most prominent was Ghulam Hyder Khan, the Afghan postmaster at Peshawar, flooded Afghanistan with exaggerated accounts of the Indian unrest. The result of all this was to convince the Amir that the real solution of his difficulties was to unite all the disturbing elements in a war with India. On the 25th April his troops were set in motion and simultaneously a stream of anti-British propaganda commenced to flow from Kabul and open intrigue was started with the Frontier tribes, on whom the Afghans placed their chief reliance.

Speedy Defeat.—The war caught the Army in India in the throes of demobilisation and with a large proportion of the seasoned troops on service abroad. Nevertheless the regular Afghan Army was rapidly dealt with. Strong British forces moved up the Khyber and seized Dacca. Jelalabad was repeatedly bombed from the air and also Kabul. Nothing but a shortage of mechanical transport prevented the British forces from seizing Jelalabad. In ten days the Afghans were severely defeated. On the 14th May they asked for an Armistice. With the usual Afghan spirit of haggling, they tried to water down the conditions of the armistice, but as they were met with an uncompromising emphasis of the situation they despatched representatives to a conference at Rawalpindi on the 26th July. On the 8th August a Treaty of Peace was signed which is set out in the Indian Year Book 1923, pp. 196-197.

Post War Relations.—It will be seen that under this Treaty the way was paved for a fresh engagement six months afterwards. During the hot weather of 1920 there were prolonged discussions at Mussoorie between Afghan Representatives and British officials under Sir Henry Dobbs. These were private, but it is believed that a complete agreement was reached. Certainly after an interchange of Notes which revealed no major point of difference it was agreed that a British Mission should proceed to Kabul to arrange a definite treaty of peace. This Mission crossed the Border in January 1921 and entered Kabul.

The Russo-Afghan Treaty was signed on February 28th, 1921, at which time the Dobbs Mission was actually in Kabul.

"Satisfactory written assurances that no Russian Consulates will be permitted in the Jalalabad, Ghazni and Kandahar areas having been received from the Afghan Government, a Treaty of Friendship with Afghanistan was signed in Kabul.

"Under the Treaty, which though subject to ratification is immediately operative, Great Britain reaffirms her recognition of Afghanistan's *complete independence*, and there is to be an interchange of Ministers in London and Kabul, and of Consuls in India and Afghanistan. Afghanistan accepts the existing Anglo-Afghan frontier, with a slight re-alignment of the boundary demarcated by the British Commission in the autumn of 1919; and misunderstanding

between the two Governments over the tribes on either side of the border having been removed, each Government engages to apprise the other beforehand of any major operations it may find it necessary to institute for the maintenance of order near the frontier. Subject to the continuance of friendliness and the provisions of any general Arms Traffic Convention that may hereafter come into force, the privilege formerly enjoyed by the Afghan Government of importing munitions of war through India is restored, a rebate of customs duty (with a small reduction to cover registration expenses) is granted, subject to the usual conditions regarding goods in transit, on goods that pass through India from the ports into Afghanistan; goods imported by the Afghan Government for the public service are exempt from all duty. Provision is made in the Treaty for the conclusion of separate trade and postal conventions."

The main points of the Treaty are set out in The Indian Year Book, 1923, pp. 197, 198-199.

Since the signing of the Treaty the relations between the Government of India and Afghanistan have been good. Any hopes which the Soviet Government of Russia entertained of establishing its influence in that country have vanished. A British Minister is established in Kabul, as well as the representatives of other European States. The representatives of Afghanistan are established in India and in London, and at some of the European capitals. The various subsidiary agreements under the Treaty have been carried into effect. Ambitious projects for the development of Afghanistan largely, through Italian agency, have been launched, but there is reason to believe that the executors of these projects have found reason to modify the spirit of optimism in which they embarked on them. *British Representative*: Major Humphreys.

VII.—TIBET.

Recent British policy in Tibet is really another phase in the long-drawn-out duel between Great Britain and Russia in Central Asia. The earliest efforts to establish communication with that country were not, of course, inspired by this apprehension. When in 1774 Warren Hastings despatched Bogle on a mission to the Tashi-Lama of Shigatse,—the spiritual equal, if not superior, of the Dalai Lama of Lhasa—his desire was to establish facilities for trade, to open up friendly relations with a Power which was giving us trouble on the frontier, and gradually to pave the way to a good understanding between the two countries. After Warren Hastings' departure from India the subject slept, and the last Englishman to visit Lhasa, until the Younghusband Expedition of 1904, was the unofficial Manning. In 1885, under the inspiration of Colman Macaulay, of the Bengal Civil Service, a further attempt was made to get into touch with the Tibetans, but it was abandoned in deference to the opposition of the Chinese, whose suzerainty over Tibet was recognised, and to whose views until the war with Japan, British statesmen were inclined to pay excessive deference. But the position on the Tibetan frontier continued to be most unsatisfactory. The Tibetans were aggressive and obstructive, and with a view to putting an end to an intolerable situation, a Convention was negotiated between Great Britain and China in 1890. This laid down the boundary between Sikkim and Tibet, it admitted a British protectorate over Sikkim, and paved the way for arrangements for the conduct of trade across the Sikkim-Tibet frontier. These supplementary arrangements provided for the opening of a trade mart at Yatung, on the Tibetan side of the frontier, to which British subjects should have the right of free access, and where there should be no restrictions on trade. The agreement proved useless in practice, because the Tibetans refused to recognise it, and despite their established suzerainty, the Chinese Government were unable to secure respect for it.

Russian Intervention.

This was the position when in 1899 Lord Curzon, Viceroy of India, endeavoured to get into direct touch with the Tibetan authorities. Three letters which he addressed to the Dalai Lama were returned unopened, at a time when the Dalai Lama was in direct intercourse with the Tsar of Russia. His emissary was a Siberian Dorjieff, who had established a remarkable ascendancy in the councils of the Dalai Lama. After a few years' residence at Lhasa Dorjieff went to Russia on a confidential mission in 1899. At the end of 1900 he returned to Russia at the head of a Tibetan mission, of which the head was officially described in Russia as "the senior Tsanite Khomba attached to the Dalai Lama of Tibet." This mission arrived at Odessa in October 1900, and was received in audience by the Tsar at Livadia. Dorjieff returned to Lhasa to report progress, and in 1901 was at St. Petersburg with a Tibetan mission, where as bearers of an autograph letter from the Dalai Lama they were received by the Tsar at Peterhoff. They were escorted home through Central Asia by a Russian force to which several Intelligence Officers were attached. At the time it was rumoured that Dorjieff had, on behalf of the Dalai Lama, concluded a treaty with Russia, which virtually placed Tibet under the protectorate of Russia. This rumour was afterwards officially contradicted by the Russian Government.

The Expedition of 1904.

In view of these conditions the Government of India, treating the idea of Chinese suzerainty over Tibet as a constitutional fiction, proposed in 1903 to despatch a mission, with an armed escort; to Lhasa to discuss the outstanding questions with the Tibetan authorities on the spot. To this the Home Government could not assent, but agreed, in conjunction with the Chinese Government, to a joint meeting at Khamba Jong, on the Tibetan side of the frontier. Sir Francis Younghusband

was the British representative, but after months of delay it was ascertained that the Tibetans had no intention of committing themselves. It was therefore agreed that the mission, with a strong escort, should move to Gyantse. On the way the Tibetans developed marked hostility, and there was fighting at Tuna, and several sharp encounters in and around Gyantse. It was therefore decided that the mission should advance to Lhasa, and on August 3rd, 1904, Lhasa was reached. There Sir Francis Younghusband negotiated a convention by which the Tibetans agreed to respect the Chinese Convention of 1890; to open trade marts at Gyantse, Gartok and Yatung; to pay an indemnity of £500,000 (seventy-five lakhs of rupees); the British to remain in occupation of the Chumbi Valley until this indemnity was paid off at the rate of a lakh of rupees a year. In a separate instrument the Tibetans agreed that the British Trade Agent at Gyantse should have the right to proceed to Lhasa to discuss commercial questions, if necessary.

Home Government intervenes.

For reasons which were not apparent at the time, but which have since been made clearer, the Home Government were unable to accept the full terms of this agreement. The indemnity was reduced from seventy-five lakhs of rupees to twenty-five lakhs, to be paid off in three years, and the occupation of the Chumbi Valley was reduced to that period. The right to despatch the British Trade Agent to Lhasa was withdrawn. Two years later (June 1906) a Convention was concluded between Great Britain and China regulating the position in Tibet. Under this Convention Great Britain agreed neither to annex Tibetan territory, nor to interfere in the internal administration of Tibet. China undertook not to permit any other foreign State to interfere with the territory or internal administration of Tibet. Great Britain was empowered to lay down telegraph lines to connect the trade stations with India, and it was provided that the provisions of the Convention of 1890, and the Trade Regulations of 1893, remained in force. The Chinese Government paid the indemnity in three years and the Chumbi Valley was evacuated. The only direct result of the Mission was the opening of the three trade marts and the establishment of a British Trade Agent at Gyantse.

Chinese Action.

The sequel to the Anglo-Russian Agreement was dramatic, although it ought not to have been unexpected. On the approach of the Younghusband Mission the Dalai Lama fled to Urga, the sacred city of the Buddhists in Mongolia. He left the internal government of Tibet in confusion, and one of Sir Francis Younghusband's great difficulties was to find Tibetan officials who would undertake the responsibility of signing the Treaty. Now the suzerainty of China over Tibet had been explicitly reaffirmed. It was asserted that she would be held responsible for the foreign relations of Tibet. In the past this suzerainty, having been a "constitutional fiction," it was inevitable that China should take steps to see that she had the power to make her will respected at Lhasa. To this end she proceeded to convert Tibet from a vassal state into a province of China. In 1908 Chao Erh-feng, Acting Viceroy in the neighbouring province of Szechuen, was appointed Resident in Tibet. He proceeded gradually to establish his authority, marching through eastern Tibet and treating the people with great severity. Meantime the Dalai Lama, finding his presence at Urga, the seat of another Buddhist Pontiff, irksome, had taken refuge in Si-ning. Thence he proceeded to Peking, where he arrived in 1908 was received by the Court, and despatched, to resume his duties at Lhasa. Moving by leisured stages, he arrived there at Christmas 1909. But it was soon apparent that the ideas of the Dalai Lama and of the Chinese Government had little in common. The Dalai Lama expected to resume the temporal and spiritual despotism which he had exercised prior to 1904. The Chinese intended to deprive him of all temporal power and preserve him as a spiritual pope. The Tibetans had already been exasperated by the pressure of the Chinese soldiery. The report that a strong Chinese force was moving on Lhasa so alarmed the Dalai Lama that he fled from Lhasa, and by the irony of fate sought a refuge in India. He was chased to the frontier by Chinese troops, and took up his abode in Darjeeling, whilst Chinese troops overran Tibet.

Later Stages.

The British Government, acting on the representations of the Government of India, made strong protests to China against this action. They pointed out that Great Britain, while disclaiming any desire to interfere with the internal administration of Tibet, could not be indifferent to disturbances in the peace of a country which was a neighbour, on intimate terms with other neighbouring States on our frontier, especially with Nepal, and pressed that an effective Tibetan Government be maintained. The attitude of the Chinese Government was that no more troops had been sent to Tibet than were necessary for the preservation of order, that China had no intention of converting Tibet into a province, but that being responsible for the good conduct of Tibet, she must be in a position to see that her wishes were respected by the Tibetans. Finally, the Chinese remarked that the Dalai Lama was such an impossible person that they had been compelled again to depose him. Here the matter might have rested, but for the revolution in China. That revolution broke out in Szechuen, and one of the first victims was Chao Erh-feng. Cut off from all support from China, surrounded by a hostile and infuriated populace, the Chinese troops in Tibet were in a hopeless case; they surrendered, and sought escape not through China, but through India, by way of Darjeeling and Calcutta. The Dalai Lama returned to Lhasa, and in 1913, in the House of Lords on July 28, Lord Morley stated the policy of the British Government in relation to these changes. He said the declaration of the President of the Chinese Republic saying that Tibet came within the sphere of Chinese internal administration: and that Tibet was to be regarded as on an equal footing with other provinces of China, was met by a very vigorous protest from the British Government. The Chinese Government subsequently accepted the principle that

China is to have no right of active intervention in the internal administration of Tibet, and agreed to the constitution of a conference to discuss the relation of the three countries. This Convention met at Simla when Sir Henry McMahon, Foreign Secretary to the Government of India; Mr. Ivan Chen, representing China; and Mr. Long Chen Shatra, Prime Minister to the Dalai Lama, threshed out these issues. Whilst no official pronouncement has been made on the subject, it is understood that a Convention was initialled in June which recognised the complete autonomy of Tibet proper, with the right of China to maintain a Resident at Lhasa with a suitable guard. A semi-autonomous zone was to be constituted in Eastern Tibet, in which the Chinese position was to be relatively much stronger. But this Convention, it is understood, has not been ratified by the Chinese Government, owing to the difficulty of defining Outer and Inner Tibet, and in 1918 Tibet took the offensive and threw off the last vestiges of Chinese suzerainty. When the Chinese province of Szechuan went over to the South, the Central Government at Pekin was unable to finance the frontier forces or to withstand the Tibetan advance, which was directed from Lhasa and appeared to be ably managed. After the Tibetan army had occupied some towns on the confines of the Szechuan marshes, hostilities were suspended and an armistice was concluded.

From what has gone before, it will be seen that the importance which formerly attached to the political condition of Tibet was much less a local than an external question, and was influenced by our relations with Russia and China rather than with our relations with Tibet. Russia having relapsed into a state of considerable confusion, and China having relapsed into a state of absolute confusion these external forces have disappeared, and Tibet no longer looms on the Indian political horizon. The veil has been drawn afresh over Lhasa, and affairs in that country pursue an isolated course, with this considerable difference. The Dalai Lama is now on terms of the greatest cordiality with the Government of India. In 1920 he requested that a British officer should be sent to discuss with him the position in Central Asia brought about by the Revolution in Russia and the collapse of Government in China, and Mr. Bell, C. M. G., I. C. S., Political Officer in Sikkim, was deputed for this purpose. In 1922 telephonic communication between Lhasa and India was established.

British Trade Agent, Yatung and Gyantse.—D. Macdonald.

VIII.—THE NORTH-EASTERN FRONTIER.

The position on the northern frontier has been considered as if the British line were contiguous with that of Tibet. This is not so. The real frontier States are Kashmir, Nepal Sikkim and Bhutan. From Chitral to Gilgit, now the northernmost posts of the Indian Government, to Assam, with the exception of the small wedge between Kashmir and Nepal, where the British district of Kumaon is thrust right up to the confines of Tibet, for a distance of nearly fifteen hundred miles there is a narrow strip of native territory between British India and the true frontier. The first of these frontier States is **Kashmir.** The characteristics of this State are considered under Indian States (*q.v.*); it is almost the only important Native State in India with frontier responsibilities, and it worthily discharges them through the agency of its efficient Indian State troops—four regiments of infantry and two Mountain Batteries, composed mainly of the Rajput Dogras, who make excellent fighting material. One of the most important trade routes with Tibet passes through Kashmir—that through Ladak. Then we come to the long narrow strip of **Nepal.** This Gurkha State stands in special relations with the British Government. It is for all practical purposes independent, and the British resident at Khatmandu exercises no influence on the internal administration. The governing machine in Nepal is also peculiar. The Maharaj Dhiraj, who comes from the Sesodia Rajput clan, the bluest blood in India, takes no part in the administration. All power vests in the Prime Minister, who occupies a place equivalent to that of the Mayors of the Palace, or the Shoguns of Japan. The present Prime Minister, Sir Chandra Shamsher, has visited England, and has given conspicuous evidence of his attachment to the British Government. Nepal is the main Indian outpost against Tibet, or against Chinese aggression through Tibet. The friction between the Chinese and the Nepalese used to be frequent, and in the eighteenth century the Chinese marched an army to the confines of Khatmandu—one of the most remarkable military achievements in the history of Asia. Under the firm rule of the present Prime Minister Nepal has been largely free from internal disturbance, and has been raised to a strong bulwark of India. Nepal is the recruiting ground for the Gurkha Infantry, who form such a splendid part of the fighting arm of the Indian Empire. Beyond Nepal are the smaller States of **Bhutan** and **Sikkim,** whose rulers are Mongolian by extraction and Buddhists by religion. In view of Chinese aggressions in Tibet, the Government of India in 1910 strengthened their relations with Bhutan by increasing their subsidy from fifty thousand to a lakh of rupees a year, and taking a guarantee that Bhutan would be guided by them in its foreign relations. Afterwards China was officially notified that Great Britain would protect the rights and interests of these States.

Assam and Burma.

We then come to the Assam border tribes—the Daflas, the Miris, the Abors and the Mishmis. Excepting the Abors none of these tribes have recently given trouble. The murder of Mr. Williamson and Dr. Gregorson by the Minyong Abors in 1911 made necessary an expedition to the Dihang valley of the Abor country on the N. E. frontier. A force of 2,500 and about 400 military police was employed from October 1911 to April 1912 in subduing the tribe. After two or three small actions the murderers were delivered up. The cost of the expedition wa

Rs. 21,60,000. At the same time friendly missions were sent to the Mishmi and Miri countries. Close contact with these forest-clad and leech-infested hills has not encouraged any desire to establish more intimate relations with them. The area occupied by the Nagasares runs northwards from Manipur. The Nagasares, a Tibeto-Burman people, devoted to the practice of head hunting, which is still vigorously prosecuted by the independent tribes. The Chin Hills is a tract of mountainous country to the south of Manipur. The corner of India from the Assam boundary to the northern boundary of the Shan States is for the most part included in the Myitkyina and Bhamo districts of Burma. Over the greater part of this area, a labyrinth of hills in the north, no direct administrative control is at present exercised. It is peopled by the Shans and the Kachins. Civilisation is said to be progressing and steps have been taken to prevent encroachments from the Chinese side. There is a considerable trade with China through Bhamo. On the Eastern frontier of Burma are the Shan States, with an area of fifty thousand square miles and a population of 1,800,000. These States are still administered by the Sawbwas or hereditary chiefs, subject to the guidance of Superintendents and Assistant Superintendents. The Northern Shan Railway to Lashio, opened in 1903, was meant to be a stage in the construction of a direct railway link with China, but this idea has been put aside, for it is seen that there can never be a trade which would justify the heavy expenditure. The Southern Shan States are being developed by railway connection. The five Karenni States lie on the frontier south of the Shan States. South of Karenni the frontier runs between Siam and the Tenasserim Division of Burma. The relations between the Indian Government and the progressive kingdom of Siam are excellent.

Railways to India.

The prospect of linking Europe and Asia by a railway running eastwards through Asia Minor has fascinated men's minds for generations. The plans suggested have, owing to the British connection with India, always lain in the direction of lines approaching India. More than 40 years ago a Select Committee of the House of Commons sat for two years to consider the question of a Euphrates Valley railway. The Shah of Persia applied to the British Foreign Office for the investment of British capital in Persian railway construction many years before the end of the nineteenth century. A proposal was put forward in 1895 for a line of 1,000 miles from Cairo and Port Said to Koweit, at the head of the Persian Gulf. While these projects were in the air, German enterprise stepped in and made a small beginning by constructing the Anatolian railway system. Its lines start from Scutari, on the southern shore of the Bosphorus, opposite Constantinople, and serve the extreme western end of Asia Minor. And upon this foundation was based the Turkish concession to Germans to build the Baghdad Railway.

Meanwhile, Russia was pushing her railways from various directions into the Central Asian territory running along the northern frontiers of Persia and Afghanistan to the borders of Chinese Turkestan. The construction of a Trans-Persian railway, connecting India, across Persia, with the Russian lines between the Black Sea and the Caspian Sea came to the forefront after the conclusion of the historic Anglo-Russian agreement regarding Persia.

The Germans pushed forward their Baghdad railway project with a calculating shrewdness arising from their estimate of the value it would possess in their grand aim to overthrow the British Empire. The outbreak of the great war and the success of the Germans in inveigling Turkey into it saw the final stages of the construction of the railway pressed forward with passionate energy. Thus, before the overthrow of the Turks and Germans in Asia Minor and of the Germans in France the railway was completed and in use from Scutari across Anatolia, over the Taurus Mountains to Aleppo and thence eastward across the Euphrates to a point between Nisibin and Mosul. The Germans had also by that time constructed a line to Baghdad at the eastern end of the route, northwards from Baghdad to a point a considerable distance beyond Samara.

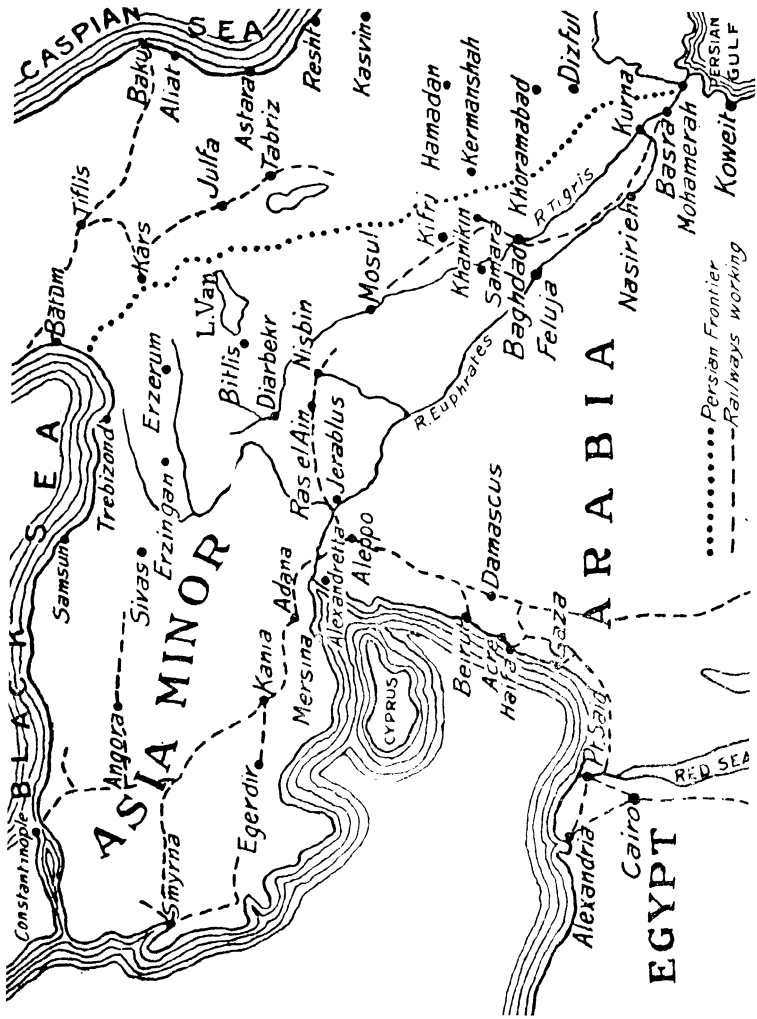
The war compelled the British to undertake considerable railway development northward from Basra, the port at the mouth of the Shat-el-Arab, the broad stream in which the Tigris and Euphrates, after their junction, flow into the head of the Persian Gulf. The system consists of a metre-gauge line from Basra *via* Nasarieh, on the Euphrates, thence northwards to Baghdad, the line passing a considerable distance westward to Kut-l-Amara, of historic fame. From Baghdad the line runs eastward approximately to the foot of the pass through which the Persian road crosses the frontier of that country. A line branches off in the neighbourhood of Kifri in the direction of Mosul. A line also runs westward from Baghdad to Feluja, on the Euphrates. With the Turkish Nationalists in control of Anatolia any question of the completion of the through Baghdad Line is indefinitely delayed.

The Trans-Persian line to join the Russian Caucasian system and the Indian railways first assumed proportions of practical importance in the winter of 1911. Both the Russian and the Indian railway systems were by then well developed up to the point likely to be the termini of a Trans-Persian line. The Russian system reached Julfa, on the Russo-Persian frontier in the Caucasus. During the war this line has been carried thence southward into the region east and south-east of Lake Urumia. The Indian railway system, on the borderland of India and Persia, was similarly much extended and improved during the war. No details have been published of proposals for the continuation of the Russo-Indian link under the restored conditions of peace. A new agreement which was negotiated between England and Persia specially provided for British assistance in the development of Persian natural resources and particularly for the extension and improvement of Persian roads suitable for motor traffic but the agreement came to naught.

There remains the possibility of linking the Russian and Indian railway system by way of Afghanistan. The suggestion has often been made in recent years that the Russian line from Merv to Herat, on the northern frontier of Afghanistan, should be linked to the Indian line which proceeds from Quetta to the Afghan border on Chaman. The distance between the railway heads is about 250 miles. But there have always for strategic reasons been strong military objections to the railway across Afghanistan and after the death of the late Amir Habibullah the Afghan Government flatly opposed any suggestion for carrying the Indian or Russian railway system within their borders. What the present Afghan Government think about the matter was not shown up to the time this article was written, but the strange situation in Central Asia and beyond the Indian North-West Frontier does not suggest the early removal of the strategic difficulties.

Britain's special interests in regard to Persian communications have hitherto primarily been associated with lines running inland from the Persian Gulf, to supersede the old mule routes. Special importance has for many years been attached to schemes for a railway from Mohammerah (at the opening of the Karun Valley, where the Karun River runs into the Shat-el-Arab, just below Basra, northwards into the rich highland country of Western Persia where the valuable West Persian oil wells also lie. Britain has long established special relations with the Karun Valley and has a large trade there.

Map of the Baghdad Railway.



Foreign Consular Officers in India.

Name.	Appointment.	Port.
Afghanistan.		
Mr. Muhammad Haidar Khan	Consul-General	Delhi.
Mr. Haji Muhammad Akbar Khan	Consul	Bombay.
Mr. Abdul Ghafur Khan	Do.	Karachi.
Argentine Republic.		
Mr. T. F. Barton	Vice-Consul	Calcutta.
Austria-Hungary.		
The Consul-General for Netherlands, Calcutta, is in charge of Austro-Hungarian Interests.		
Belgium.		
Monsieur F. Janssens	Consul-General	Calcutta.
Mr. D. J. MacGillivray (Ag.)	Consul	Karachi.
Mr. F. E. L. Worke	Do.	Madras.
Mr. P. Dormans (on leave)	Do.	Rangoon.
Mr. T. Johnstone (Ag.)	Do.	Do.
Mr. F. A. Gaudie	Do.	Akyab.
Mr. J. Lince	Vice-Consul	Calcutta.
Monsieur Paul Verstracten (on leave)	Consul	Bombay.
Monsieur D. S. Levi (Ag.)	Do.	Do.
Mr. C. Tolkowsky (on leave)	Do.	Do.
Bolivia.		
Mr. A. M. Tagore	Consul-General	Calcutta.
Sir A. W. Binning (on leave)	Vice-Consul	Rangoon.
Mr. G. R. Neilson (on leave)	Do.	Do.
Mr. J. A. Johnston (Ag.)	Do.	Do.
Brazil.		
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Mr. H. V. Simmons	Vice-Consul	Do.
Mr. A. R. Braga (on leave)	Do.	Bombay.
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Mr. C. H. Straker	Do.	Madras.
Mr. V. E. Nazareth	Do.	Karachi.
Chili.		
Senor Don P. A. Pacheco	Consul-General	Calcutta.
Vacant	Consul	Bombay.
Mr. J. B. Cuniffe (Ag.)	Do.	Madras.
Mr. J. G. Bendiena (Ag.)	Vice-Consul	Bombay.
Mr. A. R. Leishmhn	Do.	Chittagong.
Mr. William Archbald	Consul	Rangoon.
China.		
Mr. Chang Kuo Wai	Consul	Rangoon.
Costa Rica.		
Dr. Benode Behari Bonerjee	Consul	Calcutta.
Cuba.		
Senor W. F. Pais	Consul	Bombay.
Senor Don B. Martinez Y. Montalvan (on leave)	Do.	Calcutta.
Senor Don. D. C. Marco (Ag.)	Do.	Do.
Czecho-Slovak Republic.		
Dr. A. Lafar	Consul	Bombay.
Vacant	Vice-Consul	Do.

Name.	Appointment.	Port.
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Mr. E. H. Danchell	Consul	Bombay.
Mr. W. M. Browning	Do.	Madras.
Mr. C. J. J. Britton	Do.	Rangoon.
Vacant	Vice-Consul	Karachi.
Mr. H. B. Whitby	Do.	Calcutta.
Mr. P. T. Christensen	Do.	Moulmein
Finland.		
Mr. M. Joakim	Consul	Rangoon.
France.		
Monsieur L. E. R. Laronce	Consul-General	Calcutta.
Monsieur M. Garreau	Commercial Agent ..	Do.
Monsieur D. A. Levi	Consul	Bombay.
Mr. E. L. Price	Consular Agent	Karachi
Mr. F. E. L. Worke	Do.	Madras.
Vacant	Do.	Chittagong.
Mr. J. K. Michie	Do.	Rangoon.
Vacant	Do.	Tellicherry.
Vacant	Do.	Akyab.
Germany.		
Baron H. Rüdt von Collenberg Boedigheim.	Consul-General	Calcutta.
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Greece.		
Mr. Byron Cossentelli	Consul-General.. ..	Calcutta.
Guatemala.		
Mr H. J. Sanders (on leave)	Consul	Calcutta.
Italy.		
Cav. Uff. Dr. G. Cecchi, C.B.E.	Consul-General	Calcutta.
Cav. E. Benasaglio	Vice-Consul..	Do.
Signor Lodovico Manzini	Consul	Bombay.
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Vacant	Do. ..	Madras
Japan.		
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T. Watanabi	Consul	Bombay.
Mr. T. T. Fuchi	Do.	Rangoon.
Liberia.		
Dr. Benode Behari Bonerjee	Consul	Calcutta.
Dr. E. Freeman Underwood	Do.	Bombay.
Mexico.		
Mr. R. L. B. Gall	Consul	Calcutta.

NOTE.—Please *note* that the Consular Agencies in Akyab, Moulmein and Bassein *have been suppressed.*

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Monsieur J. G. Bendien (on leave)	Consul	Bombay.
Mr. J. G. Groothoff (Ag.)	Do.	Do.
Mr. D. van Wijngaarden (on leave)	Do.	Karachi.
Mr. C. van Amerongen (Ag.)	Do.	Do.
Mr W. Massink	Do.	Rangoon.
Mr. W. J. U. Turnbull	Do.	Madras.
Mr. D. Allait	Vice-Consul	Calcutta.
Nicaragua.		
Mr. C. H. Hardcastle	Consul	Bombay.
Norway.		
Mr. H. A. Falsen	Consul-General	Calcutta.
Mr. F. E. Hardcastle	Consul	Bombay.
Mr. W. Archbald (in Charge)	Do.	Rangoon.
Sir. J. F. Simpson, Kt., (on leave)	Do.	Madras.
Mr. R. C. M. Strouts (Ag.)	Do.	Do.
Captain H. W. Fox	Vice-Consul	Chittagong.
Mr. J. C. Clark (on leave)	Do.	Akyab.
Mr. G. Innes (Ag)	Do.	Do.
Mr. J. McCracken	Do.	Bassein.
Mr. A. D. Cowan	Do.	Moulmein.
Mr. D. J. MacGillivray (on leave)	Do.	Karachi.
Mr. J. R. Baxter (Ag.)	Do.	Do.
Mr. C. Hodding	Do.	Coconada.
Mr. C. H. Hardcastle	Do.	Bombay.
Mr. G. Lochen	Do.	Calcutta.
Panama.		
Senhor Don B. Martinez V. Monteleven (on leave).	Consul	Calcutta.
Mr. J. Sales (Ag.)	Do.	Do.
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Mirza Taghi Khan Mozez-od-Dowleh	Consul-General	Calcutta.
Assadolleh Khan, Moin-ul-Mulk, C.B.E.	Consul	Bombay
Mirza Muhammad Ispahani	Do.	Calcutta.
Vacant	Do.	Madras.
Mir Ayub Khan	Vice-Consul	Karachi.
Khan Bahadur Mirza Ali Akbar Shirazi	Do.	Rangoon.
Vacant	Do.	Moulmein.
Peru.		
Mr. H. C. Sturges	Consul-General	Calcutta.
Vacant	Consul	Rangoon.
Mr. J. A. Robin (temporarily in Charge)	Do.	Do.
Portugal.		
Senhor C. J. dos Santos (on leave)	Consul-General	Bombay.
Mr. A. P. J. Fernandes (in Charge)	Do.	Do.
Senhor A. M. DeSouza (on leave)	Consul	Rangoon.
Mr. W. E. D'Souza (Ag.)	Do.	Do.
Senhor A. A. Teixeira	Do.	Calcutta.
Senhor A. P. J. Fernandes	Vice-Consul	Bombay.
Senhor A. B. da Fonseca	Do.	Karachi.
Senhor A. M. Teixeira	Do.	Madras.

Name.	Appointment.	Port.
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Luang Mitrakarm Raksha	Consul-General	Calcutta.
Mr. H. P. W. Macnaghten	Consul	Bombay.
Mr. E. G. Johnston	Do.	Rangoon.
Mr. C Van-der-Gucht (on leave)	Do.	Moulmein.
Mr. W. J. Oatfield (Ag.)..	Do.	Do.
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Mr. W. Archbald	Do.	Rangoon
Mr. T. H. Wheeler (on leave)	Vice-Consul	Calcutta.
Vacant	Do.	Moulmein.
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Monsieur J. H. Frei	Do.	Madras.
Turkey.		
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United States of America.		
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H. Shantz (in Charge) (Ag.)	Vice-Consul..	Do.
C. H. Loomis (on leave)	Do.	Do.
Frederick L. Thomas	Do.	Do.
Wilbur Keblinger	Consul	Bombay.
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A. M. Warren	Consul	Karachi.
E. L. Rogers	Vice-Consul	Do.
James P. Moffitt	Consul	Rangoon.
Dr. H. B. Osborn	Vice-Consul	Do
Venezuela.		
Mr. A. M. Tagore	Consul	Calcutta.

The Home Government.

The Home Government of India represented for sixty years the gradual evolution of the governing board of the old East India Company. The affairs of the company were originally managed by the Court of Directors and the General Court of Proprietors. In 1784 Parliament established a Board of Control, with full power and authority to control and direct all operations and concerns relating to the civil and military government, and revenues of India. By degrees the number of the Board was reduced and its powers were exercised by the President, the lineal precursor of the Secretary of State for India. With modifications this system lasted until 1858, when the Mutiny, followed by the assumption of the Government of India by the Crown, demanded a complete change. Under the Act of 1858 (merged in the consolidating measure passed in 1915) the Secretary of State is the constitutional adviser of the Crown on all matters relating to India. He inherited generally all the powers and duties which were formerly vested either in the Board of Control, or in the Company, the Directors and the Secret Committee in respect of the Government and revenues of India.

The Secretary of State.

Until the Reform Act of 1919 came into force the Secretary of State had the unqualified power of giving orders to every officer in India, including the Governor-General, and to superintend, direct and control all acts, operations and concerns relating to the government or revenues of India. In the relations of the Secretary of State with the Governor-General in Council no express statutory change was made, but Parliament ordained through the Joint Select Committee that in practice the conventions governing these relations should be *modified; only in exceptional circumstances* should he be called upon to intervene in matters of purely Indian interest where the Government and the Legislature of India are in agreement.

Of the wide powers and duties still vested in the Secretary of State, many rest on his personal responsibility; others can be performed only in consultation with his Council, and for some of these the concurrence of a majority of the members of his Council voting at a meeting is required. The Act of 1919 greatly modified the rigidity of the law maintained for sixty years as to the relations of the Secretary of State with his Council, and he has fuller power than in the past to prescribe the manner in which business is to be transacted. Though in practice the Council meets weekly (save in vacation periods) this has ceased to be a statutory requirement, the law now providing that there shall be a meeting at least once in every month.

The India Council.

The number of members of the Council was reduced by the Act to not less than eight and not more than 12, the Secretary of State being free to appoint within those limits. The period of office was reduced from 7 to 5 years, though the Secretary of State may, for special reasons of public advantage to be communicated to Parliament, re-appoint a member for another five years. Half the Council must be persons who have served or resided in India for at least ten years, and who have not left India more than five years before their appointment. The Act restored the old salary of £1,200, with an additional subsistence allowance of £600 for any member who was at the time of appointment domiciled in India. Lord Morley opened the door of the Council to Indians, and since 1917 the number of Indian members has been three.

Associated with the Secretary of State and the India Council is a Secretariat known as the India Office, housed at Whitehall. Appointments to the establishment are made by the Secretary of State in Council, and are subject to the ordinary Home Civil Service rules in all respects.

In the past the whole cost of the India Office has been borne by the revenues of India, except that the Home Government made certain grants and remissions in lieu of a direct contribution amounting to £50,000 a year. The total net cost including pensions has been about £250,000 per annum. In conformity with the spirit of the new Act, an arrangement was made whereby the salary of the Secretary of State is placed on the Home estimates and the cost of the controlling and political functions exercised in Whitehall is also met from British revenues, while agency functions alone are chargeable to Indian revenues.

The High Commissionership.

The financial readjustment has been accompanied by a highly important administrative change provided for by the Act, in the creation of a High Commissioner for India in the United Kingdom with necessary establishments. From October 1st, 1920, the late Sir William Meyer became the first High Commissioner, and took over control of the large Stores Department of the India Office, the accounts section connected therewith, and the Indian Students Branch, together with the supervision of the work of the Indian Trade Commissioner in the City. The further development of the functions and powers of the High Commissioner have included such agency work as the payment of Civil leave allowances and pensions, supervision of I. C. S. and Forest probationers after first appointment, the making of arrangements for officers on deputation or study leave, repatriation of destitute lascars, sale of Government of India Publications, etc. The clerical staff of the Stores Department has been transferred to the Stores Depot off the Thames in Belvedere Road, Lambeth. The High Commissioner and the rest of the staff transferred, have separate office accommodation at 42, 44 and 46, Grosvenor Gardens, S.W. 1.

Another highly important change was the setting up by Parliament of a Joint Standing Committee on Indian affairs consisting of eleven members of each House. The purpose is to keep Parliament in closer touch with Indian affairs than has recently been possible, and to refer to the Committee draft rules and also Parliamentary Bills after they have received a second reading.

INDIA OFFICE.

Secretary of State.

The Right Hon. Viscount Peel, G.B.E.

Under-Secretaries of State.

Sir William Duke, G.C.I.E., K.C.S.I.

The Earl Winterton, M.P.

Deputy Under-Secretary of State.

Sir Arthur Hirtzel, K.C.B.

Assistant Under-Secretary of State.

Sir Malcolm Seton, K.C.B.

Council.

Sir Charles S. Bayley, G.C.I.E., K.C.S.I., I.S.O.

General Sir E. G. Barrow, G.C.B., G.C.S.I.

Sir James Bennett Brunyate, K.C.S.I., C.I.E.

Sahibzada Aftab Ahmed Khan.

Bhupendranath Basu.

Frederick Craufurd Goodenough.

Sir Malcolm Hogg.

Sir Edward Albert Gait, K.C.S.I., C.I.E.

Sir Benjamin Robertson, K.C.S.I., K.C.M.G., C.I.E.

Sir William H. H Vincent, G.C.I.E., K.C.S.I.

Sir Rajagopala Achariyar, K.C.S.I., C.I.E.

Clerk of the Council, Sir Malcolm Seton.

Deputy Clerk of the Council, P. H. Dumbell.

Private Secretary to the Secretary of State, S. K. Brown.

Assistant Private Secretary, J. G. Laithwaite.

Political A.-D.-C. to the Secretary of State, Lieut.-Col. A. D'Arcy. G. Bannerman, C.I.E., C.V.O.

Private Secretary to Sir W. Duke, A. Dibdin.

Private Secretary to Lord Winterton, R. T. Peel, M.C.

Heads of Departments.

SECRETARIES.

Financial, W. Robinson, C.B.E.; C.H. Kisch, C.B.

Judicial and Public, J. E. Ferard, C.B.E.

Military, Lieut.-General Sir A. S. Cobbe, V.C., K.C.B., K.C.S.I., D.S.O.

Ditto (Joint), S. F. Stewart, C.I.E.

Political and Secret, L. D. Wakely (*acting*).

Public Works, W. Stanilall, C.I.E.

Industries and Overseas, Sir L. J. Kershaw, K.C.S.I., C.I.E.

Commercial and Revenue, E. J. Turner, C.B.E.

Director-in-Chief of the Indo-European Telegraph, Public Works Department, M. G. Simpson.

Accountant-General, Sidney Turner, F.I.A. *also Director of Funds and Official Agent to Administrators-General in India.*

RECORD DEPARTMENT.—*Superintendent of Records*, H. Mitchell.

Auditor, W. A. Sturdy.

Miscellaneous Appointments.

Government Director of Indian Railway Companies, Sir E. A. S. Bell, C.I.E.

Librarian, Fredk. W. Thomas, M.A., Ph.D.

Historiographer—W. Foster, C.I.E.

President of Medical Board for the Examination of Officers of the Indian Services and Adviser to the Secretary of State on Medical matters, Major-General J. B. Smith, C.B., C.I.E.

Member of the Medical Board, Lt.-Col. Sir L. Rogers, C.I.E.

Legal Adviser and Solicitor to Secretary of State, Sir Edward Chamier.

Inspector of Military Equipment and Clothing, Col. H. E. Garstin, D.S.O., R.A. (retd.)

Ordnance Consulting Officer, Col. J. H. Lawrence-Archer, C.I.E.

HIGH COMMISSIONER'S OFFICE.

(42, Grosvenor Gardens.)

The High Commissioner, Dadhibai Merwanji Dalal, C.I.E.

Secretary, Sir Edward Cook, Kt.

Chief Accountancy Officer, G. H. Stoker, O.B.E.

Personal Assistant, W. Marlow.

General Department: *Assistant Secretary*, R. E. Montgomery.

Joint Secretaries for Indian Students, N. C. Sen, O.B.E., and T. Quayle, D. Litt. (Lond.).

Stores Department Depot at Belvedere Road, Lambeth, S. E. 1.

Director-General.

Deputy Director, R. R. Howlett.

Superintendent of Depot, Lt.-Col. S. S. W. Paddon, C.I.E.

Indian Trade Commissioner, H. A. F. Lindsay, C.B.E.

Secretaries of State for India.

	Assumed charge.
Lord Stanley (*a*)	1858
Sir Charles Wood, Bart. (*b*)	1859
Earl de Grey and Ripon (*c*)	1866
Viscount Cranborne (*d*)	1866
Sir Stafford Northcote, Bart. (*e*)	1867
The Duke of Argyll, K.T.	1868
The Marquis of Salisbury (2nd time)	1874
Gathorne Hardy, created Viscount Cranbrook, 14 May, 1878 (*f*)	1878
The Marquis of Hartington (*g*) ..	1880
The Earl of Kimberly	1882
Lord Randolph Churchill	1885
The Earl of Kimberley, K.G., (2nd time)	1886
Sir Richard Assheton Cross, G.C.B., created Viscount Cross, 19 Aug., 1886	1886
The Earl of Kimberley, K.G. (3rd time)	1892
H. H. Fowler (*h*)	1894
Lord George F. Hamilton	1895
St. John Brodrick (*i*)	1903
John Morley, O.M (*j*)	1905
The Earl of Crewe, K.G.	1910
Viscount Morley of Blackburn, O.M. ..	1911
The Earl of Crewe, K.G. (*k*)	1911
Austen Chamberlain, M.P.	1915
E. S. Montagu, M.P.	1917
Viscount Peel	1922

(*a*) Afterwards (by succession) Earl of Derby.

(*b*) ,, (by creation) Viscount Halifax.

(*c*) ,, (by creation) Marquess of Ripon.

(*d*) ,, (by succession) Marquess of Salisbury.

(*e*) ,, (by creation) Earl of Iddesleigh.

(*f*) ,, (by creation) Earl Cranbrook.

(*g*) ,, (by succession) Duke of Devonshire.

(*h*) ,, (by creation) Viscount Wolverhampton, G.C.S.I.

(*i*) ,, (by succession) Viscount Midleton.

(*j*) ,, (by creation) Viscount Morley of Blackburn; O.M.

(*k*) ,, (by creation) Marquess of Crewe, K.G.

The Army.

The great sepoy army of India originated in the small establishments of guards, known as peons, enrolled for the protection of the factories of the East India Company; but sepoys were first enlisted and disciplined by the French, who appeared in India in 1665. Before this detachments of soldiers were sent from England to Bombay, and as early as 1665 the first fortified position was occupied by the East India Company at Armagon, near Masulipatam. Madras was acquired in 1640, but in 1654 the garrison of Fort St. George consisted of only ten men. In 1661 Bombay was occupied by 400 soldiers, and in 1668 the number was only 285 of whom 93 were English and the rest French, Portuguese, and natives.

After the declaration of war with France in 1744 the forces were considerably increased, but this did not prevent the French capturing Madras in 1746. Following the French example, the English raised considerable sepoy forces and largely increased the military establishments. In 1748 Major Stringer Lawrence landed at Fort St. David to command the forces of the Company. The English foothold in India was then precarious and the French under Dupleix were contemplating fresh attacks. It became necessary for the English Company to form a larger military establishment. The new commandant at once set about the organisation and discipline of his small force, and the garrison was given a company formation. This was the beginning of the regular Indian Army of which Lawrence subsequently became Commander-in-Chief. In Madras the European companies were developed into the Madras Fusiliers; similar companies in Bengal and Bombay became the 1st Bengal and 1st Bombay Fusiliers. The native infantry were similarly organised by Lawrence and Clive. By degrees Royal Regiments were sent to India, the first being the 39th Foot, which arrived in 1754.

Struggle with the French.—From this time for a century or more the army in India was engaged in constant war. After a prolonged war with the French, whom Dupleix had by 1750 raised to the position of the leading power in India, the efforts of Stringer Lawrence, Clive, and Eyre Coote completed the downfall of their rivals, and the power of England was established by the battle of Plassey in Bengal; and at Wandewash in Southern India, where the French were finally defeated in 1761. A number of independent States, owning nominal allegiance to the Emperor at Delhi, had risen on the decline of the Mughal Empire, some ruled by Mahratta Princes and others by Musalman adventurers such as Hyder Ali of Mysore. A prolonged struggle ensued with the latter and his son and successor Tipu Sultan, which ended only with the defeat and death of Tipu and the capture of Seringapatam in 1799.

Reorganisation of 1796.—In 1796 the native armies, which had been organised on the Presidency system, were reorganised. The European troops were 13,000 strong and the natives numbered some 67,000, the infantry being generally formed into regimen 75 of two battalions each. In Bengal regiments were formed by linking existing battalions of ten companies each with large establishments of English officers. The Madras and Bombay armies were at the same time reorganised on similar lines, and cavalry and artillery companies were raised.

In 1798 the Marquis Wellesley arrived as Governor-General, firmly imbued with the necessity of destroying the last vestiges of French influence. In pursuance of this policy he reduced Mysore, where Tipu was intriguing with the French, and then turned his attention to the Mahratta States, in which Sindhia had established power over the Mughal Emperor at Delhi by means of a large regular army officered by Europeans under the French adventurer Perron. In campaigns against Sindhia in Hindustan by a British Army under General Lake, and in the Deccan against that prince and the Raja of Berar by an army under General Wellesley, afterwards Duke of Wellington, the power of these Chiefs was broken in the battles of Laswari and Assaye. French influence was finally destroyed, and the Mughal Emperor was released from the domination of the Mahrattas. Subsequently Holkar also was reduced, and British power established on a firm footing.

Mutiny at Vellore.—The Indian Army had been from time to time subject to incidents of mutiny which were the precursors of the great cataclysm of 1857. The most serious of these outbreaks occurred at the fort of Vellore in 1806 when the native troops suddenly broke out and killed the majority of the European officers and soldiers quartered in the fort, while the striped flag of the Sultan of Mysore, whose sons were confined there, was raised upon the ramparts. The mutiny was suppressed by Colonel Gillespie, who galloped over from Arcot at the head of the 19th Light Dragoons, blew in the gate of the fort, and destroyed the mutineers. This retribution put a stop to any further outbreaks in the army.

Overseas expeditions.—Several important overseas expeditions were undertaken in the early part of the nineteenth century. Bourbon was taken from the French; Ceylon and the Spice Islands were wrested from the Dutch, and Java was conquered in 1811 by a force largely composed of Bengal troops which had volunteered for this service.

In 1814 the Nepal War took place in which the brave Gillespie, who had distinguished himself in Java, was killed when leading the assault on the fort of Kalunga. The Gurkhas were overcome in this war after offering a stout resistance.

In 1817 hostilities again broke out with the Mahrattas, who rose against the British during the progress of operations against the Pindaris. Practically the whole army took the field and all India was turned into a vast camp. The Mahratta Chiefs of Poona, Nagpur, and Indore rose in succession, and were beaten respectively at Kirki, Sitabaldi, and Mehidpur. This was the last war in Southern India. The tide of

war rolled to the north never to return. In the Punjab, to which our frontier now extended, our army came into touch with the great military community of the Sikhs.

In 1824 the armies were reorganised, the double-battalion regiments being separated, and the battalions numbered according to the dates they were raised. The Bengal Army was organised in three brigades of horse artillery, five battalions of foot artillery, two regiments of European and 68 of native infantry, 5 regiments of regular and 8 of irregular cavalry. The Madras and Bombay armies were constituted on similar lines, though of lesser strength.

First Afghan War and Sikh Wars.—In 1839 a British Army advanced into Afghanistan and occupied Cabul. There followed the murder of the British Envoys and the disastrous retreat in which the army perished. This disaster was in some measures retrieved by subsequent operations, but it had far-reaching effects on British prestige. The people of the Punjab had witnessed these unfortunate operations, they had seen the lost legions which never returned, and although they saw also the avenging armies they no longer regarded them with their former eyes. Sikh aggression led to hostilities in 1845-46, when a large portion of the Bengal Army took the field under Sir Hugh Gough. The Sikhs were defeated after stubborn fights at Mudki and Ferozeshahr, the opening battles, but did not surrender until they had been overthrown at the battles of Aliwal and Sobraon. Two years later an outbreak at Multan caused the Second Sikh War when, after an indecisive action at Chilianwala, our brave enemies were finally overcome at Gujerat, and the Punjab was annexed. Other campaigns of this period were the conquest of Sind by Sir Charles Napier, and the Second Burmese War, the first having taken place in 1824.

The conquest of the Punjab extended our frontier to the country inhabited by those turbulent tribes which have given so much trouble during the past sixty years while they have furnished many soldiers to our army. To keep order on this border the Punjab Frontier Force was established, and was constantly engaged in small expeditions which, while they involved little bloodshed, kept the force employed and involved much arduous work.

The Indian Mutiny.—On the eve of the mutiny in 1857 there were in the Bengal Army 21,000 British and 137,000 native troops; in the Madras Army 8,000 British and 49,000 native troops; and in Bombay 9,000 British and 45,000 native troops. The proportion of native to British was therefore too large for safety. The causes of the mutiny were many and various. Among these were the annexation policy of Lord Dalhousie, especially that of Oudh from which the greater part of the Bengal Army was drawn; interference with the privileges of the sepoy with respect to certain allowances; and lack of power on the part of commanding officers either to punish or reward. The final spark which fired the revolt was the introduction of a new cartridge. The muskets of those days were supplied with a cartridge in which the powder was enclosed in a paper cover, which had to be bitten off to expose the powder to ignition. In 1857 a new cartridge was introduced with paper of a glazed texture which it was currently reported was greased with the fat of swine and oxen, and therefore unclean alike for Muhammadans and Hindus. This was interpreted as an attempt to destroy the caste and the religion of the sepoys. Skilful agitators exploited this grievance, which was not without foundation, and added reports that flour was mixed with bone-dust and sugar refined with the blood of oxen.

Disaffection culminated in mutiny at Berhampur and in an outbreak at Barrackpore where sepoy Mangal Pande attacked a European officer. The next most serious manifestation was the refusal of men of the 3rd Bengal Cavalry at Meerut to take the obnoxious cartridge. These men were tried and sentenced to long terms of imprisonment, their fetters being riveted on parade on the 9th May. Next day the troops in Meerut rose, and, aided by the mob, burned the house of the Europeans and murdered many. The troops then went off to Delhi. Unfortunately there was in Meerut no senior officer capable of dealing with the situation. The European troops in the place remained inactive, and the mutineers were allowed to depart unmolested to spread the flames of rebellion.

Delhi is the historic capital of India. On its time worn walls brood the prestige of a thousand years of Empire. It contained a great magazine of ammunition. Yet Delhi was held only by a few native battalions, who joined the mutineers. The Europeans who did not succeed in escaping were massacred and the Delhi Emperor was proclaimed supreme in India. The capital constituted a nucleus to which the troops who mutinied in many places flocked to the standard of the Mughal. An army was assembled for the recovery of Delhi but the city was not captured until the middle of September. In the meantime mutiny had spread. The massacres of Cawnpore and Jhansi took place, and Lucknow was besieged until its relief on the 27th September. The rebellion spread throughout Central India and the territory that now forms the Central Provinces, which were not recovered until Sir Hugh Rose's operations in 1858 ended in the defeat of the Rani of Jhansi.

Minor Campaigns—During the until 1879, when the Second Afghan War i there were many minor campaigns includ the China War of 1860, the Ambeyla Campaign, and the Abyssinian War. Then followed the Afghan War in which the leading figure was Lord Roberts. There were expeditions to Egypt and China, and Frontier Campaigns of which the most important was the Tirah Campaign of 1897. There were also the prolonged operations which led up to or ensued upon the annexation of Burma, several campaigns in Africa, and the expeditions to Lhasa. But until 1914, since the Afghan War, the army of India, except that portion of the British garrison which was sent to South Africa in 1899, had little severe fighting, although engaged in many arduous enterprises.

Reorganisation after the Mutiny.—In 1857 the East India Company ceased to exist and their army was taken over by the Crown. At this time the army was organized into three

armies, *viz*: Bengal, Bombay and Madras, the total strength being 65,000 British and 140,000 Indian troops.

Several minor re-organizations took place during the following years, such as the linking of three Regiments together and the raising of Class Regiments and Companies. In 1895 the next large reorganization took place. This was the abolition of the three Armies and the introduction of the command system. Four Commands were formed *viz*: Punjab, Bengal, Madras and Bombay.

Lord Kitchener's Scheme.—This system lasted until 1904 when under Lord Kitchener's re-organization the Madras Command was abolished and the Army divided into three Commands—the Northern, Eastern and Western, corresponding to the Punjab, Bombay and Bengal Commands.

In 1907 Lord Kitchener considered that consequent on the delegation of administrative powers to Divisional Commanders, retention of such powers by Lieutenant Generals of Commands led to delay in the despatch of business. The Command system was therefore abolished and India was divided into two Armies—the Northern and Southern—each under a General Officer who was responsible for the command, inspection and training of the troops but was given no administrative responsibilities.

The 1903 re-organization scheme aimed at the Army being organised in divisional areas which were to include one or more definite war formations together with troops for internal security. Each Divisional area was to be self-contained and self-administered on the same principle as the Commands in the United Kingdom. Some of these divisional areas in India were as large as the German Empire and the Divisional Commander combined in his person the offices of:—General Officer Commanding in Chief; Major General, Administration; and War Divisional Commander.

Had the areas been called Commands or even Districts, and had proper staffs been provided, the scheme would have fulfilled the requirements, but as it stood it fell far short of these. The system was based on the assumption that troops would be concentrated and that the Divisional Commander would therefore be able to exercise close control. This concentration necessitated a large building programme as entire readjustment of accommodation was required. This could not be fully carried out for financial reasons and thus, in the majority of cases, troops of war formations were not located in peace under their Divisional Commanders while Internal Security troops had to a great extent to be brought into the divisional area from a distance when required. The Divisional Commanders were overburdened with administrative responsibilities and owing to the dispersion of troops within their areas, were unable to exercise close control or to devote their main attention to the training of their troops for war. The two Army Commanders were nothing more than Inspector Generals of Forces while the elimination of their administrative duties threw an added burden on Army Headquarters. This then was the system in force at the outbreak of the Great War.

Early in the War both Army Commanders took the field and were not replaced until 1916 and 1917 when both had practically the same functions as their predecessors. It was now realised that administration was being unduly centralised at Army Headquarters and the machinery was becoming clogged with unnecessary details. To secure efficiency at A. H. Q., therefore, a certain measure of decentralisation was carried out in 1918. With the alteration of the designation "Army" to "Command" at this time, a considerable increase was made in the administrative staffs of the two Commands and the General Officers Commanding were given powers to deal with all administrative questions other than those dealing with matters of policy, new principles or war.

Four Command System.—At the conclusion of the war came an opportunity to re-consider Army organization in the light of practical experience. Two of the outstanding lessons of the war were:—

(*a*) That no system of organisation can produce good results which does not permit of the closest personal relations between Commanders, Staffs and troops.

(*b*) that the system in peace must be readily adaptable to war conditions so as to permit of transition from peace to war with the least possible dislocation.

The first of these demands restriction of area, while both demand the largest possible measure of decentralisation and delegation of powers.

Therefore the new system evolved from experience was to the effect that, to establish an effective system of Command and administration, India must be divided into not less than 14 areas or Districts and that between these districts and Army Headquarters should be interposed 4 Commands to avoid overloading A. H. Q. with work. Thus, the 4 Command system can be summed up as follows:— 14 Districts, containing a certain number of Brigade Commands, grouped into 4 Commands and one Independent District (Burma) all with full responsibilities of administration as against the old system of 10 Divisions and 6 Brigades (corresponding to Districts) with administrative responsibilities, grouped into 2 Armies having no administrative responsibilities.

Regular Army in India.—The sanctioned strength of the Regular Army in India at the present time is 68,370 British Officers and British other ranks, and 143,446 Indian Officers and Indian other ranks.

In the Indian Army the Cavalry and Infantry were re-organized in 1921. The Cavalry Regiments were in all but three cases amalgamated in groups of two of the old Regiments. In the Infantry the old 'linked' system was abolished and Battalions were formed into Regiments consisting of 4 or 5 Active Battalions and one Training Battalion.

The functions of the Training Battalion are the training and supply of recruits for the Active Battalions in the Regiment and in the case of

war the maintenance of records of the Active Battalions in the Field.

The Gurkha Rifles were grouped in a series of 4 Battalions in each group.

Cavalry Groups, Infantry and Pioneer Regiments and Gurkha Regiments are all numbered consecutively from 1 upwards.

Terms of service in the Indian army are as follows :—

Cavalry, 4 years' service in army.

Artillery, 4 years' service in army.

S. & M. Corps, 4 years' service in army.

Indian Signal Corps, 4 years' service in army.

Infantry and Pioneers (except Gurkha groups, the 4th Hazara Pioneers and trans-frontier personnel of the Infantry), 5 years in army service and 10 years in the reserve. (*Note*: This is the minimum period of service with the colours. 15 years in Colour and Reserve service must be done).

Gurkha groups, 4th Hazara Pioneers and the trans-frontier personnel of the Infantry, 4 years' service in army.

Animal transport personnel of the Indian Army Service Corps, drivers of mechanical transport and all combatants of the Army Veterinary Corps, 6 years' service in army and 4 in the reserve.

All combatants in the Works Corps, 2 years' service in army.

Bandsmen, musicians, trumpeters, drummers, buglers, fifers and pipers, 10 years' service in army.

Except in the case of those enrolled in the Works and of those who are non-combatants, all School-masters, clerks, artificers, armourers, engine drivers, farriers, carpenters, tailors and bootmakers, 10 years' service in army.

The period laid down for service in the army may be extended. Combatants may be enrolled direct into the Reserve, in which case there is no minimum period of service, but no one is allowed to serve in the reserve or in any class of the reserve for a longer period than is permitted by the regulations in force.

Auxiliary Forces.—In addition to the Regular army there are the Auxiliary and Territorial Forces.

The Auxiliary Force is the old Volunteer Force which was started some 60 years before the Great War. During the War this force was absorbed by the Indian Defence Force, in which service was compulsory for domiciled Europeans. The Indian Defence Force was a purely war-time measure and on the conclusion of the War the old Volunteer force was re-constituted and named the Auxiliary Force. The authorised establishment of this Force is 36,804 and it is organized into Cavalry Regiments, Batteries of Artillery, R. E. Companies, Railway Battalions, Infantry Battalions, Machine Gun Corps Companies and R.A.S.C. Companies.

Indian Territorial Force.—This Force was raised in 1920 to form a second line to the Regular Army. Only those who are non-European subjects or subjects of Indian States are permitted to enrol in the Force. The term of enrolment is 6 years, with the exception of those who have 2 years' approved service in an University Corps or 3 years' approved service in the Regular Army. These latter may enrol for 4 years. Those serving at present in the Indian Army Reserve, Imperial Service or State troops cannot enrol, but pensioners, if eligible, may do so without detriment to their pensions. The age limits for the Force are 18 years to 31 years but those who have 3 years' approved service in the Regular Army may enrol up to 35 years of age. The required height is 5 feet 4 inches, the chest measurement 32-34 inches and the applicant must be passed as physically fit. Those enrolled have to perform military service when called on, but cannot be sent overseas without a special or general order being issued by the Governor General in Council. During the peace 56 days' training must be done during the first year of service and 28 days in each succeeding year. Pay during the training period or when called up for military service is the same as that of the Regular Army. For discipline the Army Act of 1911 applies with certain modifications. Discharge can be taken at the expiry of the term of enrolment except when on military service. The establishment of the Force is 18,600 and it is organized into 20 Infantry Battalions and 6 University Training Corps. There are 5 Regular Officers in addition to the permanent Commanding Officer, while the remainder of the Officer establishment is filled by Hony : Lieutenants and 2nd Lieutenants of the I. T. F.

Indian State Troops.—In 1887 the Nizam of Hyderabad offered his private forces to the British Government to assist in the task of Imperial defence. His example was immediately followed by other Indian Princes and thus was started what was called the 'Imperial Service Troops.' Since being formed this Force has rendered good service, not only on the North West Frontier of India but also overseas in China and Somaliland and again during the Great War. The Force is under the inspection of Officers of the Regular Army, but, except when placed under the British Government by the rulers, the troops belong to the various States from which they are recruited. The Force is armed in the same manner as the Regular Army and their training, etc., is in general of a high standard. According to their standards of efficiency in training the troops are divided into those who are fit for immediate active service and are therefore first line troops and those whose training is not sufficiently advanced to allow of their being sent direct to the 1st line. These latter are considered as 2nd line troops ready to reinforce the 1st line.

In December 1921 the name of the force was changed to that of "The Indian State Troops."

Frontier Militia and Levy Corps.—These forces are "Civil" troops, *i.e.*, they are administered and paid by the Civil authorities and not by the Army. They are, however, officered by Officers of the Regular Indian Army. These forces were raised for duty on the North West Frontier and at present consist of the following :—Kurram Militia, Tochi Scouts, South Waziristan Scouts, Chitral Scouts, Gilgit Scouts, Zhob Levy Corps and the Mekran Levy Corps. The various names show the localities in which each force is situated.

Reserves.—The Indian Army Reserve was first formed in 1886 and until 1923 service in it had been entirely voluntary. In practice there was formerly very little training done by the Reservists. Working on suggestions made by the Inchcape Committee to promote economy a new scheme was evolved which was designed to decrease the strength of Regiments and increase the reserve and to make it efficient

The terms of service are given above. The new regulations are that the Infantry Sepoy and the Pioneer with a few exceptions do 5 years' service with the colours and then 10 years with the reserve. This reserve service is no longer voluntary and the sepoy when he enlists signs on for the two periods of service. There are two classes of Reserve, A & B, and the normal period a man serves in class A is 3 years from the date of leaving the colours. The man on completing his 3 years in class A passes straight on to class B. The period of training for class A is one month in every year and that for class B one month in every second year. During training the man receives full pay and allowances as a regular sepoy and when not called up he receives Rs. 7 per mensem in class A and Rs. 4 per mensem in class B.

These periods of service are the maximum the man may do in the Reserve. If, however, he chooses to serve 6 years with the colours, he will only do 2 years in Class A of the Reserve and so on. If he does 8 years with the colours he will go straight into Class B of the Reserve.

It is interesting to note that the periods of training in the Reserve were theoretically the same in 1886 when the Reserve was first formed. The two classes of Reserve in those days were known as the 'Active' and 'Garrison'.

The reserve establishment allowed for each 1st line Indian Infantry Battalion is 77 in class A and 227 in class B. In the Pioneer Battalions the numbers are 55 in class A and 100 in class B.

The present strength of the reserve is some 12,000 men. The new scheme for the Reserve is an adaptation of the British Reservist system to Indian conditions.

Army in India Reserve of Officers.—Previous to the Great War there had been what was called the Indian Army Reserve of Officers, a body of trained officers available to replace casualties in the Indian Army. The war proved that for many reasons this reserve did not meet the requirements and in September 1922 sanction was given to reconstitute the I. A. R. O.

The reconstitution proposed and sanctioned was as follows:—

(*a*) The following gentlemen could be granted commissions in the Reserve.

(1) Officers holding King's commissions who, having retired from H. M.'s forces, were not liable for further service.

(2) Officials, other than Military Officers, serving under the Government of India.

(3) Private gentlemen residing in India.

(*b*) Commissions would not usually be given to any one over the age of 28, unless he had previous commissioned service in the Regular Army, I.A.R.O. or I.D.F.

(*c*) The new Reserve would supply the Army in India and not only the Indian Army as before.

(*d*) The Reserve would be formed on a fixed establishment for each arm and branch of the Army.

(*e*) In the Indian Army the officers would be posted to definite groups and units.

(*f*) Officers would be divided into two groups (*i*) those immediately available for service in emergency and (*ii*) those who would not be available until the first group was exhausted.

(*g*) All officers would do periodical training of 30 days a year either with a regular unit or if that were impossible with the Auxiliary Force.

(*h*) All officers would receive Rs. 750 for each period of 30 days' training in lieu of pay and allowances.

Education.—The Army in India, both British and Indian, undergoes in addition to its purely military training, a course of educational training. The objects of this are:—To develop the soldier's training faculties, improve him as a subject for military training and as a citizen of the Empire and to enhance his prospects of remunerative employment on his return to civil life. In order to carry out this educational training in the British Army, the Army Educational Corps was formed, the members of which are educational experts and are attached to the various formations and units. Certain standards of education are now required before a man is eligible for promotion to the various Army ranks. In order that Regimental Officers and N. C. Os shall be fitted to carry out the educational programme in their units, the British Army School of Education has been established at Wellington and all Officers both of the British and Indian Army have to attend a course at the school before promotion to Captain.

For the Indian Army a similar school has been formed at Belgaum where candidates for the Indian Army Educational Corps are trained. These candidates are drawn from (*a*) the better educated serving soldiers, (*b*) existing schoolmasters and (*c*) demobilised and pensioned Indian Officers and soldiers. Up to date 322 men of the various ranks have been trained and posted to units, especially to Training Battalions.

In order to give the sons of Indian gentlemen both military and civil, a Public School education similar to that in England, to fit them for entry into the Royal Military College, Sandhurst, the Prince of Wales Royal Military College was founded at Dehra Dun. Here there are at present 70 students (the limit that can at present be accommodated). In May 1923 out of 6 candidates nominated for the Royal Military College, Sandhurst, the first two were from the Royal Indian Military College.

In addition to the above educational training in the Army, the children of the soldiers are also catered for. In the British Army, besides the various Regimental Schools for the children, there is also the Lawrence Royal Military School at Sanawar with accommodation for about 500 children. For the children of the Indian soldiers a number of schools to be named King

George's Royal Indian Military Schools are being established in areas which contain the majority of the military classes. Two of these schools will, it is hoped, be opened early in 1924 at Jullundur and Aurangabad Serai. In addition to this the foundation stone has been laid at New Delhi of the Kitchener College. This College will give a High School education to some 400 sons of Indian Officers. At present the sum of Rs. 33 lakhs required for the initial cost of the building has not been fully collected.

Indianization of the Indian Army.—The basis of this scheme is the substitution by degrees of Officers of Indian nationality for British Officers in the Indian Army. The eight units first selected for complete Indianization are:—7th and 16th Light Cavalry, 8th Bn. 19th Hyderabad Regt., 5th Royal Battalion, 5th Mahratta L. I., 1st Battalion, 7th Rajputs (Queen Victoria's Own Light Infantry), 2nd Battalion, 1st Punjabis, and 1st Battalion, 14th Punjabis.

Education of Indian Officers.—In order that the Officers of Indian nationality shall be on the same footing as their British confreres it is necessary that they shall have a similar education and training. To ensure the former the Prince of Wales Royal Indian Military College at Dehra Dun was started as already mentioned under "Education." To ensure the same military training every Indian cadet must do the prescribed period of training at the Royal Military College at Sandhurst. Candidates for the Military College at Dehra Dun are accepted from (a) the Provinces of British India, (b) Indian States (nominated by H. E. the Commander in Chief,) and (c) Sons of Indian Officers of good service especially nominated by H. E. the Commander in Chief.

Applicants for vacancies under (a) and (c) must submit their application to the local Government or Administration within whose jurisdiction they reside. Applicants under (b) must submit their applications to the local Political Officer. For vacancies under (a) the nominations rest with the Local Government or Administration concerned. For vacancies under (b) and (c) the nominations are made by H. E. the Commander in Chief on the recommendation of the Local Government or Administration or the Political Officer, as the case may be.

No written examination for entrance is held, but the nominating or recommending authorities must satisfy themselves that the candidates scholastic attainments are such as to justify an expectation that, if they were to continue their present course of studies, they would pass the University Matriculation Examination, High School Leaving Certificate Examination or any examination that is officially recognised as the equivalent of the above, by the time they attain 17 years of age. Special attention is to be paid to the candidate's attainments in English and Mathematics. Every candidate before nomination must be certified as physically fit in all respects by a fully qualified medical practitioner.

The limits of age for entry to the College are from 12 to 13 years. No candidate over 13 will be admitted and preference will be given to those candidates who are not over 12½ years of age.

The fees for students at the College are Rs. 1,500 per school year for those under (a) and (b). This is a privileged rate (considerably less than the cost of public school education in England) and is liable to enhancement hereafter, if circumstances require. These fees include tuition, messing, school servants, washing and mending and medical attendance of the ordinary kind, and, as initial provision, one suit of the uniform to be worn by the students when at the College. The fees to be paid by the students under (c) will be determined by H.E. the Commander in Chief in each particular case.

Although the primary object of the College is the preparation of Indian youths desirous of obtaining commissions in the Indian Army to enter the Royal Military College at Sandhurst, yet the course of study at the College is such that should a student fail in the entrance examination for the R. M. C. at Sandhurst, he will be in as good a position to pass the university examination as if he had been educated at an ordinary school.

The selecting of candidates for entry into the Royal Military College at Sandhurst is decided partly by nomination and partly by examination.

The present scheme for the Indianization of the Indian Army is that 8 units, *i.e.*, cavalry regiments and infantry battalions shall be indianised. This will naturally take a number of years before completion, as the Officers of Indian nationality will be under the same promotion rules as British officers.

King's commissions are also given to selected Indian officers of the Indian Army, but these owing to their age will probably be unable to rise above the rank of Captain.

Pay and Allowances of the Army in India.—The following tables show the change in the rates of pay and allowances of the Cavalry and Infantry of the Army in India.

BRITISH ARMY.

1914.

Rank.	Cavalry. Rs. a.	Infantry Rs. a.
Lieut.-Col.	1,027 0	1,002 4
Major (after 24 years' service.)	830 0	780 0
Major	780 0	730 0
Captain (after 8 years in rank and 12 years' service)	530 0	480 0
Captain	485 0	435 0
Lieut.: (after 6 years service)	375 0	325 0
Lieut	350 0	300 0
2nd-Lieut.	300 0	250 0
	per day.	per day.
Regimental Sergeant Major	5s 4d	5s
Quartermaster Sergeant and Squadron or Coy. Sergt-Major	4s 4d	4s
Colour Sergeant		3s 6d
Sergeant	2s 8d	2s 1d
Corporal	2s	1s 8d
Private	1s 2d	1s

1923 (Cavalry and Infantry.)

	Rs.	a.
Lieut.-Col.	1,250	0
Major (after 5 years in rank)	1,050	0
Major	950	0
Captain (after 15 years' service.)	850	0
Captain	750	0
Lieut. after 7 years' service)	550	0
Lieut. and 2nd-Lieut.. after 2 years' service ..	475	0
2nd-Lieut.	425	0
	per day.	
Regtl. Sergeant Major ..	14s	
Quartermaster Sergt. ..	12s	
Squadron or Coy. Sergt. Major	10s	
Colour Sergt.	9s 6d	
Sergeant	7s	
Corporal	5s	
Lce.-Corporal	4s 3d	
Private	2s 9d	

INDIAN ARMY.

RANK.	PAY IN 1914.		PAY IN 1923.	
	Rs.	a.	Rs.	a.
Lieut.-Col.	827	14	1,250	0
Major (after 5 years in rank)	..		1,050	0
Major	640	14	950	0
Captain (after 15 years' service)	..		850	0
Captain	400	0	750	0
Lieut. (after 7 years' service)	..		550	0
Lieut.	280	0	475	0
2nd-Lieut. (after 2 years' service)	..		475	0
2nd-Lieut.	..		425	0
Risaldar Major	180	0	250	0
Subedar Major	115	0	200	0
Risaldar	180	0	180	0
Ressaidar	140	0	..	
Subedar	115	0	130	0
Jamedar (Cav.)	68	0	85	0
Jamedar (Inf.)	57	8	75	0
Duffadar	29	0	31	0
Havildar	23	0	25	0
Lce. Daffadar	24	0	26	0
Naik	21	0	22	0
Lce Naik	..		18	0
Sowar	14	8	18	0
Sepoy	12	8	16	0

In 1917 the pay of Indian officers and N.C.Os. of the Indian Army was raised from the 1914 rates given above. The rates of pay for Cavalry (Indian) given above are those of the non-silledar Cavalry Regiments. The pay of Silledar Cavalry was somewhat higher. The increased rates of pay given were introduced throughout the Army in India in 1919. Before this date the Indian army soldier drew "batta" and compensation allowance to meet the cost of his food, the latter allowance being fixed by the local authorities according to the cost of food locally. At the present time in place of food allowance the sepoy draws free rations.

In addition to the rates of pay of regimental Officers given above the following allowances are drawn.

	1914. Rs.	a.	1923. Rs.	a.
Command British ..	400	0	350	0
Command Indian Cavalry	700	0	500	0
Infantry	600	0	500	0
Senior Major British ..	..		50	0
2nd in Command ..	..		..	
Indian Cavalry	300	0	250	0
Indian Infantry	250	0	250	0
Squadron Commander ..	250	0	200	0
Company Commander ..	200	0	200	0
Adjutant—				
British Cavalry	122	7	122	7
,, Infantry	152	0	152	0
Indian Cavalry	250	0	200	0
,, Infantry	200	0	200	0
Quartermaster—				
Indian Cavalry ..	200	0	150	0
,, Infantry ..	150	0	150	0
Squadron Officer.. ..	150	0	100	0
Company Officer ..	100	0	100	0

Only the Cavalry and Infantry rates of pay and allowances have been given. Other arms have likewise received a similar increase in pay but this is not given owing to want of space.

From the above tables it will be seen that although the rates of pay have increased some of the allowances have decreased. Thus the increase in the total emoluments is not as large as appears at first sight.

The Capitation Rate.—The "Capitation Rate" is in general terms intended to include the cost of training at Home of British troops employed in the Army in India and of the expenses connected with their discharge on return. The amount paid pre-war was £11/8/- per head but at the present time the whole matter is under consideration and the existing rate is only provisional.

Cost of Army In India.—The cost of the Army in India including the Auxiliary and Territorial Forces and the R.A.F. was in 1922-23, 61·8 crores. In the 1923-24 Budget Estimate 57·1 crores was entered for the cost of the Army.

The fighting races.—The fighting classes that contribute to the composition of the Indian Army have hitherto been drawn mainly from the north of India, but the experiences of the great war have caused some modifications in the opinions previously held as to the relative value of these and other fighting men. The numbers of the various castes and tribes enlisted in the Army have since the war undergone fluctuations, and it is not possible at present to give exact information as to their proportions. Previous to the war the Sikhs contributed very large numbers both to the cavalry and infantry, and the contribution of the Gurkhas was also large; it is probable that these classes preserve their preponderance. The Sikhs, who inhabit the Punjab originated in a sect founded near Lahore by a peasant in the early part of the sixteenth century and in the course of a hundred years grew into a formidable militant power. Muhammadans of various races contribute a still larger proportion to both the cavalry and infantry. These are drawn both from the north and the

south of India, as well as from beyond the Frontier. They are all excellent fighting men, hardy and warlike, who have furnished soldiers to all the great powers of India for many hundreds of years. As cavalry the Muhammadans are perhaps unequalled by any other race in the East, being good horsemen and expert men-at-arms.

Next in point of numbers are the Gurkhas of Nepal, who were at the outbreak of war formed in twenty complete battalions, but these have been considerably increased. As fighters in the hills they are unsurpassed even by the Pathans of the North-West Frontier, but the Garhwalis are equally good mountaineers.

The professional military caste of India from time immemorial has been the Rajput, inhabiting not only Rajputana but the United Provinces and Oudh. Of fine physique and martial bearing, these warriors of Hindustan formed the backbone of the old Bengal Army, and have sustained the English flag in every campaign in the East. Their high caste and consequent prejudices in no respect interfere with their martial instincts and efficiency in war. They furnish many battalions. The Garhwalis are Hill Rajputs, good and gallant soldiers, who have proved themselves equal to any other troops on the field of battle and have established an imperishable record in the war both in Europe and in the East. The two battalions which were all we had in 1914 have since been added to. The Jats are a fine and warlike race of Hindus found in the Delhi and Rohtak districts and adjoining territory. It was these people who held out so bravely at Bharatpur and repelled Lord Lake's army in 1805. They have proved themselves good soldiers on the battlefields of Europe. Dogras are good and steady soldiers found in the hilly districts of the Punjab. They fought well in Flanders and in Mesopotamia.

Among those who have rendered signal and gallant service in the war are the Mahrattas of the Deccan and the Konkan, who have revived the reputation held by their race in the days of Shivaji, the founder of the Mahratta Empire. It is probable that their proved efficiency in war will lead to their recruitment in larger numbers in future.

In addition to the castes that have been mentioned, low caste men from the south and other parts of India have filled the ranks of the Pioneer regiments and Sappers and Miners, and done their duty well in every campaign in which they have been engaged.

Summary of India's Effort in the War.—In a despatch by the Commander-in-Chief published in July, 1919, the whole operations of the Indian Army during the war are reviewed. His Excellency gives in it the following figures showing the extent of India's contribution in terms of men. On the outbreak of war, the combatant strength of the Indian Army, including reservists, was 194,000 Indian ranks; enlistments during the war for all branches of the service amounted to 791,000, making a total combatant contribution of 985,000. Of this number 552,000 were sent overseas. As regards non-combatants, the pre-war strength was 45,000; an additional 427,000 were enrolled during the war and 391,000 were sent overseas. The total contribution of Indian personel has thus been 1,457,000 of whom 943,000 have served overseas. Casualties amounted to 106,594, which include 36,696 deaths from all causes. The number of animals sent overseas was 175,000.*

THE ESHER REPORT.

It was announced in July, 1919, that the Secretary of State for India, with the concurrence of the Secretary of State for War, had appointed a committee to inquire into the administration and organisation of the Army in India.

The terms of reference were :—

1. To inquire into and report, with special reference to post-bellum conditions, upon the administration and, where necessary, the organisation of the Army in India, including its relations with the War Office and the India Office, and the relations of the two offices with one another.

2. To consider the position of the Commander-in-Chief in his dual capacity as head of the Army and member of the Executive Council, and to make recommendations.

3. To consider and report upon any other matters which they may decide are relevant to the inquiry.

The Report:—The Report was submitted to the authorities in May 1920 and published some months later. Among the outstanding recommendations in the mass of detailed proposals scattered through more than 100 foolscap pages and nowhere succinctly outlined are the following:—

Diminution of the detailed control exercised by the India Office. Membership of the India Council by an officer of high military rank to be abolished. The Military Department Secretary at the India Office to be a Deputy Chief of the Imperial General Staff, the Chief, either directly or through him, being the sole responsible military adviser of the Secretary of State.

The Commander-in-Chief in India to be the sole military adviser of the Government of India, and to be the administrative as well as the executive head of the Army, the Army Department and the Headquarters Staff being consolidated under him.

The Defence Committee set up in India during the war to be continued; a Military Council to be established; and decentralization to be promoted by the formation of four commands, each under an Army commander graded as a general officer commanding-in-chief.

* For a record of the services of the Indian Army in the War, see The Indian Year Book for 1920, p. 152, *et seq.*

Liberal and sympathetic treatment of all ranks in the Army in India, and the removal of such grievances as are shown to exist.

Existing services to be reorganized, and new services to be developed and equipped.

The Report Condemned:—The publication of the report evoked a storm of criticism in India, which protested *in toto* against the main principle underlying it, namely that the Army in India was not for the defence of India, but must be considered in relation to the general defence of the Empire. So strong was this criticism that the Government appointed a representative committee of the Legislatures, who focussed their opinion in a report which embodied the following resolutions:—

This Assembly recommends to the Governor-General in Council:

(*a*) That the purpose of the Army in India must be held to be the defence of India against external aggression and the maintenance of internal peace and tranquillity. To the extent to which it is necessary for India to maintain an army for these purposes, its organisation, equipment and administration should be thoroughly up to date, and, with due regard to Indian conditions, in accordance with present-day standards of efficiency in the British army so that when the Army in India has to co-operate with the British Army on any occasion, there may be no dissimilarities of organisation, etc., which would render such co-operation difficult. For any purpose other than those mentioned in the first sentence the obligations resting on India should be no more onerous than those resting on the Self-Governing Dominions, and should be undertaken subject to the same conditions as are applicable to those Dominions.

(*b*) To repudiate the assumption underlying the whole Report of the Esher Committee:—

(1) That the administration of the Army in India cannot be considered otherwise than as part of the total armed forces of the Empire, and

(2) That the military resources of India should be developed in a manner suited to Imperial necessities.

Overseas Service:—II. This Assembly recommends to the Governor-General in Council that the Army in India should not as a rule be employed for service outside the external frontiers of India, except for purely defensive purposes, or with the previous consent of the Governor-General in Council in very grave emergencies, provided that this resolution does not preclude the employment on garrison duties overseas of Indian troops at the expense of His Majesty's Government and with the consent of the Government of India.

Organisation:—III. This Assembly recommends to the Governor-General in Council that the absence of full responsible Government in India, the differences in conditions between India and England and the provisions of the Government of India Act do not warrant differentiation in the army administration between India and England in regard to the ultimate control of, and responsibility for, the defence of the country, and that, in view of the desirability of assimilating the system of administration in India to that in the United Kingdom, which has been arrived at after prolonged experiments, and the desirability of emphasizing the principle of the ultimate supremacy of the civil power, it is essential that the Commander-in-Chief should, without prejudice to his official precedence, cease to be a member of the Governor-General's Executive Council, and that the Portfolio of Defence, including Supply, should be entrusted to a civilian member of the Executive Council, assisted by an Army Council including the Commander-in-Chief and other high military experts and a certain number of civilians, more or less on the model of the Army Council in England.

Supply:—IV. This Assembly recommends to the Governor-General in Council that if the Portfolio of Defence including Supply is not entrusted to a civilian member of the Executive Council as recommended above, the proposal of the majority of the Esher Committee for the creation of a separate department for Production and Provision under a member of the Executive Council be not accepted, and that the proposal of the minority, namely that the responsibility should be entrusted to a Surveyor-General of Supply who should be a civil member of the Commander-in-Chief's Military Council, be accepted. This would seem to have the merit of being more logical and economical and would have the further advantage of avoiding the addition of a civil member to the Executive Council in connection with military administration.

Senior Appointments:—V. This Assembly recommends to the Governor-General in Council that:

(*a*) The Commander-in-Chief and the Chief of the General Staff in India should be appointed by the Cabinet on the nomination of the Secretary of State for India in consultation with the Government of India and the Secretary of State for War.

(*b*) In the case of Army Commanders who are officers of the Indian Army the appointment should be by the Secretary of State for India on the nomination of the Government of India.

(*c*) Appointments to the offices mentioned against Serial Nos. 3, 6, 7, 8, 10, 12 (Report Schedule annexed to Section VI) should be made in the manner proposed for Army Commanders.

(*d*) The appointment of Secretary to the Military Department, India Office, should be made by the Secretary of State on the recommendation of the Government of India and after advice obtained from the Chief of the Imperial General Staff. He should *ex officio* have the status of a Deputy Chief of the Imperial General Staff and should have the right of attending the meetings of the Army Council when questions affecting India are discussed. He should not be under the orders of the Chief of the Imperial General Staff.

C. I. G. S.:—VI. This Assembly recommends to the Governor-General in Council that the Commander-in-Chief's right of correspondence with the Chief of the Imperial General Staff should be subject to the restriction that it does

not commit the Government of India to any pecuniary responsibility or any line of military policy which has not already been the subject of decision by them; copies of all such correspondence at both ends being immediately furnished to the Government of India and the Secretary of State for India.

Indian Officers:—VII. This Assembly recommends to the Governor-General in Council:—

(*a*) That the King Emperor's Indian subjects should be freely admitted to all Arms of His Majesty's Military, Naval and Air forces in India and the ancillary services and the auxiliary forces, that every encouragement should be given to Indians including the educated middle classes, subject to the prescribed standards of fitness, to enter the commissioned rank of the Army, and that in nominating candidates for the entrance examination, unofficial Indians should be associated with the nominating authority.

(*b*) That not less than 25 per cent. of the King's Commissions granted every year should be given to His Majesty's Indian subjects to start with.

Indian Military College:—VIII. This Assembly recommends to the Governor-General in Council:—

(*a*) That adequate facilities should be provided in India for the preliminary training of Indians to fit them to enter the Royal Military College, Sandhurst.

(*b*) That the desirability of establishing in India a Military College, such as Sandhurst, should be kept in view.

Pay:—IX. This Assembly recommends to the Governor-General in Council that, in the interest of economy and in view of the likelihood of the growth of the Indian element in the commissioned ranks, it is essential that before vested interests arise, the pay of all commissioned ranks in all branches of the Army should be fixed on an Indian basis with an overseas allowance in the case of British Officers and with a similar allowance for Indian officers holding the King's Commission, when serving overseas.

Territorial Army:—X. This Assembly recommends to the Governor-General in Council that in view of the need for the preparation of India to undertake the burden of self-defence and in the interests of economy, it is essential that a serious effort should be made:—

(*a*) To organise and encourage the formation of an adequate Territorial Force on attractive conditions.

(*b*) To introduce in the Indian Army a system of short colour service followed by a few years in the reserve.

(*c*) To carry out a gradual and prudent reduction of the ratio of the British to the Indian troops.

XI. This Assembly recommends to the Governor-General in Council that officers in the Indian Territorial Force should have the rank of 2nd-Lieutenant, Lieutenant or higher rank, as the case may be, and that no distinction should be made between the Indian Territorial Force and the Indian Auxiliary Force in respect of the authority which signs the Commissions, and that officers in these two Forces should take rank *inter se* according to dates of appointment.

Exchange of Officers:—XII. This Assembly recommends to the Governor-General in Council that no proposals for interchange of officers, between the British and Indian services should be carried out unless the following conditions are satisfied:

(*a*) That the cost to Indian revenue should not be thereby appreciably increased.

(*b*) That such proposals should not be allowed to interfere with a steady expansion in the proportion of King's Commissions thrown open to Indians in the Indian Army.

(*c*) That the interchange of British officers should, in no way, affect the control of the Government of India over the entire Army in India.

Economy:—XIII. This Assembly recommends to the Governor-General in Council that, having regard to the creation of two additional commands in India the Government of India do consider the expediency of reducing the size of the administrative staff at Army Headquarters.

XIV. This Assembly recommends to the Governor-General in Council that, as soon as the external and internal conditions of India permit, the Governor-General in Council should, with the concurrence of the Secretary of State, appoint a Committee adequately representative of non-official Indian opinion for the purpose of examining and reporting upon:

(*a*) The best method of giving effect to the natural rights and aspirations of the people of India to take an honourable part in the defence of their country and prepare the country for the attainment of full responsible government which has been declared to be the goal of British policy.

(*b*) The financial capacity of India to bear the burden of military expenditure;

(*c*) Her claim to equality of status and treatment with the Self-Government Dominions; and

(*d*) The methods of recruitment to the commissioned ranks of the Indian Army;

XV. This Assembly recommends to the Governor-General in Council that Anglo-Indians should be included in the terms "Indian subjects" or "Indians" wherever such terms occur in the above resolution.

Assembly's Decisions:—These resolutions were subject to full debate in the Imperial Legislative Assembly in the course of which Resolution No. 3 proposing the creation of a Portfolio of Defence was negatived.

Resolution 4 was carried with the following amendment that the words from "if the portfolio" down to "recommended above" be omitted,

On Resolution No. 7 an important amendment was carried by a bare majority and was accepted as a substantive proposition in the following form:—

This Assembly recommends to the Governor-General in Council that (*a*) That the King Emperor's Indian subjects should be freely admitted to all arms of His Majesty's Military, Naval and Air forces in India and the Ancillary services and the Auxiliary forces, that every encouragement should be given to Indians including the educated middle classes subject to the prescribed standards of fitness, to enter the commissioned ranks of the Army and that in nominating candidates for the entrance examinations, unofficial Indians should be associated with the nominating authority and in granting King's Commissions, after giving full regard to the claims to promotion of officers of the Indian Army who already hold the commission of His Excellency the Viceroy, the rest of the commissions granted should be given to cadets trained at Sandhurst. The general rule in selecting candidates for this training should be that the large majority of the selections should be from the communities which furnish recruits and as far as possible in proportion to the numbers in which they furnish such recruits."

Resolution 8 was carried with the following amendment:

"That for clause (*b*) the following clause be substituted:

"(*b*) That as soon as funds be available, steps should be taken to establish in India a Military College, such as Sandhurst, and the desirability of establishing in India training and educational institutions for other branches of the Army should be steadily kept in view."

The Imperial Cadet Corps.

The Imperial Cadet Corps was founded in 1901, with the object of providing military training for the scions of ruling and noble families. The Corps consists of about 20 young men of noble birth who have been educated at the Chiefs' Colleges. The course of instruction lasts between two and three years, and the cadets are taught military exercises and military science. Its headquarters are at Dehra Dun.

Education for the Army.—Since the end of the Great War several steps have been taken to provide educational facilities for Indians who wish to enter the Army. The **Royal Indian Military College** at Dehra Dun, which was opened by H.R.H. the Prince of Wales in February 1922, is designed to give the preliminary training for entry into the R. M. C. Sandhurst, and is the result of the Government having accepted a resolution by the Legislative Assembly to the effect that such an institution should be provided. The **Kitchener College** in the new Capital, which like the college at Dehra Dun will be financed out of the military budget, is intended to give a sound general education under military discipline. Admittance to it will be obtained by nomination open to the sons of Indian officers and others of a recognised fighting class enlisted in the Army of a decidedly higher status than the rank and file and belonging to a family of local influence and position. It is probable that in time this college will become the chief, if not the only, channel for direct Indian commissions as Jemadars.

It is also proposed to build, with money from the King Emperor's Patriotic Fund, schools of the Anglo-Vernacular type for the education of Indian soldiers' sons. Three schools of this kind have been planned for the Punjab and the United Provinces.

The Strength of the Army.

The following table gives the average strength of European troops, Regulars and Territorials and the main facts as regards their health in 1921 with comparative figures for the quinquennial periods 1910-14 and 1915-19 and for the years 1915 to 1920 inclusive—approximate figures for 1922 have also been entered where available.

Period.	Average strength.	Admissions.	Deaths.	Invalids sent home.	Average constantly sick.
1910-14 average	69,440	39,389	303	483	2,094·57
1915	44,891	36,952	267	889	1,754·19
1916	60,737	46,892	397	1,343	2,414·56
1917	80,825	62,372	390	1,337	3,686·45
1918	87,982	90,637	1,424	2,007	5,286·61
1919	56,561	54,982	438	4,324	3,245·84
1915-19 average	66,199	58,367	583	1,980	3,277·05
1920	57,332	61,429	385	2,314	3,488·08
1921	58,681	60,515	498	749	3,070·04
1922	59,725	37,177	284	....	1,896·87

THE INDIAN TROOPS.

The average strength of Indian troops including those on duty in China and Nepal and other stations outside India, but excluding those on Field Service, was 229,731 in 1919 as compared with 341,458 in 1918.

The following table gives below the actuals and ratios of sickness, deaths, and invaliding for the quinquennial periods 1910-14 and 1915-19 and for the years 1915 to 1921 inclusive :—

Period.	Average strength.	Admissions.	Deaths.	Invalids.	Average constantly sick.	Ratio per 1,000 of strength.			
						Admissions.	Deaths.	Invalids.	Average constantly sick.
1910-14 average..	130,261	71,213	573	699	2,662	544·6	4·39	5·4	20·7
1915 ..	119,985	89,315	1,026	5,415	4,065	744·4	8·55	45·1	33·9
1916 ..	130,076	105,333	1,248	3,745	5,250	757·4	8·97	26·9	37·7
1917 ..	191,242	141,787	2,201	3,421	6,556	741·4	11·51	17·9	34·3
1918 ..	341,458	292,393	9,959	6,539	13,897	856·3	29·17	19·2	40·7
1919 ..	229,731	176,313	2,742	4,999	9,191	767·5	11·94	21·8	40·0
1915-19 average..	204,298	161,028	3,435	4,824	7,792	788·2	16·81	23·6	38·1
1920 ..	216,445	164,987	2,124	4,564	9,265	762·3	9·81	21·1	2·8
1921 ..	175,384	119,215	1,782	3,638	6,031	679·7	10·16	20·7	34·4

THE EAST INDIES SQUADRON.

Since 1903 a squadron of the Royal Navy, known as the East Indies Squadron, has been maintained in Indian waters. It has naturally varied in strength from time to time, and of late years in particular there have been several changes in its composition, the most recent being in the direction of strengthening it, owing to the disappearance of strength in the other squadrons of the Eastern Fleet. In 1903 the squadron consisted of one second class and three smaller cruisers and four sloops or gunboats. In 1906, when the policy of withdrawal from Eastern waters was inaugurated, it consisted of two second class and two third class cruisers, and remained at this strength until 1910: when one second class cruiser was withdrawn and two smaller vessels substituted, and three cruisers were lent from the Mediterranean to assist in the suppression of the arms traffic in the Gulf. By 1913 the position of the East Indies squadron had considerably improved. The battleship Swiftsure had taken the place of the second class cruiser which had been flagship, and a modern second class cruiser replaced the Perseus.

The Squadron in 1923.—The latest Navy List shows the composition of the Squadron (Fourth Light Cruiser Squadron) as follows:—Southampton (Flag) Light Cruiser: 5,400 tons. Colombo Light Cruiser: 4,190 tons. Cairo Light Cruiser; 4,190 tons. Sloops: Crocus and Cyclamen. Special Service vessel: Triad (S.N.O. Persian Gulf).

The proportion of contributions from the overseas Dominions towards naval expenditure is shown in the following table issued with the last Navy Estimates that gave details :—

Received from	Nature of Service.	Total.
		£
India ..	Maintenance of His Majesty's Ships in Indian Waters..	100,000
	Indian Troop Service (on account of work performed by the Admiralty)	3,400
	Repayment on account of services rendered by His Majesty's Ships engaged in the suppression of the Arms Traffic in the Persian Gulf	64,000
Australian Commonwealth Dominion of Canada.	Contributions on account of liability for Retired Pay of Officers and Pensions of Men lent from the Royal Navy.	10,800
Australian Commonwealth.	Survey of the N. W. Coast of Australia	7,500
Do.	Maintenance of an Australasian Squadron and of a branch of the Royal Navy Reserve..	41,600
Dominion of New Zealand	Maintenance of an Australasian Squadron and of the Imperial Navy generally, also of a branch of the Royal Naval Reserve	100,000
Union of South Africa ..	General maintenance of the Navy	85,000
Newfoundland ..	Maintenance of a branch of the Royal Naval Reserve ..	3,000
	Total ..	415,300

India's Marine Expenditure.

Since 1869 India has paid a contribution of varying amounts to the Imperial Government in consideration of services performed by the Royal Navy. Under existing arrangements, which date from 1896-7, the subsidy of £100,000 a year, is paid for the upkeep of certain ships of the East India Squadron, which may not be employed beyond prescribed limits, except with the consent of the Government of India. The expenditure amounts to nearly £400,000 annually.

ROYAL INDIAN MARINE.

The Royal Indian Marine (The Sea Service under the Government of India) traces its origin so far back as 1612 when the East India Company stationed at Surat found that it was necessary to provide themselves with armed vessels to protect their commerce and settlements from the Dutch or Portuguese and from the pirates which infested the Indian coasts. The first two ships, the Dragon and Hoseander (or Oslander), were despatched from England in 1612 under a Captain Best, and since those days under slightly varying titles and of various strengths the Government in India have always maintained a sea service.

The periods and titles have been as follows:—

Hon. E. I. Co.'s Marine ..	1612—1686
Bombay ,, ..	1686—1830
Indian Navy ,, ..	1830—1863
Bombay Marine	1863—1877
H. M. Indian Marine	1877—1892
Royal Indian Marine ..	1892, Present day.

The Marine has always been most closely connected with Bombay, and in 1668 when the E. India Co. took over Bombay, Captain Young of the Marine was appointed Deputy Governor. From then until 1877 the Marine was under the Government of Bombay, and although from that date all the Marine Establishments were amalgamated into an Imperial Marine under the Government of India, Bombay has continued to be the headquarters and the official residence of the Director.

War Service of the Marine.

1612–1717 Continuous wars against Dutch, Portuguese and Pirates for supremacy of West Coast of India. 1744 War with France, capture of Chandernagore, and French ship Indienne. In 1756 Capture of Castle of Gheria 1774 Mahratta War, capture of Tannah. Latter part of the eighteenth century, war with French and Dutch, Capture of Pondicherry, Trincomalee, Jafnapatam, Colombo, etc. 1801 Egyptian campaign under Sir Ralph Abercrombie. 1803 War with France. 1810 Taking of Mauritius and capture of French ship in Port Louis. Early part of the nineteenth century suppression of Jowasmi Pirates in the Persian Gulf. 1811 Conquest of Tara. 1813 Expedition against Sultan of Sambar. 1817-18 Mahratta War, capture of Forts at Severndroog. 1819 Expedition to exterminate piracy in the Persian Gulf. 1820 Capture of Mocha. 1821 Expedition against the Beni-koo-Ali Arabs. 1824-26 First Burma War. 1827 Blockade of Berbera and Somali Coast. 1835 Defeat of Beni Yas Pirater. 1838 Expedition to Afghanistan and capture of Karachi. 1838 Capture of Aden. 1840–42 War in China. 1843 Scinde War Battle of Meanee, capture of Hyderabad. 1845–46 Maori war in New Zealand. 1848–49 War in Punjab, siege of Mooltan. 1852 Second Burma War, Capture of Rangoon, Martaban, Bassein, Prome and Pegu. 1855 Persian War, capture of Bushire, Muhammerah and Ahwaz. 1856–57 War in China. 1857–59 The Indian Mutiny. 1859 Capture of the Island of Beyt. 1860 China War, Canton, Taku Forts, Fatshan and Pekin. 1871 Abyssinian War. 1882 Egyptian Campaign. 1885 Egyptian Campaign. 1885 Third Burma War 1889 Chin-Lshai Expedition. 1896 Suakin Expedition. 1897 Expedition to Imtirbe, Mombassa E. Africa. 1899–1902 S. African

War, 1900-01 Boxer Rebellion in China relief of Pekin, 1902-04, Somaliland Expedition Suppression of Arms Traffic operations, Persian Gulf, 1912-14.

During the War 1914-1918 Royal Indian Marine Officers were employed on many and various duties. Royal Indian Marine Ships "DUFFERIN," "HARDINGE," "NORTHBROOK," "LAWRENCE," "DALHOUSIE" and "MINTO" had their guns mounted and served as Auxiliary Cruisers. Officers also served in the Royal Navy in the Grand Fleet, Mediterranean and North Sea.

In addition to transport duties in Indian Ports, Officers were sent to Marseilles, East Africa and Egypt for such duties, and on the entry of Turkey into the War were employed on duties towing and manning River Craft and Barges to and in Mesopotamia, and it was necessary to enlist a number of Temporary Officers, Warrant Officers and men to the numbers of approximately 240, 60 and 2,000 respectively for these and other duties.

When the War Office assumed full control of Operations in Mesopotamia a large number of Regular and Temporary Officers and men were seconded to the Royal Engineers and General Service respectively for duties in the Inland Water Transport which controlled all River Transport work in that country, and these officers held many important executive appointments in that unit.

The movements of all sea transports between India and the various theatres of War were controlled by Marine Officers.

Trawlers were built in the Bombay and Calcutta Dockyards and Mine Sweeping Operations were carried out with these and Launches off Bombay and elsewhere, the Trawlers were also used for towing duties.

Retired Royal Indian Marine Officers were employed on Naval Transport duties in England and France, and also in very responsible positions with the Inland Water Transport in France.

Service in the War 1914-18.—The Royal Indian Marine, though a small Service compared with the Army and Navy, played a very active and conspicuous part in the European War. These are set out in details in the Indian Year Book for 1922 and earlier editions (*q. v.* pp. 202 *et seq.*).

Personnel, 1923.

DIRECTOR.

Captain E. J. Headlam, C.M.G., D.S.O., A.D.C., R.I.M.

(The Director, R.I.M., advises the Government of India on all maritime matters. Is also Principal Naval Transport Officer, East Indies.)

DEPUTY DIRECTOR.

Capt. W. K. Thyne, R.I.M. (*Officiating*).

FINANCIAL ADVISER.

E. Harper, Esq., M.A., B.SC.

CHIEF SUPERINTENDENT TO THE DIRECTOR, R. I. M.

E. O. Carey, Esq.

OFFICERS.

Captains	9
Commanders	25
Lieutenant-Commanders, Lieutenants, Sub-Lieutenants and Midshipmen	79
Engineer-Captain	1
Engineer-Commanders	9
Engineer-Lieutenant-Commanders, Engineer-Lieutenants and Engineer-Sub-Lieutenants	60

WARRANT OFFICERS.

Boatswains, European	17
Wireless Operators	11
Clerks	25
Boatswains, Indian	7
Engine Drivers, 1st class	2

PETTY OFFICERS AND MEN

Who are mostly recruited from the Ratnagiri District of the Bombay Presidency.

SHIPS.

Troopship ..	R. I. M. S. Dufferin	8,260 tons	10,191 Horse Power		
,, ...	,, Hardinge	6,350 ,,	9,366 ,,		Awaiting decision of Govt.
,, ...	,, Northbrook.	6,100 ,,	7,249 ,,		
Light-house Tender ..	,, Nearchus	925 ,,	753 ,,		Paid off awaiting decision of Govt.
Station Ship	,, Clive	2,100 ,,	2,422 ,,		Burma.
,, ...	,, Minto	1,152 ,,	2,025 ,,		Andaman Islands.
Sloop	,, Cornwallis	1,290 ,,	..		Aden.
,, ...	,, Elphinstone	1,237 ,,	2,700 ,,		
Despatch Vessel ..	,, Lawrence	1,259 ,,	2,020 ,,		Persian Gulf.
Surveying Ship ..	,, Investigator	1,185 ,,	1,500 ,,		
,, ..	,, Palinurus	484 ,,	486 ,,		
Receiving Ship ..	,, Dalhousie	2,195 ,,	2,200 ,,		Bombay Depot Ship.
Patrol Ship	,, Pathan	.. .. ,,	3,500 ,,		
,, ...	,, Baluchi	.. .. ,,	3,500 ,,		

In addition to the above there are 45 vessels composed of steam trawlers, service launches, target towing tugs, powder boats, military service launches, distributed at Bombay, Calcutta, Aden, Rangoon and Karachi.

Dockyards.

There were two Royal Indian Marine Dockyards at Bombay and at Calcutta, the former being the more important. The one at Calcutta has been closed. There are 5 graving docks and a wet basin at Bombay, together with factories.

PRINCIPAL OFFICERS, BOMBAY DOCK YARD.

R. I. M. Officers

Commander of the Yard, Comdr. A. G. Kinch, D.S.O., R.I.M.

Chief Engineer of the Yard, Engineer-Captain F. B. Phillips, O.B.E., R.I.M.

Marine Store Officer, Engineer-Commander W. W. Collins, R.I.M.

1st Assistant to the Chief Engineer of the Yard Engineer-Commander R. S. Baskett, R.I.M.

2nd Assistant to the Chief Engineer of the Yard, Engineer-Lieutenant-Commander W. G. Manfield, R.I.M.

Maintenance Officer, Lieutenant-Commander, R. D. Merriman, D.S.C., R.I.M.

Civilian Officers

Chief Constructor, Mr. E. P. Newnham, C.I.E.

Electrical Engineer, Mr. S. W. Redcliff.

Constructor, Mr. F. Williams.
,, Mr. W. J. Kenshett.

Assistant Constructor, Mr. W. G. J. Francis.

Medical Staff.

Marine Surgeon, Major I. D. Jones, M.D., I.M.S.,

Warrant Officer in sub-medical charge, Dockyard Dispensary, Assistant Surgeon J. B. D'Souza, I.M.D.

R. I. M. Warrant Officers.

Boatswain of the Yard, Mr. G. F. C. Long, Boatswain, R.I.M.

Boatswain-in-Charge, Yard Craft, Mr. C. Mahon, Boatswain, R.I.M.

Boatswain-in-Charge, Arsenal Stores, Mr. P. O'Hara, Boatswain, R.I.M.

Marine Transport Appointments, Bombay.

Divisional Marine Transport Officer, Lieutenant Commander (Temporary Commander) R. W. V. Beatty, R.I.M.

Assistant Marine Transport Officer, 1st Grade, Lieutenant-Commander J. Cameron, R.I.M.

Assistant Marine Transport Officer, 2nd Grade, Lieutenant H. C. Beauchamp, R.I.M.

Appointments

In addition to the regular appointments in the ships of the Royal Indian Marine, and in the R. I. M. Dockyards, the following appointments under local Governments are held by the officers of the Royal Indian Marine :—

BOMBAY.

Port Officer, Assistant Port Officer, Principal Engineer and Ship Surveyor and 2nd and 3rd Engineers and Ship Surveyors to the Government of Bombay also Assistant to the Principal Engineer and Ship Surveyors to the Government of Bombay (temporary).

CALCUTTA.

Port Officer, Deputy Port Officer and Deputy Shipping Master, Assistant Port Officer, Principal Engineer and Ship Surveyor, 2nd and 3rd Engineer and Ship Surveyors to the Government of Bengal.

NARAYANGANJ (Bengal)

Engineer Superintendent of the Police Vessels, Bengal Government.

BURMA.

Principal Port Officer, Burma, 1st and 2nd Assistant Port Officer, Rangoon, Principal Engineer and Ship Surveyor and Superintending Engineer to the Government of Burma, Assistant to the Principal Engineer and Ship Surveyor and Superintending Engineer to the Government of Burma and Engineer Superintendent of Government Vessels in Lower Burma.

MANDALAY.

Marine Transport Officer and Superintending Engineer.

AKYAB.

Port Officer.

BASSEIN.

Port Officer.

MOULMEIN.

Port Officer.

CHITTAGONG.

Port Officer and Engineer and Ship Surveyor.

MADRAS.

Presidency Port Officer and Deputy Conservator of the Port.

ADEN.

Port Officer.

KARACHI.

Port Officer, Assistant Marine Transport Officer and Engineer and Ship Surveyor.

PORT BLAIR.

Engineer and Harbour Master.

Indian finance has undergone such remarkable changes during the last few years that some general introduction of the present position is required. Originally there was one budget for the whole of India, the provinces receiving fixed allowances with which to meet their expenses. As the provinces grew in importance and in power, it was obvious that these conditions could not continue, and there developed a long struggle between the Provinces and the Government of India, the former claiming a larger share of the revenues raised within their borders and greater freedom in the spending of them, and the Government of India, perhaps not unnaturally, striving to retain its control. But by degrees the situation was improved into a working compromise. Contracts were made between the Government of India insuring to the provinces adequate and growing funds, an important element in these contracts being the division of certain heads of revenue between the Province and the Government of India, so as to give the Province as the tax collecting agency an incentive to develop revenues to a reasonable extent. Later, the provinces were given the product of certain fixed heads of revenue instead of the usufruct of divided heads, such fixed heads being decided by negotiation and agreement. A change of this character went deeper than appears at first sight. When the Government of India was entitled to half of any particular head of revenue it naturally kept a jealous eye on expenditure charged to that revenue, and changes of policy which might affect the yield of that revenue. This gave occasion to much interference with the provinces which was increasingly resented. But when there was a cleaner cut between the revenues of the Government of India and of the provinces occasions for interference and control were naturally fewer. It may be said that by the time of the passing of the Reform Act of 1919 a satisfactory adjustment between the financial roles of the Government of India and the Provinces had been reached and the real friction was small.

The Clean Cut—Progress went very much farther in the Reform Act of 1919. By that instrument there was made what is for all practical purposes a clean cut between Imperial and Provincial finance. The Government of India took unto itself the whole product of those taxes which experience and usage have recognised as federal rather than State, which is a better description of the relations between the Government of India and the Provinces than Imperial and Provincial. Such taxes are customs, income tax, posts, and telegraphs, railways and the salt tax. It made over to the provinces, for their free and unfettered disposal, the yield of the other great taxes, such as land revenue, excise, forests, stamps, and miscellaneous heads. The full definition and dividing line drawn under this scheme will be found in the section The Government of India (q.v.) But when a balance sheet on these lines was drawn it was found that the Government of India was insufficiently provided with money to carry out its responsibilities. The deficiency was 983 lakhs of rupees. It was very difficult to adjust this contribution equitably amongst the provinces concerned, because under the various settlements effected there was a wide disparity between the conditions of the various provinces. Ultimately the following decision was arrived at, with machinery for the gradual extinction of the provincial contributions, if ever the Government of India is in the happy position to be able to do without the funds. Meantime all that needs to be said is that whilst the disparity of the contributions from the various provinces is at first sight glaring, in practice there is no such disparity, and the financial authorities of Bombay can be found to argue that that Province is much worse off than Madras, though the Madras contribution is so much larger. The only other point is that this scheme has already broken down in part, the great and wealthy Province of Bengal having secured temporary evasion of its payment on the plea of poverty.

In the financial year 1921-22 contributions shall be paid to the Governor General in Council by the local Governments mentioned below according to the following scale:—

Name of Province.	Contributions (In lakhs of rupees).
Madras	348
Bombay	58
Bengal	63
United Provinces	240
Punjab	175
Burma	64
Central Provinces and Berar ..	22
Assam	15

From the financial year 1922-23 onwards total contribution of 983 lakhs, or such smaller sum as may be determined by the Governor General in Council, shall be paid to the Governor General in Council by the local Governments mentioned in the preceding rule. When for any year the Governor General in Council determines as the amount of the contribution a smaller sum than that payable for the preceding year, a reduction shall be made in the contribution of those local Governments only whose last previous annual contribution exceeds the proportion specified below of the smaller sum so determined as the total contribution; and any reduction so made shall be proportionate to such excess:—

Madras	..17—90ths.
Bombay	..13—90ths.
Bengal	..19—90ths.
United Provinces	..18—90ths.
Punjab	.. 9—90ths.
Burma	..6½—90ths.
Central Provinces and Berar	.. 5—90ths
Assam	..2½—90ths.

Progressive Deficits.—The other new feature in the finances of India is the appearance of progressive deficits in the budget. For a quarter of a century the finances of India were administered with storm, one is almost inclined to say penurious economy. The Budgets were made to balance even in the lean years of a falling rupee, and in the face of such calamities as the famine of 1896 and the still more formidable calamity of 1899. The appearance of a deficit was viewed in the light of a strange and terrific phenomenon, and not only

was the budget balanced, but large contributions were made from revenue to productive public works, with the result that the unproductive debt was kept very low. Indeed on the outbreak of the war a careful balance sheet would have shown India with very large assets after fully providing for the public debt. From 1918-19 onwards all this was changed. The modest deficit of six crores shown in the budget of that year grew like the prophet's gourd. The result of this financial policy, pursued in the face of stern but unregarded warnings from the Government's ablest financial adviser, and general protests from the public in India, cannot be better described than in the words of the present Finance Member. We quote them textually because they are above the suspicion of political bias, for it has always remembered that in the orient politics and finance are indissolubly associated.

"When I came to look into the finances of India for the last few years I was tempted to wonder whether it was not rather a rake's progress. For five years in succession, India has had a deficit. The accumulated total of these deficits amounts to no less than 100 crores, and this in spite of the fact that in the last two budgets additional taxation has been imposed estimated to bring in about 28 crores during the year 1922-23. Even this is not the whole story. Apart from our revenue deficits, we have spent many crores on unproductive purposes, the expenditure on which is classed as capital expenditure. New Delhi is the most obvious example. I can see no justification, other than sheer necessity, for not treating this expenditure as chargeable against revenue, and in any case it ought to be repaid out of revenue at an early date. Moreover, besides the deficits of the Central Government, the recurring deficits of the Provincial Governments and of many local bodies throughout India must not be forgotten.

Inflation and Floating Debt.—"India has not entirely escaped the evils of taxation through inflation, but as compared with many other countries she has come off well. Out of the total deficit of 100 crores during the last five years, it is estimated that 31 crores have been covered by the creation of paper money, representing nothing but the I. O. U.'s of the Government of India. The remainder amounting to 69 crores has been raised by borrowing. Moreover to the extent of 22 crores the borrowing has thus far taken the form of issues of Treasury Bills to the public. It is true that, owing to special conditions during 1922-23, we were able to reduce our Treasury Bills by 32 crores, in spite of the deficit, out of the proceeds of long term loans. Still, 22 crores of Treasury Bills in a country like India is far too large an amount to have outstanding. A large volume of Treasury Bills is an evil even in England, where the condition of the money market is such that it is always possible to renew maturing bills by offering a competitive rate, but in India conditions might easily arise under which even an impossibly high rate would be insufficient, and in that case the Government of India would be driven back to replacing the Treasury Bills by paper currency, *i.e.*, would be driven to taxation by inflation.

Maturing Debt:—"In this connection, a word may be said about our early maturing debt. We have to find the means of meeting bonds during the next three or four years to the extent of 5¼ crores in 1923, 3¾ crores in 1925, and nearly 38 crores in 1926. These amounts, too, have to be competed for against other demands on the market, and may be said, in part at any rate, to be one of the outcomes of the deficits for the last few years.

Increased Interest Charge.—"But the deficits of 100 crores can be looked at from another point of view, when again their evil effects are prominent. In the budget for 1923-24, the charge for interest would be at least 5¼ crores less had it not been for these accumulated deficits. This extra 5¼ crores has to be met either by reducing expenditure, possibly by reducing desirable expenditure, or by raising new taxation, or at least by maintaining existing taxes which could otherwise be reduced.

Growth of Unproductive Debt.—"As the results of the deficits of the last few years and of the war, India's debt has grown from a total of 4,11 crores on the 31st March 1914 to an estimated total of 7,81 crores on the 31st March 1923. This figure includes the floating debt and the early maturing debt of which I have already spoken, but it excludes no less than 63 crores of obligations which it is I find the practice to treat separately from the debt of India, though as far as I can see these obligations are just as much a part of India's debt as the rest. Taking, however, the figure of 7,81 crores which I have given of the total debt of India on the 31st March 1923, we find that 5,57 crores is classed as productive and 2,24 crores as ordinary or unproductive debt. The proportion of productive to unproductive debt is one which naturally looks strikingly good to any one who thinks of Great Britain's figure of £7,500 millions of debt, all of which has gone in powder and shot. But this comparison must not blind us to the fact that since the 31st March 1914 the total debt has increased by 3,70 crores and the unproductive debt by 2,27 crores, and we must not forget that the yield on that part of our productive debt which is invested in railways has not been sufficient in the last two years to meet the interest charges.

"The debt, again, has to be divided between rupee debt and sterling debt. The rupee debt has risen since the 31st March 1914 from 1,46 crores to 4,21 crores and the sterling debt has risen from £ 177 millions to £240 millions in the same period. The sterling debt of £ 240 millions represents a claim on India's production of goods and services in the future up to the value of the principal together with a further claim on those goods and services for interest during the interval until the principal is paid off."

The Present Position:—These are the circumstances, fully disclosed in the Budget presented in February 1922, which led to an insistent demand for economy. The Government of India bowed before the storm, and it was agreed to appoint a strong retrenchment committee, on the lines, of the Geddes Committee, which inquired into the inflated expenditure in England, and which had for its chairman Lord Inchcape, who was one of the most influential members of the Geddes Committee. The Inchcape Committee sat in India during the cold weather of 1922-23, and its inquiries therefore

synchronised with the preparation and submission of the current Budget. Its recommendations are fully summarised elsewhere in this issue (q. v. The Inchcape Committee). The current budget therefore represents to a certain extent a temporary phase in Indian finance, a phase which stands for the passage of the old into the new rate of expenditure. For another reason this phase is transitory. The Finance Member, Sir Basil Blackett, came to his office in India, with a great Treasury reputation, after the broad outlines of the Budget had been settled; whilst he was responsible for it, he had not had a great hand in shaping it. The Budget for 1922-23 provided for an uncovered deficit of Rs. 9·16 crores. There was a saving of Rs. 4·14 crores in expenditure, but the revenue was Rs. 12·48 crores less than the estimate. There was a shortage of Rs. 3 crores in the Customs Revenue. Owing to poor trade in textiles, a reduction of the prevailing depression the excise on cotton cloth manufactured in the country was Rs. 60 lakhs less. The railway traffic was also poor, and the net revenue was down Rs. 5¾ crores, with the result that the railways, which it had been hoped would yield surpluses compensating for the loss of the opium revenue, resulted in a loss to the State of one crore of Rupees. The higher postal charges led to a loss of traffic, and though there was a recovery in the closing months of the year the receipts were down Rs. 106 lakhs. The general depression in trade was further reflected in a decline in the yield from income tax, which was Rs. 3½ crores below the estimate. On the expenditure side various savings were materially reduced by the higher military charges, chiefly under the heading of the outlay induced by the occupation of Waziristan and demobilisation charges, with the general result indicated above. The position is set out statistically in the following table—

	(In lakhs of rupees) (+better—worse)	
(*i*) Customs revenue, less ..		3,12
(*ii*) Income-tax revenue, less ..		3,42
(*iii*) Opium and salt revenue, more	96	..
(*iv*) Net revenue from Railways, less		5,86
(*v*) Net revenue from Posts and Telegraphs, less		94
(*vi*) Interest and Currency receipts, more	51	..
(*vii*) Saving in provision for interest on debt ..	1,86	
(*viii*) Saving in Military expenditure (net)	46	..
(*ix*) Saving in civil expenditure including Political expenditure in Waziristan) and other items	1,21	..
	5,00	13,34
		— 8,34
Deficit as budgeted for		— 9,16
Deficit according to present estimate		—17,50

New Taxation:—The governing principle followed in framing the new Budget was to make the revenue balance the expenditure. After taking account of all the savings practicable on the report of the Inchcape Committee the Finance Member came to the conclusion that on the basis of the existing taxation there was bound to be a further deficit. He estimated that against a minimum expenditure of Rs. 204·37 crores, there could not be expected a revenue greater than 198·52 crores, leaving a deficit of Rs. 5·85 crores. This deficit was reduced to Rs. 4·26 crores by the following expedient. There is held to the credit of India, chiefly in London, what is called The Gold Standard Reserve (q. v.) which is a sum representing the profit on coining rupees and the interest on such investments, which is held for the purpose of supporting the rupee at its gold value in the event of the balance of trade turning against India. That reserve now amounts to £40 millions. The interest on the investments representing the Reserve are credited to the credit of the Reserve. But the Reserve having reached a figure calculated to meet all reasonable demands, so far as they can be foreseen, the interest for the current year was taken into the revenues; this interest therefore, amounting to Rs. 1·59 crores, reduced the deficit to Rs. 4·26 crores. Inasmuch as the principle followed was to establish financial equilibrium, the Finance Member asked for fresh taxation to cover this deficit, summarising his proposals in the following terms —"What form then is the new taxation to take? We have carefully reviewed the existing taxes. In particular, we have examined those taxes which were proposed last year and not accepted. One after another we have had to reject promising expedients, and finally we have come to the conclusion that the right course is to ask the House to agree to an increase in the salt tax to Rs. 2-8 a maund. In a full year, this increase is estimated to yield 6 crores, but we cannot count on its bringing in more than 4½ crores in 1923-24. The House will see that this additional revenue is just sufficient to cover the deficit of 4¼ crores, to give us a balanced budget, and to leave us a small surplus of 24 lakhs. In view of the uncertainties of our estimates of expenditure, this House will agree that this is not an undue margin to leave over for contingencies."

Ways and Means:—Before leaving the financial statement there is another section to be considered. The Government of India has large capital liabilities to meet. It finances the capital expenditure on railways and irrigation works, the New Delhi and in a few other directions. It has also to meet heavy expenditure in London, not only under the capital account, but for the payment of pensions and leave charges. This section of the Budget is known as the Ways and Means section, and is of special interest in as much as it embodies the loan account for the year.

The following statement summarises the Ways and Means operations in India and England

together, during 1922-23 and 1923-24 :—

	(crores of rupees). Revised.	Budget.
Liabilities.		
Railway capital outlay	21·4	38·6
Delhi, Irrigation and Telegraph Capital outlay	3·0	2·9
Discharge of funded debts, etc.	12·4	5·2
Discharge of Treasury Bills— With the public	32·4	5·5
In the Paper Currency Reserve	8·2	
Loans to Provincial Governments	11·4	13·5
Central Government's revenue deficit	17·3	—
Drawings of Provincial Governments	—	1·3
	1,06·1	67·0
Met as follows :—		
Central Government's revenue surplus	..	·2
Surplus revenue of Provincial Governments	1·0	—
Rupee loans	46·9	25·0
Sterling loans (converted at 1*s.* 4*d.*)	47·3	22·7
Net receipts from Savings Bank deposits, etc.	3·1	5·0
Miscellaneous items	2·5	2·2
Reduction of cash balances ..	5·3	11·9
	1,06·1	67·0

Reception of the Budget :—The Budget was received with a note of dismay. This was based on the fact that despite recent increased taxation, direct and indirect, estimated at Rs. 69 crores--the figure is unofficial, but it has not been challenged—the country was asked to face another deficit and yet further taxation. The Legislature proceeded to the discussion of the Budget in an extremely critical mood. It made "cuts" amounting to Rs. 1·76 crore, but the Viceroy, in the exercise of his constitutional powers, decided to restore these economies to the extent of Rs. 1·14 crore under railways, and Rs. 3 lakhs under Miscellaneous. The real fight was over the proposed enhancement of the Salt Tax. This was always an unpopular tax, and its progressive reduction under the regime of Lord Curzon, even in difficult years of famine, was one of the many acts of statecraft carried through by that Viceroy. The Assembly recognised that the Budget must be made to balance. But it was not satisfied that retrenchment had been carried to the furthest practicable point, and its willingness to raise the supertax or the customs failed because it could not agree with the Government. Therefore it rejected the proposed enhancement of the Salt Tax by 59 votes against 44. The Budget next came before the upper house in the Indian Legislature, the Council of State. That body reversed the decision of the Assembly, and adopted the Budget as framed by the Government, including the higher Salt Tax, by 28 votes to 10. The Budget under the constitutional rules, came back to the Assembly, which again rejected the higher salt tax by 58 votes to 47. The Viceroy, in these circumstances, used the powers reserved to him under the Government of India Act, and "certified" the tax, an act which gave it the force of law.

The Viceroy Explains :—The Viceroy, in a long memorandum issued at the time of the certification, explained the principles which had governed his action in using the special powers conferred on him under the Government of India Act. In the course of this he said :—

"Ever since I came to India and learnt the financial conditions, I have been deeply impressed by the imperative necessity of placing India's finances on a sound basis, and have kept this object continually in view. The first Budget after my arrival, was that of 1922-23. I then learnt that there has been cumulative deficits in the four preceding years totalling Rs. 90 crores. Heavy increases of taxation had been imposed by my predecessor's Government in 1921-22 in order to balance the Budget. Taxation had again to be enhanced by my Government in 1922-23, and an increase was also made in the postal and railway charges. It will be remembered that at that time my Government also proposed to double the salt duty. The Legislative Assembly rejected this proposal. I accepted their decision and did not certify the necessary legislation for the purpose.

"Without dwelling in detail on my reasons it will suffice to mention : (*a*) That my Government were deeply impressed with the need urged by the legislature for retrenchment in both military and civil expenditure, as a necessary step to produce any further taxation of this nature ; (*b*) that food prices were then high and wheat in particular exceptionally high. When we came to frame the Budget of the present year, we found that notwithstanding the admirable work accomplished by Lord Inchcape and his Committee, and after making very far-reaching reductions in expenditure, we had again to face a deficit ; not so large indeed as last year, but nevertheless amounting to nearly Rs. 4 crores. We have striven our utmost to restore equilibrium by the scrutiny of estimates of revenue and expenditure, but have failed. Speaking with all the responsibility falling upon me and my Government, I am convinced that the position cannot be ameliorated by any addition however tempting in appearance, to revenue, or by any reduction from expenditure.

"My Government held that in view of the past accumulated deficits, it was essential in the interests of India to balance its Budget. It had every reason to look for the support of the public and the Legislature in this view. Ever since my arrival in this country, the Legislature, all sections of the press, and public men in deputations, addresses and speeches have insistently urged on me the vital necessity of securing financial equilibrium. In addition representations had persistently been made that the Government of India should balance its Budget in order that it might begin to remit the contributions of Rs. 9½ crores from the Provincial Governments to the Government of India, a matter vitally important to the progress of those departments which have under the Reform Scheme been committed to the charge of Ministers,

"The most careful and anxious consideration was given to the possibility of finding an alternative to the salt tax as a means of raising the additional revenue necessary to attain an equilibrium. No alternative presented itself to Government, nor indeed when the matter came to be discussed by the Legislature. The reason is obvious. Those engaged in trade and industry have had laid upon them heavy increases in taxation during recent years. Postal and railway rates have been enhanced. The burden thus placed on commerce and industry will require time for adjustment and further taxation in these directions would have failed to provide the sum required. I have myself given most careful consideration to the objections which appear to exist against the enhancement of the salt tax, whether on economic grounds or those of sentiment.

"It was in these circumstances that it became my duty to certify the measure. It must be clearly understood that my action merely imposed an enhancement of the tax until March 31st 1924, when the matter must again come before the Legislature. It will then have had a year's experience of the operation of the tax, and it will be in a position to determine whether, in view of the condition of the country and having regard to our obligations to the Provinces, it will vote for its retention.

"I hold strict views regarding the exercise of my special powers. Their use can only be justified, in the words of the Government of India Act, when it is essential for the interests of British India. This requirement has throughout been present to my mind. In the present case the interest of India only, and no other interests are in question. A balanced Budget is absolutely essential to her interests at the present time, and I believe that it is my duty to take the necessary action to secure this in the discharge of the responsibility placed upon me as Governor-General by the Imperial Parliament.

"It may be that the scheme of reforms introduced by the Government of India Act will be attacked on account of the action taken by me. This would be unfortunate and could only be due to misapprehension, for the constitution is embodied in the Act, and I do not believe that there is any substantial difference as regards the meaning of the important provisions under which I am acting. Unbalanced Budgets appear to me to involve dangers to the future of India perhaps inherently greater than any constitutional or political issue, while their immediate effect is to stifle the development in the provision of all those beneficent activities, *e.g.*, education, public health, industry, which should be the first fruits of the reforms. I am convinced, therefore, that my action will prove of ultimate benefit in the development of the reforms and the advancement of India, and for these I shall continue to labour in the discharge of the high responsibilities entrusted to me as Governor-General."

Notwithstanding this explanation by the Viceroy, there were strong protests all over the country at the raising of the Salt Tax, and at the use of the special powers employed in its certification. But these protests were drowned later by the still stronger feeling raised by the Kenya decision (*q.v.* Indians Abroad). There was an echo of this discussion in the House of Commons when, on the initiative of the Labour Party, the action of the Viceroy was challenged during the debate on the Indian Budget, but the discussion petered out.

I.—General Statement of the Revenue and Expenditure charged to Revenue of the Central Government, in India and in England.

	Accounts, 1921-1922.	Revised Estimate, 1922-1923.	Budget Estimate, 1923-24.
REVENUE.	Rs.	Rs.	Rs.
Principal Heads of Revenue—			
Customs	34,40,98,381	42,30,03,000	45,09,41,000
Taxes on Income	18,74,13,424	17,89,31,000	19,04,64,000
Salt	6,34,37,848	7,17,84,000	11,75,00,000
Opium	3,07,24,798	3,98,68,000	3,98,12,000
Other Heads	2,20,16,921	2,37,37,000	2,44,97,000
TOTAL PRINCIPAL HEADS	64,76,91,372	73,73,23,000	82,27,14,000
Railways: Net Receipts	15,20,82,829	25,81,31,000	31,76,58,000
Irrigation: Net Receipts	5,94,141	10,26,000	10,83,000
Post and Telegraphs: Net Receipts	56,52,778	90,58,000	2,08,32,000
Interest Receipts	1,11,00,700	1,04,11,000	2,50,96,000
Civil Administration	77,29,211	56,20,000	62,08,000
Currency, Mint and Exchange	4,37,42,013	3,53,10,000	2,69,26,000
Civil Works	11,33,782	11,25,000	10,69,000
Miscellaneous	(*a*)7,13,56,875	67,62,000	48,34,000
Military Receipts	8,06,99,832	5,01,01,000	3,04,87,000
Contributions and Assignments to the Central Government by provincial Governments	12,98,72,704	9,21,50,000	9,21,36,000
TOTAL REVENUE	1,15,21,50,317	1,20,70,17,000	1,34,90,43,000
DEFICIT	27,65,01,700	17,25,35,000	....
TOTAL	1,42,86,52,017	1,37,95,52,000	1,34,90,43,000

(*a*) Includes profits of freight tax which was replaced from 1922-23 by increased goods rates.

.—General Statement of the Revenue and Expenditure charged to Revenue of the Central Government, in India and in England—*contd.*

	Accounts, 1921-1922.	Revised Estimate, 1922-1923.	Budget Estimate, 1923-24.
EXPENDITURE.	Rs.	Rs.	Rs.
Direct Demands on the Revenue ..	5,27,12,199	5,30,73,000	5,37,22,000
Railways: Interest and Miscellaneous charges	24,23,82,572	26,23,91,000	27,91,32,000
Irrigation	14,48,454	12,25,000	14,20,000
Posts and Telegraphs	1,66,00,497	66,42,000	53,35,000
Debt Services	15,99,70,014	15,07,90,000	17,21,57,000
Civil Administration	9,40,80,047	10,01,05,000	9,78,29,000
Currency, Mint and Exchange	1,07,48,311	1,59,28,000	1,13,11,000
Civil Works	1,54,20,200	1,50,01,000	1,76,63,000
Miscellaneous	5,58,91,383	5,30,32,000	5,15,39,000
Military Services	77,87,98,340	72,09,79,000	65,04,87,000
Miscellaneous adjustments between the Central and Provincial Governments...	....	3,86,000	3,62,000
TOTAL EXPENDITURE CHARGED TO REVENUE	1,42,86,52,017	1,37,95,52,000	1,34,06,57,000
SURPLUS	....	....	80,86,000
TOTAL ..	1,42,86,52,017	1,37,95,52,000	1,34,90,13,000

THE LAND REVENUE.

The principle underlying the Land Revenue system in India has operated from time immemorial. It may be roughly formulated thus—the Government is the supreme landlord and the revenue derived from the land is equivalent to rent. On strictly theoretical grounds, exception may be taken to this statement of the case. It serves, however, as a substantially correct description of the relation between the Government and the cultivator. The former gives protection and legal security. The latter pays for it according to the value of his holding. The official term for the method by which the Land Revenue is determined is "Settlement." There are two kinds of settlements in India—Permanent and Temporary. Under the former the amount of revenue has been fixed in perpetuity, and is payable by the landlord as distinguished from the actual cultivator. The Permanent Settlement was introduced into India by Lord Cornwallis at the close of the eighteenth century. It had the effect intended of converting a number of large revenue farmers in Bengal into landlords occupying a similar status to that of landowners in Europe. The actual cultivators became the tenants of the landlords. While the latter became solely responsible for the payment of the revenue, the former lost the advantage of holding from the State. This system has prevailed in Bengal since 1795 and in the greater part of Oudh since 1859. It also obtains in certain districts of Madras.

Temporary Settlements.

Elsewhere the system of Temporary Settlements is in operation. At intervals of thirty years, more or less, the land in a given district is subjected to a thorough economic survey, on the basis of the trigonometrical and topographic surveys carried out by the Survey Department of the Government of India. Each village area, wherever the Temporary Settlement is in vogue, has been carefully mapped, property-boundaries accurately delineated, and records of rights made and preserved. Under the Permanent Settlement in Bengal the occupant does not enjoy these advantages. The duty of assessing the revenue of a district is entrusted to Settlement Officers, members of the Indian Civil Service specially delegated for this work. The duties of a Settlement Officer are thus described in Strachey's *India* (revised edition, 1911):—"He has to determine the amount of the Government demand, and to make a record of all existing rights and responsibilities in the land. He has a staff of experienced subordinates, almost all of whom are natives of the country, and the settlement of the district assigned to him is a work which formerly required several years of constant work. The establishment of agricultural departments and other reforms have however led to much simplification of the Settlement Officer's proceedings, and to much greater rapidity in the completion of the Settlements. All the work of the settlement officer is liable to the supervision of superior officers, the assessments proposed by him require the sanction of the Government before they become finally binding; and his judicial decisions may be reviewed by the Civil Courts. It is the duty of the settlement officer to make a record of every right which may form the subject of future dispute, whether affecting the interests of the State or of the people. The intention

is to alter nothing, but to maintain and place on record that which exists."

The Two Tenures.

Under the Temporary Settlement land tenures fall into two classes—peasant-holdings and landlord-holdings, or *Ryotwari* and *Zemindari* tenures. Broadly speaking, the difference between the two in a fiscal sense is that in Ryotwari tracts the *ryot* or cultivator pays the revenue direct; in *Zemindari* tracts the landlord pays on a rental assessment. In the case of the former, however, there are two kinds of *Ryotwari* holdings—those in which each individual occupant holds directly from Government, and those in which the land is held by village communities, the heads of the village being responsible for the payment of revenue on the whole village area. This latter system prevails in the North. In Madras, Bombay, Burma and Assam, ryotwari tenure is on an individual basis, and the Government enters into a separate agreement with every single occupant. The basis of assessment on all classes of holdings is now more favourable to the cultivator than it used to be. Formerly what was believed to be a fair average sum was levied on the anticipated yield of the land during the ensuing period of settlement. Now the actual yield at the time of assessment alone is considered, so that the cultivator gets the whole of the benefit of improvements in his holding subsequently brought about either by his own enterprise or by "unearned increment." The Government, however, may at a new settlement re-classify a holding so as to secure for itself a fair share in an increment that may have resulted from public works in the vicinity, such as canals and railways, or from a general enhancement of values. But the principle that improvements effected by private enterprise shall be exempt from assessment is now accepted by the Government and provided for in definite rules.

Incidence of the Revenue.

The incidence of the revenue charges varies according to the nature of the settlement, the class of tenure, and the character and circumstances of the holding. Under the Permanent Settlement in Bengal Government derive rather less than £3,000,000 from a total rental estimated at £12,000,000. Under Temporary Settlements, 50 per cent. of the rental in the case of *Zemindari* land may be regarded as virtually a maximum demand. In some parts the impost falls as low as 35 and even 25 per cent. and only rarely is the proportion of one-half the rental exceeded. In regard to *Ryotwari* tracts it is impossible to give any figure that would be generally representative of the Government's share. But one-fifth of the gross produce is the extreme limit, below which the incidence of the revenue charge varies greatly. About sixteen years ago the Government of India were invited in an influentially signed memorial to fix one-fifth of the gross produce as the maximum Government demand. In reply to this memorial and other representations the Government of India (Lord Curzon being Viceroy) issued a Resolution in defence of their Land Revenue Policy. In it was stated that "under the existing practice the Government is already taking much less in revenue than it is now invited to exact" and "the average rate is everywhere on the down grade." This Resolution, together with the statements of Provincial Governments on which it was based, was published as a volume; it is still the authoritative exposition of the principles controlling the Land Revenue Policy of the Government of India. In a series of propositions claimed to be established by this Resolution the following points are noted:—(1) In *Zemindari* tracts progressive moderation is the key-note of the Government's policy, and the standard of 50 per cent. of the assets is more often departed from on the side of deficiency than excess; (2) in the same areas the State does not hesitate to interfere by legislation to protect the interests of the tenants against oppression at the hands of the landlords; (3) in *Ryotwari* tracts the policy of long-term settlements is being extended, and the proceedings in connection with new settlements simplified and cheapened; (4) local-taxation (of land) as a whole is neither immoderate nor burdensome; (5) over-assessment is not, as alleged, a general or widespread source of poverty, and it cannot fairly be regarded as a contributory cause of famine. At the same time the Government laid down as principles for future guidance—(*a*) large enhancements of revenue, when they occur, to be imposed progressively and gradually, and not *per saltum*; (*b*) greater elasticity in revenue collection, suspensions and remissions being allowed according to seasonal variations and the circumstances of the people; (*c*) a more general resort to reduction of assessments in cases of local deterioration.

Protection of the Tenants.

In regard to the second of the five propositions noted above, various Acts have been passed from time to time to protect the interests of tenants against landlords, and also to give greater security to the latter in possession of their holdings. The Oudh Tenancy Act of 1886 placed important checks on enhancement of rent and eviction, and in 1901 an Act was passed enabling a landowner to entail the whole or a portion of his estate, and to place it beyond the danger of alienation by his heirs. The Punjab Land Alienation Act, passed at the instance of Lord Curzon, embodied the principle that it is the duty of a Government which derives such considerable proportion of its revenue from the land, to interfere in the interests of the cultivating classes. This Act greatly restricted the credit of the cultivator by prohibiting the alienation of his land in payment of debt. It had the effect of arresting the process by which the Punjab peasantry were becoming the economic serfs of money-lenders. A good deal of legislation affecting land tenure has been passed from time to time in other provinces, and it has been called for more than once in Bengal, where under the Permanent Settlement (in the words of the Resolution quoted above), "so far from being generously treated by the Zemindars, the Bengal cultivator was rack-rented, impoverished, and oppressed."

Government and Cultivator.

While the Government thus interferes between landlord and tenant in the interests of the latter, its own attitude towards the cul-

tivator is one of generosity. Mention has already been made of the great advantage to the agricultural classes generally of the elaborate systems of Land Survey and Records of Rights carried out and maintained by Government. In the Administration Report of Bombay for 1911-12, it is stated:—"The Survey Department has cost the State from first to last many lakhs of rupees. But the outlay has been repaid over and over again. The extensions of cultivation which have occurred (by allowing cultivators to abandon unprofitable lands) have thus been profitable to the State no less than to the individual; whereas under a *Zemindari* or kindred system the State would have gained nothing, however much cultivation had extended throughout the whole of 30 years' leases." On the other hand, the system is of advantage to the *ryots* in reducing settlement operations to a minimum of time and procedure. In the collection of revenue the Government consistently pursues a generous policy. In times of distress, suspensions and remissions are freely granted after proper inquiry.

Land revenue is now a provincial head of revenue and is not shown in the All India accounts. It may be taken roughly at £28 million, as compared with £84 million said to have been raised annually by Aurungzebe from a much smaller Empire.

The literature of the subject is considerable. The following should be consulted by readers who require fuller information:—"Land Revenue Policy of the Indian Government," 1902 (Superintendent of Government Printing); Baden Powell's "Land Systems of British India"; Sir John Strachey's "India, its Administration and Progress, 1911," (Macmillan & Co.); M. Joseph Chailley's "Administrative Problems of British India" (Macmillan & Co., 1910), and the Annual Administration Reports of the respective Provincial Government.

EXCISE.

The Excise revenue in British India is derived from the manufacture and sale of intoxicating liquors, hemp, drugs, toddy and opium. It is a commonplace amongst certain sections of temperance reformers to represent the traffic in intoxicating liquors as one result of British rule. There is, however, abundant evidence to show that in pre-British days the drinking of spirituous liquors was commonly practised and was a source of revenue.

The forms of intoxicating liquor chiefly consumed are country spirit; fermented palm juice; beer made from grain; country brands of rum, brandy, etc., locally manufactured malt beer and imported wine, beer and spirits. Country spirit is the main source of revenue, except in the Madras Presidency, and yields about two-thirds of the total receipts from liquors. It is usually prepared by distillation from the Mhowra flower, molasses and other forms of unrefined sugar, fermented palm juice and rice. In Madras a very large revenue is derived from fresh toddy. The British inherited from the Native Administration either an uncontrolled Out-Still System or in some cases a crude Farming System and the first steps to bring these systems under control were the limitation of the number of shops in the area farmed, and the establishment of an improved Out-Still System under which the combined right of manufacture and sale at a special shop was annually granted. This of course was a kind of control, but it only enabled Government to impose haphazard taxation on the liquor traffic as a whole by means of vend fees. It did not enable Government to graduate the taxation accurately on the still-head duty principle nor to insist upon a standard of purity or a fixed strength of liquor. Moreover for political and other reasons the extent of control could not at first be complete. There were tribes of aborigines who regarded the privilege of making their own liquor in their private homes as a long established right; and who believed that liquor poured as libations to their god should be such as had been made by their own hands. The introduction of any system amongst those peoples had to be worked very cautiously. Gradually, as the Administration began to be consolidated, the numerous native pot-stills scattered all over the country under the crude arrangements then in force began to be collected into Central Government enclosures called Distilleries, thus enabling Government to perfect its control by narrowing the limits of supervision; and to regularize its taxation by imposing a direct still-head duty on every gallon issued from the Distillery. Under Distillery arrangements it has also been possible to regulate and supervise thoroughly the manufacture of its liquor and its disposal subsequent to leaving the Distillery by means of a system of transport passes, establishment supervision, improved distribution and vend arrangements.

Various Systems.

The Out-Still System may be taken to include all systems prior in order of development to the imposition of Still-head duty. Briefly stated the stages of development have been—First: farms of large tracts; Second: farms of smaller areas; Third: farms of the combined right to manufacture and sell at particular places without any exclusive privilege over a definite area; Fourth: farms of similar right subject to control of means and times for distilling and the like. The Provincial Governments have had to deal with the subject in different ways suited to local conditions, and so the order of development from the lower forms of systems to the higher has not been always everywhere identical in details. Yet in its essence and main features the Excise Administration in most provinces of British India has progressed on uniform lines the key note lying in attempts, where it has not been possible to work with the fixed duty system in its simplest forms, to combine the farming and fixed duty systems with the object of securing that every gallon of spirit should bear a certain amount of taxation. The Out-Still System has in its turn been superseded by either the Free-supply system or the District Monopoly system. The Free-supply system is one of free competition among the licensed distil-

lers in respect of manufacture. The right of vend is separately disposed of. The District monopoly system on the other hand is one in which the combined monopoly of manufacture and sale in a district is leased to a farmer subject to a certain amount of minimum still-head duty revenue in the monopoly area being guaranteed to the State during the term of the lease.

The recommendations of the Indian Excise Committee of 1905-06 resulted in numerous reforms in British India, one of them being that the various systems have been or are gradually being superseded by the Contract Distillery System under which the manufacture of spirit for supply to a district is disposed of by tender, the rate of still-head duty and the supply price to be charged are fixed in the contract and the right of vend is separately disposed of. This is the system that now prevails over the greater portion of British India. The other significant reforms have been the revision of the Provincial Excise Laws and regulations, and the conditions of manufacture, vend, storage and transport, an improvement in the quality of the spirit, an improved system of disposal of vend licenses, reductions and re-distributions of shops under the guidance and control of local Advisory Committees and gradual enhancement of taxation with a view to checking consumption.

Since the issue of the report of the Excise Committee 1905-06, no less than 213,000 square miles of territory were transferred from the out-still to the distilling system. In 1905-06 39 per cent. of the total excise area and 28 per cent. of the population of that area were served by out-stills, the proportions in 1912-13 were only 15 and 8 per cent. respectively.

Excise has now been made over entirely to the Provincial Governments, and the duties vary from province to province. The governing principle in fixing these rates is the highest duty compatible with the prevention of illicit distillation. In the Bombay Presidency the issue of spirit to all country spirit shops has been rationed on the basis of consumption for the year 1920-21. From that consumption reduced to proof gallons. 10 per cent. is deducted in the case of shops in Bombay City and 5 per cent. elsewhere and the ration is then fixed for each shop according to the issues in the corresponding month of 1920-21. This is the most important step taken by the new Government to reduce consumption. Two large distilleries in the Presidency have been placed entirely under Government management, thus partially superseding the Contract Distilling system.

Sap of the date, palmyra, and cocoanut palms called toddy, is used as a drink either fresh or after fermentation. In Madras and Bombay the revenue is obtained from a fixed fee on every tree from which it is intended to draw the liquor and from shop license fees. In Bengal and Burma the sale of shop licenses is the sole form of taxation. Country brands of rum, and so-called brandies and whiskies, are distilled from grape juice, etc. The manufacture is carried out in private distilleries in various parts of India. A number of breweries has been established, mostly in the hills, for the manufacture of a light beer for European and Eurasian consumption. The uniform fee of 8 annas per gallon is levied all over India at the time of issue.

Foreign liquor is subject to an import duty at the tariff rates, which are set out in the Customs Tariff (*q. v.*). It can only be sold under a license.

Since the war Brandy and Whisky have been manufactured in considerable quantities at Baroda.

The base used is the Mhowra flower. It is drunk in big towns as a substitute for German spirit, and is excised at tariff rates.

Drugs.—The narcotic products of the hemp plant consumed in India fall under three main categories, namely, ganja or the dry flowering tops of the cultivated female hemp plant charas, or the resinous matter which forms an active drug when collected separately; and bhang, or the dried leaves of the hemp plant whether male or female cultivated or uncultivated. The main features of the existing system are restricted cultivation under supervision, storage in Bonded Warehouses, payment of a quantitative duty before issue, retail sale under licenses and restriction on private possession. Licenses to retail all forms of hemp drugs are usually sold by auction. The sale of charas has been prohibited in the Bombay Presidency except Sindh from the 1st April 1922.

Opium.—Opium is consumed in all provinces in India. The drug is commonly taken in the form of pills; but in some places, chiefly on social and ceremonial occasions, it is drunk dissolved in water. Opium smoking also prevails in the City of Bombay and other large towns. The general practice is to sell opium from the Government Treasury, or a Central Warehouse, to licensed vendors. The right of retail to the public is sold by annual auction to one or several sanctioned shops. Further legislation against opium smoking in clubs and dens is now under contemplation.

The estimated opium revenue in 1923-24 is Rs. 3,93,12,000.

SALT.

The salt revenue was inherited by the British Government from Native rule, together with a miscellaneous transit dues. These transit dues were abolished and the salt duty consolidated and raised. There are four great sources of supply; rock salt from the Salt range and Kohat Mines in the Punjab; brine salt from the Sambhar Lake in Rajputana, salt brine condensed on the borders of the lesser Rann of Cutch; and sea salt factories in Bombay, Madras and at the mouth of the Indus.

The Salt Range mines contains an inexhaustible supply. They are worked in chambers excavated in salt strata, some of which are 250 feet long, 45 feet wide and 200 feet high. The Rajputana supply chiefly comes from the Sambhar Lake where brine is extracted and evaporated by solar heat. In the Rann of Cutch the brine is also evaporated by solar heat and the product is known as Baragara salt. Important works for the manufacture of that salt were opened in Dhrangadhra State in

1923. In Bombay and Madras sea water is let into shallow pans on the sea-coast and evaporated by solar heat and the product sold throughout India. In Bengal the damp climate together with the large volume of fresh water from the Ganges and the Brahmaputra into the Bay of Bengal render the manufacture of sea salt difficult and the bulk of the supply, both for Bengal and Burma, is imported from Liverpool, Germany, Aden, Bombay and Madras.

Broadly, one-half of the indigenous salt is manufactured by Government Agency, and the remainder under license and excise systems. In the Punjab and Rajputana the salt manufactories are under the control of the Northern India Salt Department, a branch of the Commerce and Industry Department. In Madras and Bombay the manufactories are under the supervision of Local Governments. Special treaties with Native States permit of the free movement of salt throughout India, except from the Portuguese territories of Goa and Damaun, on the frontiers of which patrol lines are established to prevent the smuggling of salt into British India.

From 1888-1903 the duty on salt was Rs. 2-8 per maund of 82 lbs. In 1903, it was reduced to Rs. 2; in 1905 to Rs. 1-8-0; in 1907 to Re. 1 and in 1916 it was raised to Rs. 1-4-0. The successive reductions in duty have led to a largely increased consumption, the figures rising by 25 per cent. between 1903-1908. In 1923 the duty was doubled bringing it again to Rs. 2-8. (This proposal had been rejected in 1922 and was only enforced in 1923 by the Governor-General's power of certification). The estimated salt revenue in 1923-24 is Rs. 11,75,00,000.

CUSTOMS.

The import duties have varied from time to time according to the financial condition of the country. Before the Mutiny they were five per cent.; in the days of financial stringency which followed they were raised to 10 and in some cases 20 per cent. In 1875 they were reduced to five per cent., but the opinions of Free Traders, and the agitation of Lancashire manufacturers who felt the competition of the Indian Mills, induced a movement which led to the abolition of all customs dues in 1882. The continued fall in exchange compelled the Government of India to look for fresh sources of revenue and in 1894 five per cent. duties were re-imposed, yarns and cotton fabrics being excluded. Continued financial stringency brought piece-goods within the scope of the tariff, and after various expedients the demands of Lancashire were satisfied by a general duty of 3½ per cent. on all woven goods—an import duty on goods by sea, an excise duty on goods produced in the country. The products of the hand-looms are excluded. These excise duties are intensely unpopular in India, for reasons set out in the special article dealing with the subject. In 1910-11, in order to meet the deficit threatened by the loss of the revenue on opium exported to China, the silver duty was raised from 5 per cent. to 4d. an ounce, and higher duties levied on petroleum, tobacco, wines, spirits, and beer. These were estimated to produce £1 million annually.

The Customs Schedule was completely recast in the Budget of 1916-17 in order to provide additional revenue to meet the financial disturbance set up by the war. The general import tariff, which had been at the rate of 5 per cent. *ad valorem* since 1894 was raised to 7½ per cent. *ad valorem*, except in the case of sugar; as India is the largest producer of sugar in the world the import duty on this staple was fixed at 10 per cent. There was also a material curtailment of the free list. The principal article of trade which was not touched was cotton manufactures. For the past twenty years the position has been that cotton twists and yarns of all kinds are free of duty while a duty at the rate of 3½ per cent. is imposed on woven goods of all kinds whether imported or manufactured in Indian mills. The Budget left the position as it stood. The Government of India would have been glad to see the tariff raised to 5 per cent. without any corresponding alteration of the excise, but were over-ruled by the Cabinet on the ground that this controversial matter must come up for discussion after the war. Finally the Budget imposed export duties on tea and jute. In the case of tea the duty was fixed at Re. 1-8-0 per 100 lbs; in the case of jute the export duty on raw jute was fixed at Rs. 2-4-0 per bale of 400 lbs., approximately equivalent to an *ad valorem* duty of 5 per cent.; manufactured jute was charged at the rate of Rs. 10 per ton on sacking and Rs. 16 per ton on Hessians.

The Customs Tariff was further materially modified in the Budget for 1917-18. In the previous year an export duty on jute was imposed at the rate of Rs. 2-4-0 per bale of 400 lbs. in the case of raw jute and Rs. 10 per ton on sackings, and Rs. 16 per ton on Hessians; these rates were doubled, with a view to obtaining an additional revenue of £500,000. The import duty on cotton goods was raised from 3½ per cent. to 7½ per cent. without any alteration in the Excise, which remained at 3½ per cent. This change was expected to produce an additional revenue of £1,000,000. The question of the Excise was left untouched, for the reason, amongst others, that the Government could not possibly forego the revenue of £320,000, which it was expected to produce. With these changes in operation the revenue from Customs in 1920-21 was Rs. 32,37,29,000.

The Customs Tariff was further raised in the Budget of 1921-22 in order to provide for the big deficit which had then to be faced. The general *ad valorem* duty was raised from 7½ to 11 per cent.; a special duty was levied on matches of 12 annas per gross boxes in place of the existing *ad valorem* duty of 7½ per cent: the duties on imported liquors was raised to 3 annas per degree of proof per gallon; the *ad valorem* duty of 7½ per cent was raised to 20 per cent. in the case of certain articles of luxury; the import duty on foreign sugar was increased from 10 to 15 per cent. and the duty on manufactured tobacco was raised by 50 per cent. The Customs duties were further increased in the Budget of 1922-23. The Government proposals in this direction have been described in an early passage. They were to raise the general Customs duty from 11 to 15 per

cent., the cotton excise duty from 3½ per cent. to 7½ per cent., the duty on sugar from 15 to 25 per cent., a duty of 5 per cent. on imported yarn, a rising duty on machinery, iron, steel and railway material from 2½ per cent. to 10 per cent. together with the general duty on articles of luxury from 20 per cent. to 30 per cent. In the course of the passage of the Budget through the Legislatures the cotton excise duty was retained at 3½ per cent., the duty on machinery was retained at 2½ per cent. and the duty on cotton piecegoods at 11 per cent, the other increases being accepted. Full details with regard to the customs duty are set out in the section on Indian Customs Tariff (q. v.). The estimated revenue from the customs in 1923-24 is Rs. 45,09,41,000.

The Senior Collectors were Covenanted Civilians specially chosen for this duty, before the introduction of the Imperial Customs Service in 1906. Since that date, of the five Collectorships at the principal ports (Calcutta, Bombay, Madras, Rangoon, and Karachi) three are ordinarily reserved for Members of the I. C. S. (*i. e.* "Covenanted Civilians"). The other two are reserved for members of the Imperial Customs Service.

Assistant Collectors in the Imperial Customs Service are recruited in two ways: (*a*) from members of the Indian Civil Service—3 vacancies, and (*b*) by the Secretary of State—19 vacancies. There are in addition a few Gazetted Officers in what is known as the Provincial Customs Service. These posts are in the gift of the Government of India, and are usually filled by promotion from the subordinate (in the Government sense of the word) service. The "subordinate" staff is recruited entirely in India.

Income Tax.

The income tax was first imposed in India in 1860, in order to meet the financial dislocation caused by the Mutiny. It was levied at the rate of four per cent. or a little more than 9½ d. in the pound on all income of five hundred rupees and upwards. Many changes have from time to time been made in the system, and the present schedule was consolidated in the Act of 1886. This imposed a tax on all incomes derived from sources other than agriculture which were exempted. On incomes of 2,000 rupees and upwards it fell at the rate of five pies in the rupee, or about 6¼d. in the pound; on incomes between 500 and 2,000 rupees at the rate of four pies in the rupee or about 5d. in the pound. In March 1903 the minimum taxable income was raised from 500 to 1,000 rupees. The income-tax schedule was completely revised, raised, and graduated in the Budget of 1916-17 in the general scale of increased taxation imposed to meet the deficit arising out of war conditions.

Since then the process has been almost continuous and in every financial difficulty the authorities turn to the Income Tax as a means of raising fresh revenue. The last revision was in the Budget of 1922-23, when the scale was fixed as follows :—

RATES OF INCOME-TAX.

		Rate.
A.	In the case of every individual, every unregistered firm and every undivided Hindu family :—	
	(1) When the total income is less than Rs. 2,000	*Nil.*
	(2) When the total income is Rs. 2,000 or upwards, but is less than Rs. 5,000	Five pies in the rupee.
	(3) When the total income is Rs. 5,000 or upwards but is less than Rs. 10,000	Six pies in the rupee.
	(4) When the total income is Rs. 10,000 or upwards, but is less than Rs. 20,000	Nine pies in the rupee.
	(5) When the total income is Rs. 20,000 or upwards, but is less than Rs. 30,000	One anna in the rupee.
	(6) When the total income is Rs. 30,000 or upwards, but is less than Rs. 40,000	One anna and three pies in the rupee.
	(7) When the total income is Rs. 40,000 or upwards ..	One anna and six pies in the rupee.
In the case of every company, and every registered firm whatever its total income		One anna and six pies in the rupee.

RATES OF SUPER-TAX.

In respect of the excess over fifty thousand rupees of total income

		Rate.
(1)	In the case of every company	One anna in the rupee.
(2)	(*a*) In the case of every Hindu undivided family— (*i*) in respect of the first twenty-five thousand rupees of the excess	*Nil.*
	(*ii*) for every rupee of the next twenty-five thousand rupees of such excess	One anna in the rupee.
	(*b*) In the case of every individual and every unregistered firm, for every rupee of the first fifty thousand rupees of such excess	One anna in the rupee.
	(*c*) In the case of every individual, every unregistered firm and every Hindu undivided family :— (*i*) or every rupee of the second fifty thousand rupees of such excess	One and a half anna in the rupee.

(*ii*) for every rupee of the next fifty thousand rupees of such excess .. ..Two annas in the rupee.
(*iii*) for every rupee of the next fifty thousand rupees of such excess .. ..Two and a half annas in the rupee.
(*iv*) for every rupee of the next fifty thousand rupees of such excess .. ..Three annas in the rupee.
(*v*) for every rupee of the next fifty thousand rupees of such excess .. ..Three and a half annas in the rupee.
(*vi*) for every rupee of the next fifty thousand rupees of such excess .. ..Four annas in the rupee.
(*vii*) for every rupee of the next fifty thousand rupees of such excess .. ..Four and a half annas in the rupee.
(*viii*) for every rupee of the next fifty thousand rupees of such excess .. ..Five annas in the rupee.
(*ix*) for every rupee of the next fifty thousand rupees of such excess .. ..Five and a half annas in the rupee.
(*x*) for every rupee of the remainder of the excess ..Six annas in the rupee.

The head of the Income-Tax Department of a province is the Commissioner of Income-tax who is appointed by the Governor-General in Council. The rest of the income-tax staff in a province are subordinate to him and they are appointed and dismissed by him. His power of appointment and dismissal is, under section 5 (4) "subject to the control of the Governor-General in Council," but the Governor-General in Council exercises this control through the local Government.

The estimated yield of Income-tax in 1922-23 is Rs. 22,11,39,000.

THE DEBT.

On 31st August 1922, the national debt of India was 574 crores in round figures. This figure represents less than Rs. 19 per head of India's population; when compared with the public revenues, which in 1920-21 amounted to about 206 crores, constitutes a national indebtedness which, in comparison with the national resources, is very much smaller than that of most other nations. The reason why India is in this favourable position is mainly the care with which, in the long years of peace preceding the great war, her outlay was restricted to her available means whereby the accumulation of wasteful and unproductive debt was avoided. At the commencement of the war India found herself in a position when almost the whole of her debt represented productive outlay on railways and irrigation, normally yielding a return considerably in excess of the interest which she had to pay on the amount borrowed, including the interest on the small amount of debt which could be described as unproductive.

Productive Debt.—The following table shows the amount of the national debt of India both productive and non-productive, from time to time:—

[IN CRORES OF RUPEES.]

	Ordinary Debt.	Productive Debt.			Total of debt.
		Railways.	Irrigation.	Total.	
On 31st March—					
1893	97·0	136·5	28·9	165·4	262·0
1898	105·5	159·0	32·5	191·5	296·5
1903	88·7	192·1	37·2	229·3	318·0
1908	56·1	266·6	44·8	311·4	367·5
1913	37·5	317·7	56·4	374·1	411·6
1914	19·2	333·0	59·1	392·1	411·3
1915	3·3	349·8	61·6	411·4	414·7
1916	3·0	351·6	63·6	415·2	418·2
1917	10·5	353·6	64·9	418·5	429·0
1918	132·5	358·8	65·9	424·7	557 2
1919	129·9	365·5	66·7	432·2	562·1
1920	119·7	378·6	67·5	446·1	565 8
1921	99·9	404·6	68·7	473·3	564·2
1922	120·6	426·1	66·1	492·2	612·8

AMOUNT OF COMBINED DEBT OF THE GOVERNMENT OF INDIA AND PROVINCIAL GOVERNMENTS.

Year.	Debt in India.		Debt in England.	Net Amount of Permanent Debt incurred (—Discharged)		Total Debt.			Total.
	Permanent.	Floating.	Permanent.	Rupees.	£	In India.	In England.		
	Rs.	Rs.	£	Rs.	£	Rs.	£	Rs. (@ Rs. 10 to £1)	Rs.
1919–20 ..	2,76,86,33,953	52,98,00,000	192,631,081	18,36,40,517	—9,897,488	3,29,84,33,953	192,631,081	1,92,63,10,808	5,22,47,44,761
1920–21 ..	2,86,64,24,751	1,04,93,10,000	191,329,246	9,77,90,798	—1,301,835	3,91,57,34,751	191,329,246	1,91,32,92,457	5,82,90,27,208
1921–22 ..	3,18,73,65,651	1,11,85,70,000	205,128,482	32,09,40,900	13,799,236	4,30,59,35,651	205,128,482	2,05,12,84,826	6,35,72,20,477

CLASSIFICATION OF COMBINED DEBT OF THE GOVERNMENT OF INDIA AND THE PROVINCIAL GOVERNMENTS.

Year.	Debt debited to Commercial Departments.				Ordinary Debt.	Floating Debt.
	Railways.	Irrigation.	Posts & Telegraphs.	Forest.		
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1920-21 ..	3,77,45,54,938	68,77,12,546	....	..	31,74,49,724	1,04,93,10,000
1921–22 ..	3,99,67,52,477	78,00,79,612	15,23,64,560	3,09,239	30,91,44,589	1,11,85,70,000

INTEREST PAID ON DEBT AND OTHER OBLIGATIONS.

Year.	In India.	In England. * Sterling = Rupees.		Total.
	Rs.	£	Rs.	Rs.
1920–21	29,76,63,827	7,236,388	8,40,74,527	29,17,38,354
1921–22	22,63,21,346	7,239,271	10,94,72,806	33,57,94,152

* Conversion has been effected at the average market rate of exchange for the year as adopted for the purpose of the Government of India's accounts.

	Accounts, 1921-1922.			
	India.	England.*	Exchange.	Total.
DEBT SERVICES—	Rs.	Rs.	Rs.	Rs.
Interest on Ordinary Debt ..	19,05,17,484	7,23,92,711	3,70,80,095	29,99,90,290
Deduct—Amount chargeable to—				
Railways	9,22,00,832	4,24,61,280	2,16,85,936	15,63,48,048
Irrigation	12,18,481	....	....	12,18,481
Post and Telegraphs	56,81,015	....	....	56,81,015
Provincial Governments ..	2,58,41,800	....	..	2,58,41,800
Remainder chargeable to Ordinary Debt	6,55,75,356	2,99,31,431	1,53,94,159	11,09,00,946
Interest on other obligations.	2,60,97,497	....	....	2,60,97,497
Sinking Funds	1,54,00,000	50,00,000	25,71,571	2,29,71,571
TOTAL	10,70,72,853	3,49,31,431	1,79,65,730	15,99,70,014

	Revised Estimate, 1922-1923.			
	India.	England.*	Exchange.	Total.
DEBT SERVICES—*contd.*	Rs.	Rs.	Rs.	Rs.
Interest on Ordinary Debt ..	17,44,40,000	8,66,11,000	4,33,06,000	30,43,17,000
Deduct—Amount chargeable to—				
Railways	10,58,98,000	4,25,23,000	2,12,62,000	16,96,83,000
Irrigation	10,76,000	....	....	10,76,000
Post and Telegraphs	62,05,000	....	....	62,05,000
Provincial Governments ..	3,10,54,000	....	....	3,10,54,000
Remainder chargeable to Ordinary Debt	3,01,67,000	4,40,88,000	2,20,44,000	9'62,99,000
Interest on other obligations ..	3,15,01,000	60,000	30,000	3,15,91,000
Sinking Funds	1,54,00,000	50,00,000	25,00,000	2,29,00,000
TOTAL	7,70,68,000	4,91,48,000	2,45,74,000	15,07,90,000

	Budget Estimate, 1923-1924.			
	India.	England.*	Exchange.	Total.
DEBT SERVICES—*contd.*	Rs.	Rs.	Rs.	Rs.
Interest on Ordinary Debt ..	20,29,30,000	10,04,95,000	5,02,18,000	35,36,73,000
Deduct Amount chargeable to—				
Railways	12,16,05,000	4,41,23,000	2,20,62,000	18,77,90,000
Irrigation	10,88,000	....	....	10,88,000
Post and Telegraphs	68,28,000	....	....	68,28,000
Provincial Governments ..	4,00,15,000	....	....	4,00,15,000
Remainder chargeable to Ordinary Debt	3,33,94,000	5,63,72,000	2,81,86,000	11,79,52,000
Interest on other obligations..	3,21,07,000	36,000	18,000	3,21,61,000
Sinking Funds	1,54,00,000	44,29,000	22,15,000	2,20,44,000
TOTAL	8,09,01,000	6,08,37,000	3,04,19,000	17,21,57,000

* Sterling converted in Rupees at £ 1=Rs. 10.

THE INDIAN MINTS.

The silver coinage executed for the Government of India during 1922-23 consisted of Rs. 63 lakhs of whole rupees and half rupees coined from silver obtained from melting uncurrent coins. No other coinage of rupees was undertaken during the year.

Nickel and Bronze coinage.—The coinage during 1922-23 consisted of Rs. 5½ lakhs of 2-anna nickel, Rs. 50,000 of half-pice and Rs. 44,000 of pie pieces.

HISTORY OF THE COINAGE.

The Indian mints were closed to the unrestricted coinage of silver for the public from the 26th June 1893, and Act VIII of 1893, passed on that date, repealed Sections 10 to 26 of the Indian Coinage Act of 1870, which provided for the coinage at the mints for the public of gold and silver coins of the Government of India. After 1893 no Government rupees were coined until 1897, when, under arrangements made with the Native States of Bhopal and Kashmir, the currency of those States was replaced by Government rupees. The re-coinage of these rupees proceeded through the two years 1897 and 1898. In 1899 there was no coinage of rupees; but in the following year it seemed that coinage was necessary, and it was begun in February 1900, the Government purchasing the silver required, and paying for it mainly with the gold accumulated in the Paper Currency Reserve. In that and the following month a crore of rupees was coined and over 17 crores of rupees in the year ending the 31st March 1910 including the rupees issued in connection with the conversion of the currencies of Native States. From the profit accruing to Government on the coinage it was decided to constitute a separate fund called the Gold Reserve Fund as the most effective guarantee against temporary fluctuations of exchange. The whole profit was invested in sterling securities, the interest from which was added to the fund. In 1906 exchange had been practically stable for eight years, and it was decided that of the coinage profits devoted to this fund, six crores should be kept in rupees in India, instead of being invested in gold securities. The Gold Reserve Fund was then named the Gold Standard Reserve. It was ordered in 1907 that only one-half of the coinage profits should be paid into the reserve, the remainder being used for capital expenditure on railways. The Gold Standard Reserve was called into action before the year 1907-08 was out. Exchange turned against India, and in March 1908, the Government of India offered bills on the Secretary of State up to half a million sterling, while the Secretary of State sold £1,000,000 Consols in order to meet such demands. During April to August, further sterling bills were sold for a total amount of £8,058,000. On a representation by the Government of India, the Secretary of State agreed to defer the application of coinage profits to railway construction until the sterling assets of the Gold Standard Reserve amounted to £25,000,000. On the outbreak of the war in August 1914 the Reserve was drawn upon to meet the demands for sterling remittances, and Government offer to sell £1,000,000 of Bills weekly .

Gold.

Since 1870 there had been no coinage of double mohurs in India and the last coinage of single mohurs before 1918 in which year coinage was resumed, was in the year 1891-92.

A Royal proclamation was issued in 1918 establishing a branch of the **Royal Mint at Bombay**. It stated:—Subject to the provision of this proclamation the Bombay Branch Mint shall for the purpose of the coinage of gold coins be deemed to be part of the Mint, and accordingly, (a) the Deputy Master of the Bombay Branch Mint shall comply with all directions he may receive from the Master of the Mint whether as regards the expenditure to be incurred or the returns to be made or the transmission of specimen coins to England or otherwise and (b) the said specimen coins shall be subject to the trial of the pyx under section 12 of the Coinage Act, 1870, so that they shall be examined separately from the coins coined in England or at any other branch of the Mint. and (c) the Deputy Master of the Bombay Branch Mint and other officers and persons employed for the purpose of carrying on the business of the Branch Mint may be appointed, promoted, suspended and removed and their duties assigned and salaries awarded and in accordance with the provisions of section 15 of the Coinage Act, 1870. Pending the completion of the arrangements at the Branch Royal Mint, power was taken by legislation to coin in India gold mohurs of the same weight and fineness as the sovereign. Altogether 2,109,703 pieces of these new coins of the nominal value of Rs. 3,16,45,545, were struck at the Bombay Mint. The actual coinage of sovereigns was begun in August, 1918, and 1,295,372 sovereigns were coined during the year. This branch of the Royal Mint was closed in April, 1919, owing to difficulties in supplying the necessary staff.

Act XXII of 1899, passed on the 15th September 1899, provided that gold coin (sovereign and half-sovereigns) shall be a legal tender in payment or on account at the rate of fifteen rupees for one sovereign.

With the receipt of large consignments of gold, the Bombay Mint made special arrangements for the **refining of gold** by the chlorine process and at the end of the year 1919-20 the Refinery Department was capable of refining a daily amount of 6,000 ounces of raw gold. The Refinery turned out 16,62,466 fine tolas of refined gold in 1920-21.

Silver.

The weight and fineness of the silver coins are :—

—	Fine Silver grains.	Alloy grains.	Total grains.
Rupee	165	15	180
Half-rupee	82½	7½	90
Quarter-rupee or 4-anna piece	41¼	3¾	45
Eighth of a rupee or 2-anna piece ..	20⅝	1⅞	22½

One rupee = 165 grains of fine silver.
One shilling = 80$\frac{4}{11}$ grains of fine silver.
One rupee = shillings 2·0439.

Copper and Bronze.

Copper coinage was introduced into the Bengal Presidency by Act XVII of 1835 and into the Madras and Bombay Presidencies by Act XXII of 1844.

The weight of the copper coins struck under Act XXIII of 1870 remained the same as it was in 1835. It was as follows :—

	Grains troy.
Double pice or half-anna	200
Pice or quarter-anna	100
Half-pice or one-eighth of an anna ..	50
Pie being one-third of a pice or one-twelfth of an anna	33⅓

The weight and dimensions of bronze coins are as follows :—

	Standard weight in grains troy.	Diameter in millimetres.
Pice	75	25·4
Half-pice	37½	21·15
Pie	25	17·45

Nickel.

The Act of 1906 also provides for the coinage of a nickel coin. It was directed that the nickel one-anna piece should thenceforth be coined at the Mint and issue. The notification also prescribed the design of the coin, which has a waved edge with twelve scollops, the greatest diameter of the coin being 21 millimetres and its least diameter 19·8 millimetres. The desirability of issuing a half anna nickel coin was considered by the Government of India in 1909 but after consultation with Local Governments it was decided not to take action in this direction until the people had become thoroughly familiar with the present one-anna coin. The two-anna nickel coin was introduced in 1917-18 ; and the four-anna and eight-anna nickel coins in 1919. The eight-anna nickel is now being withdrawn from circulation.

The Currency System.

The working of the Indian currency system which has commanded a large amount of public attention since 1893, was forced to the front in 1920, as the result of measures taken to stabilise the exchange value of the rupee after the fluctuations caused by the war. These assumed so much importance, and they continue to bulk so largely in all Indian economic questions, that we propose to give here a short summary of the Indian currency system in non-technical language.

I. THE SILVER STANDARD.

Prior to 1893 the Indian currency system was a mono-metallic system, with silver as the standard of value and a circulation of silver rupees and notes based thereon. But with the opening of new and very productive silver mines in the United States of America the supply of silver exceeded the demand and it steadily receded in value. The result was that the gold value of the rupee, which was nominally two shillings, fell continuously until it reached the neighbourhood of a shilling. These disturbances were prejudicial to trade, but they were still more prejudicial to the finances of the Government. The Government of India has to meet every year in London a substantial sum in the form of payment of interest on the debt, the salaries of officials on leave, the pensions of retired officials, as well as large payment for stores required for State enterprises. As the rupee fell in its gold value the number of rupees required to satisfy these payments rose. The total reached a pitch which seriously alarmed the Government, which felt that it might be called upon to raise a sum in rupees which would necessitate a considerable increase in taxation, which should be avoided if possible. It was therefore decided to take measures to raise and fix the gold value of the rupee for the purposes of exchange.

Closing the Mints.—The whole question was examined by a strong committee under the presidency of Lord Herschell, whose report is commonly called the Herschell Report. It was decided in 1893 to close the mints to the unrestricted coinage of silver. This step led, as was intended, to a gradual divergence between the exchange value of the rupee and the gold value of its silver content. Government ceased to add rupees to the circulation. Rupees remained unlimited legal tender and formed the standard of value for all internal transactions. Since Government refused, and no one else had the power to coin rupees, as soon as circumstances led to an increased demand for rupees, the exchange value of the rupee began to rise. By 1898 it had approached the figure of one shilling and fourpence. Meantime, in response to the undertaking of Government to give notes or rupees for gold at the rate of fifteen rupees to the pound sterling, gold began to accumulate in the Paper Currency Reserve. These purposes having been attained, a second committee was appointed under the chairmanship of Sir Henry Fowler to consider what further steps should be adopted in the light of these conditions. The report of the Fowler Committee as it was called marked the second stage in Ind an currency policy.

II. THE NEW STANDARD.

The Fowler Committee rejected the proposal to re-open the Mints to the free coinage of silver. They proposed that the exchange value of the rupee should be fixed at one shilling and fourpence, or fifteen rupees to the sovereign. They further suggested that the British sovereign should be made a legal tender and a current coin in India: that the Indian mints should be thrown open to the unrestricted coinage of gold; so that the rupee and the sovereign should freely circulate side by side in India. The goal which the Committee had in view was a gold standard supported by a gold currency. Now under the condition which compelled the Government of India to give either rupees or rupee notes for gold tendered in India, at the rate of fifteen rupees to the sovereign, it was impossible for the rate of exchange to rise above one shilling and fourpence, save by the fraction which covered the cost of shipping gold to India. But if the balance of trade turned against India, it was still possible for the rate of exchange to fall. To meet this the Fowler Committee recommended that the profits on coining rupees should not be absorbed in the general revenues, but should be set aside in a special reserve, to be called the Gold Standard Reserve. Inasmuch as the cost of coining rupees was approximately elevenpence halfpenny, and they were sold to the public at one and fourpence, the profits were considerable; they were to have been kept in gold, so as to be freely available when required for the support of exchange.

A 16 pence Rupee.—The Government of India professed to accept all the recommendations of the Fowler Committee; actually only a portion of them was put in practice. The official rate of exchange was fixed at one and fourpence. The sovereign and the half sovereign were declared unlimited legal tender in India. But after a first attempt, when sovereigns soon came back to the treasuries, no effort was made to support the gold standard by an active gold currency. The gold mint was not set up. The Gold Standard Reserve was established, but instead of holding the Reserve in gold, it was invested in British securities. These practices gave rise to conditions which were never contemplated by the Fowler Committee. Reference has been made to the Home Charges of the Government of India, which at the time amounted to

about seventeen millions sterling a year. These are met by the sale of what are called Council Bills. That is to say, the Secretary of State, acting on behalf of the Government of India sold Bills against gold deposited in the Bank of England in London. These Bills when presented in India were cashed at the Government Treasuries. Now if the Secretary of State sold Council Bills only to meet his actual requirements, it follows that the balance of trade in favour of India over and above this figure would be liquidated, as it is in other countries, by the importation of bullion or by the creation of credits. It is a fact that owing to the failure of the policy of encouraging an active gold circulation to support the gold standard, gold tended to accumulate in India in embarrassing quantities. In 1904 therefore the Secretary of State declared his intention of selling Council Bills on India without limit at the price of one shilling fourpence one-eighth—that is to say gold import point. The effect of this policy was to limit the import of gold to India, for it was generally more convenient to deposit the gold in London and to obtain Council Bills against it, than to ship the gold to India. Nevertheless as the Egyptian cotton crop was very largely financed in sovereigns it was sometimes cheaper and more convenient to ship sovereigns from Egypt, or even from Australia, than to buy Council Bills. Considerable quantities of sovereigns found their way into India and circulated freely, particularly in the Bombay Presidency, the Punjab and parts of the Central Provinces.

Sterling Remittance.—This system worked until 1907-08. A partial failure of the rains in India in 1907, and the general financial stringency all over the world which followed the American financial crisis in the autumn, caused the Indian exchange to become weak in November. This was one of the occasions contemplated, in a different form, by the Fowler Committee when it proposed the formation of the Gold Standard Reserve. There had been very heavy coining of rupees in India and the amount in the Reserve was ample. But the Reserve was in securities not in gold, and was therefore not in a liquid form, nor was the time an opportune one for the realisation of securities. Moreover the authorities did not realise that a reserve is for use in times of emergency. It had been assumed that in times of weakness it would be sufficient for the Secretary of State to stop selling Council Bills, and it would firm up; meantime he would finance himself by drawing on the funds in the Gold Standard Reserve. But it was apparent that the stoppage of the sales of Councils was not enough; there was an insistent demand for the export of gold, or the equivalent of gold. The Government of India refused and exchange fell to one and threepence twenty-three thirty-seconds. Ultimately the authorities had to give way. It was decided to sell in India a certain quantity of sterling bills on London at one and threepence twenty-nine thirtyseconds, representing gold export point, and the equivalent of the export of gold. These were met in London from the funds in the Gold Standard Reserve. Bills to the extent of between eight and nine millions sterling were sold, which regularised the position and the Indian export trade recovered. Thus were gradually evolved the main principles of the Indian currency system. It consisted of silver rupees and rupee notes in India, with the sovereign and half sovereign unlimited legal tender at the rate of fifteen rupees to the sovereign, or one and fourpence. The rate of exchange was prevented from rising above gold import point by the unlimited sale of Council Bills at gold point in London; it was prevented from falling below gold point by the sale of Sterling Bills (commonly called Reverse Councils) at gold export point in India. But it was not the system proposed by the Fowler Committee, for there was no gold mint and only a limited gold circulation; some people invented for it the novel term of the gold exchange standard, a term unknown to the law of India. It was described by one of the most active workers in it as a "limping standard."

III. THE CHAMBERLAIN COMMITTEE.

This brings us to the year 1913. There were many critics of the system. Some hankered for a return to the open mints; others objected to the practice of unlimited sales of Council Bills as forcing rupees into circulation in excess of the requirements of the country. But the general advantages of a fixed exchange were so great as to smother the voices of the critics, and the trade and commerce of the country adjusted itself to the one and fourpenny rupee. But there gradually grew up a formidable body of criticism directed against the administrative measures taken by the India Office. These criticisms were chiefly directed at the investment of the Gold Standard Reserve in securities instead of keeping it in gold in India; at a raid on that reserve in order temporarily to relieve the Government of the difficulty of financing its railway expenditure; at the transfer of a solid block of the Paper Currency Reserve from India to London; at the holding of a portion of the Gold Standard Reserve in silver in order to facilitate the coining of rupees; and at the unlimited sales of Council Bills at rates which prevented the free flow of gold to India, thus forcing token rupees into circulation in quantities in excess of the requirements of the country. The cumulative effect of this policy was to transfer from India to London an immense block of India's resources, aggregating over seventy millions, where they were lent out at low rates of interest to the London bankers, whilst India was starved of money until at one point money was not available for loans even against Government securities and the bank rate was artificially high. All these things were done, it was contended, on the *obiter dicta* of a small Finance Committee of the India Office, from which all Indian influence was excluded, and on which London banking influence was supreme. The India Office for long ignored this criticism, until it was summarised in a series of articles in *The Times*, and public

opinion was focussed on the discussion through the action of the India Office in purchasing a big block of silver for coining purposes from Messrs. Montagu & Co., instead of through their recognised and constituted agents, the Bank of England. The Government could no longer afford to stand aloof and yet another Currency Committee was appointed under the chairmanship of Mr. Austen Chamberlain. This is known as the Chamberlain Committee.

New Measures.—The conclusions of this Commission were that it was unnecessary to support the Gold Standard by a gold currency; that it was not to the advantage of India to encourage the internal use of gold as currency; that the internal currency should be supported by a thoroughly adequate reserve of gold and sterling; that no limit should be fixed to the amount of the Gold Standard Reserve, one half of which should be held in gold; that the silver branch of the Gold Standard Reserve should be abolished; that Reverse Councils should be sold on demand; that the Paper Currency should be made more elastic; and that there should be two Indian representatives out of three on the Finance Committee of the India Office. The Committee dealt inconclusively with the accumulation of excessive balances in London, the general tenor of their recommendations being "not guilty, but do not do it again." They gave a passing commendation to the idea of a State Bank. Sir James Begbie, the only Indian banker on the Committee, appended a vigorous minute of dissent, in which he urged that the true line of advance was to discourage the extension of the token currency by providing further facilities for the distribution of gold when increases to the currency became necessary, including the issue of an Indian gold coin of a more convenient denomination than the sovereign or the half sovereign.

IV. CURRENCY AND THE WAR.

The report was in the hands of the Government of India shortly before the outbreak of the war. Some immediate steps were taken, like the abolition of the silver branch of the Gold Standard Reserve, but before the Government could deal entirely with the temporising recommendations of the Commission, the war broke out. The early effects of the war were precisely those anticipated. There was a demand for sterling remittance which was met by the sale of Reverse Councils, £8,707,000, being sold up to the end of January 1915. There were withdrawals from the Post Office Savings Banks, and a net sum of Rs. 8 crores was taken away. There was some lack of confidence in the Note issue, and a demand for gold; Notes to the extent of Rs. 10 crores were presented for encashment and the Government were obliged to suspend the issue of gold. But these were transient features and did not demand a moratorium; confidence was soon revived and Exchange and the Note issue continued strong. The difficulties which afterwards arose were from causes completely unanticipated by all students of the Indian currency. they arose from an immense balance of trade in favour of India, caused by the demand for Indian produce for the United Kingdom and the Allies and the decline in the export trade from these countries; a heavy expenditure in India on behalf of the British Government; and a phenomenal rise in the price of silver. If we take the three years 1916-17 to 1918-19 the balance of trade in favour of India was £6 millions a year above the corresponding years of the previous quinquennium. The disbursements in India on behalf of the Government of the United Kingdom and the Allies were by December 1919 £240,000,000. This balance of trade and expenditure for Imperial purposes could not be financed either by the import of the precious metals, owing to the universal embargo on the movement of gold and silver nor by credits in India. It could be financed only by the expansion of the Note issue, against sterling securities in the United Kingdom, chiefly Treasury Bills, and the issue of coined rupees. But simultaneously there was a reduction in the output of the silver mines of the world coinciding with an increased demand for the metal. The price of silver in 1915 was 27¼ pence per standard ounce. In May 1919 it was 58 pence, on the 17th December of that year it was 78 pence. The main difficulties in India were not therefore the prevention of the rupee from falling below the ratio of 15 to one, but to keep it within any limits and to provide a sufficiency to meet the demand.

Rise in Exchange.—The measures adopted by the Government of India in these emergencies were to bring exchange under rigid control, confining remittance to the finance of articles of national importance. The next step was to raise the rate for the sale of Council Bills, so that silver might be purchased at a price which would allow rupees to be coined without loss. The following table shows how rates were raised from one shilling fourpence to two shillings fourpence:—

Date of Introduction.	Minimum Rate for Immediate Telegraphic Transfers.
1d January 1917 ..	1 4⅛
28th August 1917 .	1 5
12th April 1918 ..	1 6
13th May 1919 ..	1 8
12th August 1919 .	1 10
15th September 1919 .	2 0
22nd November 1919 ..	2 2
12th December 1919 ..	2 4

Rise in Exchange.—Silver for coining was purchased in large quantities, the following table showing the amount acquired by the Government of India in the last five years :—

	In open Market (Standard Ounces).	From United States Dollar Reserve (equivalent in Standard Ounces).
1915-16	8,636,000	—
1916-17	124,535,000	—
1917-18	70,923,000	—
1918-19	106,410,000	152,518,000
1919-20 (to 30th November 1919)	14,108,000	60,875,000
Total ..	324,612,000	213,393,000

The total amount is thus 538,005,000 standard ounces.

Gold and silver were taken under control and measures taken to prevent export and melting. Gold went to a premium and ceased to function as currency. The Note issue was expanded, and small Notes of one and two and a half rupees were specially prepared to economise the use of silver rupees. The nature of this expansion is shown below :—

Date.	Lakhs of Rupees.					
	Gross Note Circulation.	Composition of Reserve.				Percentage of Total Metallic Reserve to gross Note Circulation.
		Silver.	Gold.	Securities.	Total.	
31st March 1914 ..	66,12	20,53	31,59	14,00	66,12	78·9
„ 1915 ..	61,63	32,34	15,29	14,00	61,63	77·3
„ 1916 ..	67,73	23,57	24,16	20,00	67,73	70·5
„ 1917 ..	86,38	19,22	18,67	48,49	86,38	43·9
„ 1918 ..	99,79	10,79	27,52	61,48	99,79	38·4
„ 1919 ..	153,46	37,39	17,49	98,58	153,46	35·8
30th November 1919 ..	179,67	47,44	32,70	99,53	179,67	44·6

The facilities for the encashment of Notes were reduced. In these ways the Government were able to maintain the broad convertibility of the Note issue and finance the essential trades and expenditure for the Imperial Government. It often meant sailing very near to the wind, but these measures carried the country through the war.

V. THE 1919 COMMITTEE.

The effect of these measures however was to jettison the currency policy pursued from 1893 to 1915, the main object of which was to stabilise the rupee at one and fourpence. The war being over, a Committee was appointed to advise in regard to the future of Indian exchange and currency. It sat in 1919 and reported towards the end of the year. Its main recommendations are summarised below :—

(i) It is desirable to restore stability to the rupee and to re-establish the automatic working of the Indian currency system.

(*ii*) The reduction of the fineness or weight of the rupee, the issue of 2 or 3-rupee coins of lower proportional silver content than the present rupee, or the issue of a nickel rupee, are expedients that cannot be recommended.

(*iii*) The maintenance of the convertibility of the note issue is essential, and proposals that do not adequately protect the Indian paper currency from the risk of becoming inconvertible cannot be entertained.

(*iv*) The rise in exchange, in so far as it has checked and mitigated the rise in Indian prices, has been to the advantage of the country as a whole, and it is desirable to secure the continuance of this benefit.

(*v*) Indian trade is not likely to suffer any permanent injury from the fixing of exchange at a high level.

If, contrary to expectation, a great and rapid fall in world prices were to take place, and if the costs of production in India fail to adjust themselves with equal rapidity to the lower level of prices, then it might be necessary to consider the problem afresh.

(*vi*) The development of Indian industry would not be seriously hampered by a high rate of exchange.

(*vii*) The gain to India of a high rate of exchange for meeting the Home charges is an incidental advantage that must be taken into consideration.

(*viii*) To postpone fixing a stable rate of exchange would be open to serious criticism and entail prolongation of Government control.

(*ix*) The balance of advantage is decidedly on the side of fixing the exchange value of the rupee in terms of gold rather than in terms of sterling.

(*x*) The stable relation to be established between the rupee and gold should be at the rate of Rs. 10 to one sovereign, or, in other words, at the rate of one rupee for 11·30,016 grains of fine gold, both for foreign exchange and for internal circulation.

(*xi*) If silver rises for more than a brief period above the parity of 2s. (gold), the situation should be met by all other available means rather than by impairing the convertibility of the note issue. Such measures might be (*a*) reduction of sale of Council Bills; (*b*) abstention from purchase of silver; (*c*) use of gold to meet demands for metallic currency. If it should be absolutely necessary to purchase silver, the Government should be prepared to purchase even at a price such that rupees would be coined at a loss.

(*xii*) Council Drafts are primarily sold not for the convenience of trade but to provide for the Home charges in the wider sense of the term. There is no obligation to sell drafts to meet all trade demands; but, if without inconvenience or with advantage the Secretary of State is in a position to sell drafts in excess of his immediate needs, when a trade demand for them exists, there is no objection to his doing so, subject to due regard being paid to the principles governing the location of the reserves.

Council Drafts should be sold as now by open tender at competitive rates, a minimum rate being fixed from time to time on the basis of the sterling cost of shipping gold to India. At present this rate will vary; but when sterling is again equivalent to gold, it will remain uniform.

The Government of India should be authorised to announce, without previous reference to the Secretary of State on each occasion, their readiness to sell weekly a stated amount of Reverse Councils (including telegraphic transfers) during periods of exchange weakness at a price based on the cost of shipping gold from India to the United Kingdom.

(*xiii*) The import and export of gold to and from India should be free from Government control.

(*xiv*) The statutory minimum for the metallic portion of the Paper Currency Reserve should be 40 per cent. of the gross circulation.

As regards the fiduciary portion of the reserve, the holding of securities issued by the Government of India should be limited to 20 crores. The balance should be held in securities of other Governments comprised within the British Empire, and of the amount so held not more than 10 crores should have more than one year's maturity and all should be redeemable at a fixed date. The balance of the invested portion above these 30 crores should be held in short-dated securities, with not more than one year's maturity, issued by Government within the British Empire.

The sterling investments and gold in the Paper Currency Reserve should be revalued at 2s. to the rupee. The depreciation which will result from this revaluation, cannot be made good at once, but any savings resulting from the rise in exchange will afford a suitable means of discharging this liability in a limited number of years.

(*xv*) With a view to meeting the seasonal demand for additional currency, provision should be made for the issue of notes up to five crores over and above the normal fiduciary issue as loans to the Presidency Banks on the security of export bills of exchange.

Minority Report.—The main object of the Committee, it will be seen, was to secure a stable rate of exchange, without impairing the convertibility of the Note issue, and without debasing the standard silver rupee in India, or substituting another coin of inferior metallic content, which would be debasement in another form. In order to attain these ends it was imperative to fix a ratio for the rupee in relation to gold which would ensure that the Government was able to purchase silver for coining purposes without more than temporary loss. For reasons given in the report they fixed this point at two shillings gold: all other recommendations are subsidiary thereto. But in this they were not unanimous: an important member of the Committee, Mr. Dadaba Dalal, of Bombay, appended a minority report in which he urged the adoption of the following courses:—

(*a*) The money standard in India should remain unaltered; that is, the standard of the sovereign and gold mohur with rupees related thereto at the ratio of 15 to 1.

(*b*) Free and unfettered imports and exports by the public of gold bullion and gold coins.

(*c*) Free and unfettered imports and exports by the public of silver bullion and silver coins.

(*d*) The existing silver rupees of 165 grains of fine silver at present in circulation to continue full legal tender.

(*e*) As long as the price of silver in New York is over 92 cents, Government should not manufacture silver rupees containing 165 grains fine silver.

(*f*) As long as the price of silver is over 92 cents Government should coin 2 rupee silver coins of reduced fineness compared with that of the present silver rupee and the same to be unlimited legal tender.

(*g*) Government to sell Council Bills by competitive tenders for the amount defined in the Budget as required to be remitted to the Secretary of State. The Budget estimate to show under separate headings the amount of Council Bills drawn for Home Charges, for Capital Outlay and Discharge of Debt. Council Bills to be sold for Government requirements only and not for trade purposes, except for the purpose mentioned in the next succeeding recommendation.

(*h*) "Reverse" drafts on London to be sold only at 1s. 3 29-32d. The proceeds of "Reverse" drafts to be kept apart from all other Government funds and not to be utilised for any purpose except to meet drafts drawn by the Secretary of State at a rate not below 1s. 4 3-32d. per rupee.

VI. THE TWO SHILLING RUPEE.

The fundamental recommendation of the Committee was that the rupee should be linked to gold and not to sterling, in view of the decline in the value of sterling; that it should be linked at the rate of two shillings instead of the standard value, one and fourpence: all other recommendations were ancillary to this. But it is very important to bear in mind the twofold problem which confronted the Committee. It would be quite easy to fix any low ratio provided the paper currency were made inconvertible, or the rupee debased to such a point that the Government in providing rupee currency, were independent of the price of silver. But if the convertibility of the rupee were to be maintained, and if the rupee were not to be debased, it was essential that the new ratio should be one at which the Government could reasonably rely on purchasing without loss the silver necessary to meet the heavy demands for rupee in India. For reasons set out in the Report, the Committee came to the conclusion that the Government could reckon on purchasing silver for coining at a little under two shillings gold, and that powerfully influenced them in fixing the new ratio at two shillings gold.

The Report Adopted.—The Currency Committee's Report was signed in December 1919; but it was not until February 1920 that action was taken thereon. In the first week of that month a Notification was issued in India accepting the principal recommendations in the Report and notifying that the necessary official action would be taken thereon. This action covered a wide field, but for the sake of clarity in this narrative we shall concentrate on the main issue, the changing of the official monetary standard from fifteen rupees to the sovereign to ten rupees to the sovereign and its effect on Indian currency and trade. That may be summarised in a sentence. A policy which was avowedly adopted to secure fixity of exchange produced the greatest fluctuations in the exchanges of any solvent country and widespread disturbance of trade, heavy losses to Government, and brought hundreds of big traders to the verge of bankruptcy.

Financial Confusion.—This result was produced by many causes. It has been explained above that the essential features of the Indian currency system are the free sales of Council Bills at gold export point in London to prevent exchange from rising above the official standard and the sale of Reverse Councils in India at gold export point to prevent exchange from falling below the official standard. Now when the Currency Report was signed the Indian exchanges were practically at two shillings gold. But between the signing of the Report and the taking of official action, there was a sensational fall in the sterling exchanges, as measured in dollars, the dollar-sterling rate, inasmuch as America was the only free gold market, being the dominating factor in the situation. Consequently the Indian exchanges were considerably below the two shillings gold rate when the Notification accepting the Currency Committee's Report was issued. The Indian exchanges were two shillings and fourpence, and weak at that; the gold rate was about two shillings ninepence. There was an immediate and prodigious demand for Reverse Councils, to take advantage of this high rate of exchange; the market rate jumped up to two shillings eightpence.

Effect of the Rise.—The effect of a rise in exchange has been well described in the words of the Currency Committee's Report; it is that a rising exchange stimulates imports and impedes exports, the effect of a falling exchange is the reverse.

Now when the official notification of the two shilling rupee was made the Indian export trade was weak. The great consuming markets of Great Britain and America were glutted with Indian produce. The continent of Europe, which was starved of Indian produce and in urgent need of it, had not the wherewithal to pay for it nor the means of commanding credit. The only Indian staples which were in demand were foodstuffs, and as the rains of 1920 failed over a wide area, the Government were not able to lift the embargo on the export for foodstuffs, save to a limited extent in the case of wheat. On the other hand, the import trade was strong. Orders had been placed for machinery and other manufactured goods during the war and after the Armistice for delivery at the discretion of manufacturers. These began to come forward.

Difficulties Accentuated.—In accordance with the principles laid down by the Currency Committee these difficulties were accentuated by the action of Government in raising exchange by an administrative act. The weak export trade was almost killed. At the same time the temptation of a high exchange gave powerful stimulus to the import trade and orders were placed for immense quantities of manufactured goods, in which textiles filled an important place. Afterwards other forces intervened which accentuated the difficulties of the situation. There was a severe commercial crisis in Japan and this

checked the export of Indian cotton. Japan is the largest buyer of Indian cotton, and when her merchants not only stopped buying but began to re-sell in the Indian markets, the trade was severely shaken and stocks accumulated at a great rate. Even before the 1920 crop came into the market the stocks in Bombay were double those in the corresponding period of the previous year. The expectations of a revival in the buying power of the Continent which were held in many quarters were disappointed and throughout the year there was a heavy balance of trade against India, which made the stabilisation of exchange at the high ratio attempted a hopeless proposition.

Confession of Failure.—Government struggled long against these conditions in the desperate hope that a revival of the export trade would come to their assistance, but they were further handicapped by the variations of the sterling-dollar exchange, which at one time took the rate for Reverse Councils to two shillings tenpence half penny. They sold two millions of Reverse Councils a week, then five millions, then dropped down to a steady million. But their policy only aggravated the situation. In addition to arresting the export trade and stimulating the import trade at a time when the precise converse was demanded, their action created an artificial movement for the transfer of capital from India to England. Large war profits accumulated in India since 1914 were hurriedly liquidated and transferred to England. Then the difference between the Reverse Council rate and the market rate, which on some occasions was several pence, induced gigantic speculations. The Exchange Banks set aside all their available resources for the purpose of bidding for Bills, and at once sold their allotments at substantial profits. Considerable groups of speculators pooled their resources and followed the same course. In this way the weekly biddings for the million of Reverse Councils varied from a hundred and 20 millions to a hundred and thirty millions and the money market was completely disorganised. The biddings assumed such proportions that it was necessary to put up fifty lakhs of rupees to obtain the smallest allotment made, five thousand pounds, and Reverse Councils and the large profits thereon came under the entire control of the Banks and the wealthy speculators. Various expedients were tried to remedy the situation but without the slightest effect.

Sterling for Gold.—The first definite break from the recommendations of the Currency Committee came at the end of June, when the Government announced that instead of trying to stabilise the rupee at two shillings gold they would aim at stabilising it at two shillings sterling, leaving the gap between sterling and gold to be closed when the dollar-sterling rate became par. The effect of this was to alter the rate at which Reverse Councils were sold from the fluctuating rate involved in the fluctuations of dollar-sterling exchange to a fixed sterling rate, namely one shilling elevenpence nineteen thirty seconds. But this had little practical effect. The biddings for Reverse Councils continued on a very big scale, and the market rate for exchange was always twopence or threepence below the Reverse Council rate. This practice continued until the end of September, when it was officially declared that Reverse Councils would be stopped altogether. Exchange immediately slumped to between one and sixpence and one and sevenpence, and it continued to range between these narrow points until the end of the year. The market made its own rate; it made a more stable rate than the efforts of Government to attain an administrative stability.

Other Measures.—Apart from the effort to stabilise exchange, which had such unfortunate results, the policy of Government had certain other effects. During the year all restrictions on the movement of the precious metals were removed, in accordance with the recommendations of the Currency Committee. This included the abandonment of the import duty on silver, always a sore point with Indian bullionists. Legislative action was taken to alter the official ratio of the sovereign from fifteen to one to ten to one; due notice of this intention was given to holders of sovereigns and of the gold mohurs which were coined as an emergency measure in 1918, and they were given the option of tendering them at fifteen rupees. As the gold value of these coins was above fifteen rupees only a limited number was tendered, although there was extensive smuggling of sovereigns into India to take advantage of the premium. Then measures were adopted to give greater elasticity to the Note issue. Under the old law the invested proportion of the Note issue was fixed by statute and it could be altered only by altering the law or by Ordinance. An Act was passed fixing the metallic portion of the Paper Currency Reserve at fifty per cent. of the Note Issue, the invested portion being limited to Rs. 20 crores in Indian securities and the balance in British securities of not more than twelve months currency. The invested portion of the Paper Currency Reserve was revalued at the new rate of exchange, and an undertaking was given that the profits on the Note issue would be devoted to writing off the depreciation, as also would be the interest on the Gold Standard Reserve when the total had reached £40 millions. Further, in order to give greater elasticity to the Note issue, power was taken to issue Rs. 5 crores of emergency currency in the busy season against commercial bills. These measures, save the alteration of the ratio, were generally approved by the commercial public.

Results.—It remains to sum up the results of these measures. In a pregnant sentence in their report the Currency Committee say that whilst a fixed rate of exchange exercises little influence on the course of trade, a rising exchange impedes exports and stimulates imports, a falling exchange exercises a reverse influence. Here we have the key to the failure of the currency policy attempted. At the moment when it was sought suddenly and violently to raise the rate of exchange by the introduction of the new ratio of two shillings gold, the export trade was weak and the import trade in obedience to the delivery of long deferred orders was strong. The very principle enunciated by the Currency Committee wrecked the policy which they recommended. The rising rate of exchange scotched the weak export trade and gave a great stimulus to imports. Unexpected forces, such as the financial crisis in Japan, the lack of buying power on the Continent, and the movement for the transfer of capital from India to England at the

artificially high rate of exchange stimulated these forces, but they had their origin in the attempt by administrative action artificially and violently to raise the rate of exchange. If let alone, the natural fall in exchange would have tended to correct the adverse balance of trade; the official policy exaggerated and intensified it. The effects on Indian business were severe. Exporters found themselves loaded with produce for which there was no foreign demand; importers found themselves loaded up with imported goods, bought in the expectation of the continuance of a high rate of exchange, delivered when it had fallen one and fourpence from the highest point reached. Immense losses were incurred by all importers. The Government sold £55 millions of Reverse Councils before abandoning their effort to stabilise exchange at the new ratio; the loss on these—that is the difference between the cost of putting the funds down in London and in bringing them back to India—was Rs 35 crores of rupees. Government sold £53 millions of gold, without breaking or seriously affecting the premium on gold. The Secretary of State, in the absence of any demand for Council Bills, was able to finance his expenditure in England only through the lucky chance of heavy expenditure on behalf of the Imperial Government for the forces in Mesopotamia—this expenditure being made in India and set off by payments in London. The only advantages were a considerable contraction of the Note issue and the silver token currency.

VII.—RECENT EXCHANGE AND CURRENCY HISTORY.

These unfortunate events have induced a wholesome caution in dealing with Indian currency questions. The general feeling is to leave currency and exchange alone, and not to attempt any further experiments whilst the world is in a state of flux, and economic questions are so obscure. Left alone, the Indian exchange and currency have righted themselves. Exchange has reverted to the neighbourhood of one and fourpence, and is firm at that figure. The Secretary of State has been able to sell Council Bills freely and so to place himself in funds. There has been a large return of rupees from circulation to the Treasuries, and the Indian Paper Currency has an exceedingly strong metallic backing. There are, of course, absurdities in the present position. The official rate of Exchange is still nominally ten rupees to the sovereign, but all official calculations are made on the basis of fifteen rupees to the sovereign, which is the market rate. Whilst Government offers to give ten rupees for a sovereign, sovereigns are selling in the bazars at from seventeen to nineteen rupees each. There is therefore no flow of gold to the Paper Currency Reserve, such as used to occur before the war. These circumstances have led to the demand from some quarters that the fiction of a two shilling rupee should now be abandoned, and that Government should officially revert to the one and fourpenny rupee. There is something to be said for this point of view, but on the other hand the economic bases of the world have been so shaken that it would need a brave man to say that the old ratio should be officially re-established, and whilst the sovereign is at a premium little advantage would be reaped from it. Whilst therefore there is every indication that India has reverted to the one and fourpenny rupee, and that there it will stay, the general consensus of opinion favours a policy of not attempting legally to fix any ratio. In other directions there has been a considerable advance in the monetary machinery of India. The Note issue has increased its popularity. Large districts where the crop used to be financed entirely in rupees have now gone over to the Note. The constitution of the Imperial Bank of India as a State Bank in all but name has improved the organisation and flexibility of Indian credit. That Bank is under engagement with the Government to open a hundred new branches in the first five years of its existence, and consequently reliable credit organisations are being brought nearer and nearer to the people. The metallic backing of the Paper Currency has been strengthened and the fiduciary portion of the Paper Currency Reserve brought within small proportions. Indeed that fiduciary element is so small that it is of little account. It used to be a subject of complaint that the Indian Paper Currency was not sufficiently elastic to meet the needs of a seasonal trade. Now power has been taken to issue emergency currency against commercial bills endorsed by the Imperial Bank up to twelve crores of rupees, which is ample for all emergencies. Further the Government of India is empowered to purchase sterling in India within certain limits when it can do so on favourable terms, and this adds an element of stability to Indian Exchange. In all these ways progress has been made and is being made; the continued presence on the statute book of the fiction that the Indian rupee is worth two shillings deceives nobody, and is little more than an unpleasant reminder of a disastrous experiment. The constitution of the two Reserves which are the backbone of the currency and Exchange position of India is shown in the following tables:—

VIII. THE RESERVES.

Composition of the Currency Reserve held against the note circulation at the end of each month. (In lakhs of rupees.)

MONTH.	COIN AND BULLION RESERVE.									SECURITIES.
	Gross circulation of notes.	Silver coin in India.	Gold coin and bullion in India.	Silver bullion under coinage.	Gold coin and bullion in England.	Silver bullion in England.	Gold coin and bullion in His Majesty's Dominions.	Gold coin and bullion in transit between India and England and His Majesty's Dominions.	Silver bullion in transit between India and England, and His Majesty's Dominions.	
1922.										
April	1,71,76	71,95	24,32	4,56	..	..	..	..	..	70,93
May	1,72,39	72,50	24,32	4,56	..	..	..	..	..	71,01
June	1,76,01	76,17	24,32	4,56	..	..	..	..	..	70,96
July	1,80,41	80,53	24,32	4,56	..	..	..	..	..	71,00
August	1,82,26	83,76	24,32	4,56	..	..	..	..	..	69,62
September	1,80,76	85,11	24,32	4,56	..	..	..	..	..	66,77
October	1,79,63	86,54	24,32	4,56	..	..	..	..	..	64,21
November	1,77,30	85,15	24,32	4,56	..	..	..	..	..	63,27
December	1,74,18	82,03	24,32	4,56	..	..	..	..	..	63,27
1923.										
January	1,72,65	80,49	24,32	4,56	..	..	..	..	..	63,28
February	1,73,89	81,73	24,32	4,56	..	..	..	..	..	63,28
March	1,74,70	82,49	24,32	4,56	..	..	..	..	..	* 63,33

* See note * on next page.

* **Made up of :—**

	Nominal Value.	Cost price.
	Rs.	Rs. a. p.
Rupee securities—		
3½ per cent. loan of 1842-43	8,15,95,000	8,00,00,000 0 0
3 per cent. loan of 1896-97	2,04,86,500	1,99,99,945 10 0
	10,20,81,500	9,99,99,945 10 0
Indian Treasury Bills	49,65,00,000	47,48,07,625 0 0
	59,85,81,500	57,48,07,570 10 0
	£ s. d.	£ s. d
Sterling securities—		
British Treasury Bills	5,880,000 0 0	5,847,772 15 2

Details of the balance of the Gold Standard Reserve on the 31st March 1923.

	£
In England—	
Estimated value on the 31st March 1923 of the Sterling Securities of the nominal value of £ 39,817,321 (as per details below)	40,043,831
Cash at the Bank of England	3,658
Total ..	40,047,489

Details of investments :—

	Face value £
British Treasury Bills	30,955,000
Guaranteed 2¾ per cent. Stock	438,720
National War Loan 5 per cent. Stock 1929-47	567,601
Union of South Africa Bills, 1923	700,000
Exchequer 5½ per cent. Bonds, 1925	2,250,000
National 5 per cent. War Bonds, 1924	3,606,000
National 5 per cent. War Bonds, 1922	500,000
National 5 per cent. War Bonds, 1928	725,000
National 5 per cent. War Bonds, 1929	75,000
Total ..	39,817,321

The chief characteristics of the Indian rainfall are its unequal distribution over the country, its irregular distribution throughout the seasons and its liability to failure or serious deficiency. The normal annual rainfall varies from 460 inches at Cherrapunji in the Assam hills to less than three inches in Upper Sind. The greatest rainfall actually measured at any station in any one year was 905 inches, recorded at Cherrapunji in 1861, while at stations in Upper Sind it has been nil. There are thus portions of the country which suffer as much from excessive rainfall as others do from drought.

The second important characteristic of the rainfall is its unequal distribution throughout the seasons. Except in the south-east of the peninsula, where the heaviest precipitation is received from October to December, by far the greater portion of the rain falls during the south-west monsoon, between June and October. During the winter months the rainfall is comparatively small the normal amount varying from half an inch to two inches, while the hot weather, from March to May or June, is practically rainless. Consequently it happens that in one season of the year the greater part of India is deluged with rain and is the scene of the most wonderful and rapid growth of vegetation; in another period the same tract becomes a dreary, sun-burnt waste. The transition from the latter to the former stage often occurs in a few days. From the agricultural point of view the most unsatisfactory feature of the Indian rainfall is its liability to failure or serious deficiency. The average annual rainfall over the whole country is about 45 inches and there is but little variation from this average from year to year, the greatest recorded being only about seven inches. But if separate tracts are considered, extraordinary variations are found. At many stations annual rainfalls of less than half the average are not uncommon, while at some less than a quarter of the normal amount has been recorded in a year of extreme drought.

Scarcity.—Classing a year in which the deficiency is 25 per cent. as a dry year and one in which it is 40 per cent. as a year of severe drought, the examination of past statistics shows that, over the precarious area, one year in five may be expected to be a dry year and one in ten a year of severe drought. It is largely in order to remove the menace of these years that the great irrigation systems of India have been constructed.

Government Works.—The Government irrigation works of India may be divided into two main classes, those provided with artificial storage, and those dependent throughout the year on the natural supplies of the rivers from which they have their origin. In actual fact, practically every irrigation work depends upon storage of one kind or another but, in many cases, this is provided by nature without man's assistance. In Northern India, upon the Himalayan rivers, and in Madras, where the cold weather rains are even heavier than those of the south-west monsoon, the principal non-storage systems are found.

The expedient of storing water in the monsoon for utilization during the subsequent dry weather has been practised in India from time immemorial. In their simplest form, such storage works consist of an earthen embankment constructed across a valley or depression, behind which the water collects, and those under Government control range from small tanks irrigating only a few acres each to the huge reservoirs now under construction in the Deccan which will be capable of storing over 20,000 million cubic feet of water. By gradually escaping water from a work of the latter type, a supply can be maintained long after the river on which the reservoir is situated would otherwise be dry and useless.

The Three Classes.—For the purpose of determining the source from which the funds for the construction of Government works are provided, they are divided into three classes, productive, protective and minor works. The main criterion to be satisfied before a work can be classed as productive is that it shall, within ten years of the completion of construction, produce sufficient revenue to cover its working expenses and the interest charges on its capital cost. Most of the largest irrigation systems in India belong to the productive class.

Protective works are constructed primarily with a view to the protection of precarious tracts and to guard against the necessity for periodical expenditure on the relief of the population in times of famine. They are financed from the current revenues of India, generally from the annual grant for famine relief and insurance, and are not directly remunerative, the construction of each such work being separately justified by a comparison of the value of each acre protected (based upon such factors as the probable cost of famine relief, the population of the tract, the area already protected and the minimum area which must be protected in order to tide over a period of severe drought) with the cost of such protection. A sum of Rs. 1,173 lakhs has, up to date, been expended on works of this nature.

It is difficult to define the class of minor works otherwise than by saying that works not classified either as productive or protective are classified as minor works. Nearly a third of the whole area irrigated in India from Government works is effected by these minor works.

Growth of Irrigation.—There has, during the last forty years, been a steady growth in the area irrigated by Government irrigation works. From 10½ million acres in 1878–79 the area annually irrigated rose to 19½ million acres at the beginning of the century and to 28 million acres in 1919–20, the record year up to date, from which figure it fell again to 27 million acres in 1920–21. The main increase has been in the class of productive works, which irrigated 4½ million acres in 1878–79, 10¼ million acres in 1900–01 and 18¾ million acres in 1919–20. The area irrigated by protective works has increased, in the same period, from nil to over three-quarters of a million acres, that by minor works from 6 million to 8½ million acres.

Some idea of the probable future development of irrigation can be obtained from the forecasts appended to the project estimates of the works now under construction and awaiting sanction. The irrigated area in 1919–20 was over 28 million acres. Schemes completed but which have not yet reached their full develop-

ment are expected to add about 100,000 acres to this total while works under construction will further enhance it by 2¼ million acres. Projects have also been submitted to the Secretary of State for sanction which, if constructed, will add another 4¾ million acres; a total eventual area in British India of about 36 million acres is thus at present contemplated from works sanctioned or awaiting sanction, irrespective of the natural extension of existing areas and of new projects, of which several are under consideration, which may be put forward in future.

The figures given are exclusive of the areas irrigated from the Punjab canals by branches constructed for Indian States, which amounted in 1919-20 to 650,000 acres. The Sutlej Valley scheme will add nearly 3½ million acres to this area, so that a gross total of some 40 million acres from Government works is confidently looked to.

Capital and Revenue.—The total capital invested in the works has risen from Rs. 4,236 lakhs in 1900-01 to Rs. 7,861 lakhs in 1920-21, an average increase of Rs. 180 lakhs a year. As regards revenue, the Government irrigation works of India, taken as a whole, yield a return of from 7 to 8 per cent. on the capital invested in them; this is a satisfactory result as Rs. 1,173 lakhs of the total have been spent on protective works, which return less than 1 per cent. and Rs. 7,03 lakh on minor works, the yield from which varies between 4 and 6 per cent. The capital outlay also includes expenditure on a number of large works under construction, which have not yet commended to earn revenue.

Charges for Water.—The charges for water are levied in different ways in the various provinces. In some, notably in Sind, the ordinary land revenue assessment includes also the charge for water, 9/10ths of this assessment being regarded as due to the canals. In others, as in parts of Madras and Bombay, different rates of land revenue are assessed according to whether the land is irrigated or not, and the assessment upon irrigated land includes also the charge for water. These methods may however be regarded as exceptional. Over the greater part of India water is paid for separately, the area actually irrigated is measured, and a rate is charged per acre according to the crop grown. Lower rates are often levied in cases where irrigation is by "lift", that is to say where the land is too high for the water to flow on to it by gravity and consequently the cultivator has to lift it on to his field.

Various other methods of assessment have been tried, such as by renting outlets for an annual sum, or by charging according to the volume of the water used, but these have never been successful. The cultivator fully understands the principle of "No crops, no charge" which is now followed as far as possible in canal administration, but has no confidence in a system under which his liability for water rate is independent of the area and quality of his crop.

The rates charged vary considerably with the crop grown, and are different in each province and often upon the several canals in a single province. Thus in the Punjab, they vary from Rs. 7-8-0 to Rs. 12 per acre for sugar-cane, from Rs. 4 to Rs. 7-8-0 per acre for rice, from Rs. 3-4-0 to Rs. 5-4-0 per acre for wheat, from Rs. 3 to Rs. 4-4-0 per acre for cotton and from Rs. 2 to Rs. 3-4-0 per acre for millets and pulses. No extra charge is made for additional waterings. Practically speaking, Government guarantees sufficient water for the crop and gives it as available. If the crop fails to mature, or if its yield is much below normal, either the whole or part of the irrigation assessment is remitted.

A somewhat different system, the long lease system, is in force in parts of Bengal and the Central Provinces, under which the cultivators pay a small rate for a term of years whether they take water or not. In these provinces where the normal rainfall is fairly high, it is always a question whether irrigation will be necessary at all, and if the cultivators have to pay the full rate, they are apt to hold off until water becomes absolutely essential, and the sudden and universal demand then usually exceeds the supply. By paying a reduced rate every year for a term of years they become entitled to water when required; consequently there is no temptation to wait till the last possible moment, and the demand is much more evenly distributed throughout the season.

Taken as a whole, irrigation is offered on extremely easy terms, and the water rates represent only a very small proportion of the extra profit which the cultivator secures owing to the water he receives.

Triennial Comparisons.—The average area irrigated in British India by Government works of all classes was 26¾ million acres, as compared with 25¾ million acres, the average of the previous triennium. The areas for each of the three years were 25,152,451 acres in 1918-19, 28,144,864 acres in 1919-20 and 27,004,321 acres in 1920-21. The area of 1919-20 is the record area irrigated in any one year up to date.

The results obtained in each province are given in the table below:—

Provinces.	Average area irrigated in previous triennium 1915-18.	Average area irrigated in triennium 1918-21.
Madras	7,339,088	7,276,257
Bombay (Deccan)	284,132	391,791
Sind	3,568,220	3,038,652
Bengal	112,539	108,618
United Provinces	3,121,834	3,501,848
Punjab	8,646,495	9,273,009
Burma	1,360,612	1,460,750
Bihar and Orissa	862,612	988,368
Central Provinces	110,814	331,551
North-West Frontier Province	337,000	355,647
Rajputana	22,992	20,947
Baluchistan	9,487	19,776
Total	25,775,827	26,767,214

Productive Works.—Taking productive works only, a similar comparison is given in the following table. It will be seen that the average area irrigated by such works during the triennium was nearly a million and a quarter acres more than in the previous period.

Provinces.	Average area irrigated in previous triennium 1915-18.	Average area irrigated in triennium 1918-21.
Madras	3,499,312	3,576,718
Bombay Deccan	31,633	51,178
Sind	1,407,654	1,138,261
Bengal	85,661	87,169
United Provinces	2,799,511	3,115,207
Punjab	7,632,536	8,480,798
Burma	267,921	312,786
Bihar and Orissa	808,528	898,844
Central Provinces	53,826	127,374
North-West Frontier Province	337,000	355,647
Total ..	16,923,582	18,143,982

Taking the productive works as a whole, the capital invested in them was, at the end of 1920–21, Rs. 5,986 lakhs. The net revenue for the year was Rs. 531 lakhs giving a return 8·88 per cent. as compared with 9 per cent. in 1918–19 and 9¾ per cent. in 1919–20. In considering these figures it must be remembered that the capital invested includes the expenditure upon several works which have only lately come into operation and others which are under construction, which classes at present contribute little or nothing in the way of revenue' moreover only receipts from water rates and a share of the enhanced land revenue due to the introduction of irrigation are credited to the canals, so that the returns include nothing on account of the large addition to the general revenues of the country which follows in the wake of their construction.

Protective Works.—Turning now to the protective works, the areas irrigated in the various provinces during the triennium were as below :—

Provinces.	Average area irrigated in previous triennium 1915-18.	Average area irrigated in triennium 1918-21.
Madras	106,676	108,145
Bombay Deccan	72,178	137,063
United Provinces	169,843	228,418
Bihar and Orissa	52,707	87,110
Central Provinces	40,544	175,235
Total ..	441,948	735,971

In so far as the financial results of these works are concerned, they have at least succeeded in paying their working expenses in each of the three years, and the results of 1920–21 afford hope that they will soon begin to do better although, of course, they are not built with any idea of their proving directly remunerative. They represent a capital outlay of 1,173 lakhs and returned 0·19 per cent. in 1918-19, 0·37 per cent. in 1919-20 and 0·94 per cent. in 1920–21. Here again the capital account is at present inflated by heavy expenditure on works, especially the two great Deccan storage schemes, which have not yet come into operation. The net revenue obtained rose from Rs. 2 lakhs in 1918–19 to Rs. 4 lakhs in 1919–20 and to over Rs. 11 lakhs in 1920–21.

Minor Works.—The results obtained from the minor works are given below. In this case there is a decrease of more than half a million acres below the average for the previous triennium :—

Province.	Average area irrigated in previous triennium 1915-18.	Average area irrigated in triennium 1918-21.
Madras	3,733,100	3,591,394
Bombay Deccan	180,321	203,550
Sind	2,160,566	1,900,391
Bengal	26,878	21,449
United Provinces	152,480	158,223
Punjab	1,013,959	792,211
Burma	1,092,691	1,147,964
Bihar and Orissa	1,377	2,414
Central Provinces	16,444	28,942
Rajputana	22,992	20,947
Baluchistan	9,489	19,776
Total ..	8,410,297	7,887,261

The minor works represent a capital expenditure of Rs. 703 lakhs but, as already explained, no capital account is kept for many of them. Those for which such accounts are maintained returned 5·83 per cent. in 1918-19, 5·35 per cent. in 1919-20 and 4·77 per cent. in 1920-21. These figures include the returns of certain canals in Madras and Bengal which have been constructed solely for navigation purposes; if irrigation works only are considered the corresponding percentages are 8·20, 8·04 and 8·17.

Irrigated Acreage.—A comparison between the acreage of crops matured during 1921-22 by means of Government irrigation works with the total area under cultivation is given below:—

Province.	Net area cropped.	Area irrigated by Government irrigation works.	Percentage of area irrigated to total cropped area.	Capital cost of Government irrigation works to end of 1920-21 in lakhs of rupees.	Estimated value of crops raised on areas receiving State irrigation in lakhs of rupees.
Madras	37,532,000	7,229,000	19·3	1,189	4,139*
Bombay Deccan	23,628,000	422,000	1·8	778	479
Sind	4,238,000	3,251,000	76·7	346	1,144
Bengal	23,701,000	105,000	0·4	367	70
United Provinces	33,697,000	2,673,000	7·9	1,402	2 481
Punjab	31,020,000	10,461,000	33·7	2,278	6,721
Burma	14,205,000	1,537,000	10·8	346	745
Bihar and Orissa	8,874,000	1,003,000	11·3	626	584
Central Provinces	16,690,000	439,000	2·6	428	286
North-West Frontier Province	2,876,000	439,000	15·3	282	336
Rajputana	240,000	24,000	10·0	35	10
Baluchistan	177,000	21,000	7·3	44	5
Total ..	196,879,000	27,604,000	14·0	8,121	17,000

*Exclusive of the value of crops raised on some 3 million acres irrigated by noncapital works.

It will be seen that 14 per cent. of the cropped area was so irrigated and that the value of the crops produced therefrom was more than double the total capital expended on the works. While the comparison between the cost of the works and the value of the crops can be pressed too far, as even in the absence of the canals crops though in many cases of an inferior quality would doubtless still have been raised on much of the area, yet the figures are sufficiently striking to be worth quoting especially as it is safe to say that, on many millions of acres of the areas affected, no crop of any sort could have been grown without the assistance of the canals

The main fact which emerges from the result of the triennium is that the irrigation systems are capable of functioning with effect in year of extreme drought. This is the crucial test, and the canals have come through it well. In spite of short supplies the irrigation was maintained at its normal figure, a result which only unceasing care and watchfulness can bring about and which, even with such care, could never have been obtained but for the enforcement in the past of strict observance of the policy that fair weather canals shall not be encouraged and that every system shall be so designed that, with the application of rigid economy, it shall be able to do its irrigation even in the most unfavourable years.

Projects.—At the close of the triennium three projects, for the Sukkur Barrage and Canals in Sind, for the Sutlej Valley Canals in the Punjab and for the Damodar Canal in Bengal, were open. The Sukkur Barrage, when completed will be the greatest work of its kind in the world, measuring 4,725 feet between the faces of the regulators on either side. The total cost of the scheme is estimated at Rs. 1,835 lakhs, of which the barrage accounts for about Rs. 569 lakhs and the canals for Rs. 1,266 lakhs. A gross area of 7½ million acres is commanded, of which 6¼ million acres is culturable and an annual area of irrigation of 5¼ million acres is anticipated, of which 2 million acres represents existing inundation irrigation which will be given an assured supply by the new canals. The ultimate annual net revenue forecasted as obtainable from the project, after paying working expenses, is Rs. 194 lakhs, which represents a return of 10½ per cent. on capital. This is the return from water rates alone, but a further large increase in general revenues may safely be reckoned upon from the area of 3 million acres of waste which will be brought under cultivation. There will be increases on this account under practically every head of revenue, such as railways, customs, stamps, excise and the like, not to mention the addition to the country's wealth owing to the production, on land at present barren, of crops to the value of Rs. 2,500 lakhs per annum.

The Sutlej Valley Project consists of four weirs, three on the Sutlej and one on the Panjnad, as the Chenab is called below its junction with the Sutlej, with twelve canals taking off from above them. The total area to be irrigated from the project is 5,108,000 acres, or nearly 8,000 square miles. Of this, 2,075,000 acres will be perennial and 3,033,000 acres non-perennial irrigation. 1,942,000 acres will be in British territory, 2,825,000 acres in Bahawalpur and 341,000 acres in Bikaner.

The total cost of the project is estimated at Rs. 1,460 lakhs. Upon this a return of 12¾ per cent. is anticipated from water-rates alone. But the scheme has another, and even more important source of revenue. On the introduction of irrigation, no less than 3¾ million acres of desert waste, the property of the three parties concerned, at present valueless, will become available for colonisation and sale. It is customary, in the *pro-forma* accounts of irrigation projects, to credit a scheme with the interest on the sale proceeds of Crown waste lands rendered culturable by its construction; if this is included, the annual return on the project will amount to nearly 38 per cent. It bids fair, indeed, to rival the Lower Chenab Canal, the return from which during the past seven years has averaged over 41 per cent.

WELLS AND TANKS.

So far we have dealt only with the great irrigation schemes. They are essentially exotic, the products of British rule; the real eastern instrument is the well. The most recent figures give thirty per cent. of the irrigated area in India as being under wells. Moreover the well is an extremely efficient instrument of irrigation. When the cultivator has to raise every drop of water which he uses from a varying depth, he is more careful in the use of it; well water exerts at least three times as much duty as canal water. Again, owing to the cost of lifting, it is generally used for high grade crops. It is estimated that well-irrigated lands produce at least one-third more than canal-watered lands. Although the huge areas brought under cultivation by a single canal scheme tend to reduce the disproportion between the two systems, it must be remembered that the spread of canals increases the possibilities of well irrigation by adding, through seepage, to the store of subsoil water and raising the level.

Varieties of Wells.—Wells in India are of every description. They may be just holes in the ground, sunk to subsoil level, used to a year or two and then allowed to fall into decay. These are temporary or kacha wells. Or they may be lined with timber, or with brick or stone. They vary from the kacha well costing a few rupees to the masonry well, which will run into thousands, or in the sandy wastes of Bikanir, where the water level is three hundred feet below the surface, to still more. The means of raising the water vary in equal degree. There is the *picottah*, or weighted lever, raising a bucket at the end of a pivoted pole, just as is done on the banks of the Nile. This is rarely used for lifts beyond fifteen feet. For greater lifts bullock power is invariably used. This is generally harnessed to the *mot*, or leather bag, which is passed over a pulley overhanging the well, then raised by bullocks who walk down a ramp of a length approximating to the depth of the well. Sometimes the *mot* is just a leather

bag, more often it is a self-acting arrangement, which discharges the water into a sump automatically on reaching the surface. By this means from thirty to forty gallons of water are raised at a time, and in its simplicity, and the ease with which the apparatus can be constructed and repaired by village labour, the *mot* is unsurpassed in efficiency. There is also the Persian wheel, an endless chain of earthenware pots running round a wheel. Recently attempts have been made, particularly in Madras, to substitute mechanical power, furnished by oil engines, for the bullock. This has been found economical where the water supply is sufficiently large, especially where two or three wells can be linked. Government have systematically encouraged well irrigation by advancing funds for the purpose and exempting well watered lands from extra assessment due to improvement. These advances, termed *takavi*, are freely made to approved applicants, the general rate of interest being 6½ per cent. In Madras and Bombay ryots who construct wells, or other works of agricultural improvement, are exempt from enhanced assessment on that account. In other provinces the exemption lasts for specific periods, the term generally being long enough to recoup the owner the capital sunk.

Tanks.—Next to the well, the indigenous instrument of irrigation is the tank. The village or the roadside tank is one of the most conspicuous features in the Indian scene. The Indian tank may be any size. It may vary from a great work like Lakes Fife and Whiting in the Bombay Presidency or the Periyar Lake in Travancore, holding up from four to seven billion cubic feet of water, and spreading their waters through great chains of canal, to the little village tank irrigating ten acres. They date back to a very early stage in Indian civilisation. Some of these works in Madras are of great size, holding from three to four billion cubic feet, with water spreads of nine miles. The inscriptions of two large tanks in the Chingleput district of Madras, which still irrigate from two to four thousand acres are said to be over 1,100 years old. Tank irrigation is practically unknown in the Punjab and in Sind, but it is found in some form or other in all other provinces, including Burma, and finds its highest development in Madras. In the ryotwari tracts of Bombay and Madras all but the smallest tanks are controlled by Government. In the zemindari tracts only the large tanks are State works. According to the latest figures the area irrigated from tanks is about eight million acres, but in many cases the supply is extremely precarious. So far from tanks being a refuge in famine they are often quite useless inasmuch as the rainfall does not suffice to fill them and they remain dry throughout the season.

Bibliography.—Triennial Review of Irrigation in India, 1918-1921. Calcutta, Superintendent of Government Printing. Price Five Rupees. The annual irrigation reports in India used to be as arid as the Sahara, consisting of a dull statistical record. They have been greatly improved of recent years and have now assumed a quite satisfactory form. The major review appears once every three years, and consists not only of an admirable summary of the work of the triennium, but a well-illustrated history of the progress of irrigation in India from the earliest times. The first of these triennial reviews was issued in 1922 and the article above is based thereon. Between the triennial reviews there will be issued a briefer statement recording the progress of each particular year and the first of these, dealing with 1921-22, was published in September, 1923.

Agriculture.

As crops depend on the existence of plant food and moisture in the soil so the character of the agriculture of a country depends largely on its soil and climate. It is true that geographical situation, the character of the people and other considerations have their influence which is not inconsiderable, but the limitations imposed by the nature of the soil and above all by the climate tend to the production of a certain class of agriculture under a certain given set of conditions.

The climate of India, while varying to some extent in degree, in most respects is remarkably similar in character throughout the country. The main factors in common are the monsoon, the dry winter and early summer months, and the intense heat from March till October. These have the effect of dividing the year into two agricultural seasons, the *Kharif* or Monsoon and the *Rabi* or Winter Season each bearing its own distinctive crops. From early June till October abundant rains fall over the greater part of the continent while the winter months are generally dry although North-Western India benefits from showers in December and January. The distribution of the rainfall throughout the year, which is of considerable importance to agriculture, is none too favourable, but is not quite so bad as is often represented. The rainfall is greatest at what would otherwise be the hottest time of the year, *viz.*, mid-summer and when it is most needed. It should be remembered that in a hot country intermittent showers are practically valueless as evaporation is very rapid. The distribution of rainfall such as is common in England, for example, would be of little use to Indian soils.

Soil.—For the purpose of soil classification India may be conveniently divided into two main areas in (1) The Indo-Gangetic plains, (2) Central and Southern India. The physical features of these two divisions are essentially different. The Indo-Gangetic plains (including the Punjab, Sind, the United Provinces, Bengal, Bihar and Assam) form large level stretches of alluvium of great depth. The top soil varies in texture from sand to clay, the greater part being a light loam, porous in texture, easily worked, and naturally fertile. The great depth of the alluvium tends to keep down the soil temperature. Central and Southern India on the other hand consist of hills and valleys. The higher uplands are too hot and too near the rock to be suitable for agriculture which is mainly practised in the valleys where the soil is deeper and cooler and moisture more plentiful. The main difference between the soils of the two tracts is in texture and while the greater part of the land in Northern India is porous and easily cultivated, and moist near to the surface, large stretches in Southern and Central India consist of an intractable soil derived from the Deccan trap, sticky in the rains, hard and crumbly in the dry weather and holding its moisture at lower levels.

Agricultural Capital and Equipment.—India is a country of small holdings and the vast majority of the people cultivate patches varying in size from one to eight acres. Large holdings are practically unknown, and are mainly confined to the planting industries. Farming is carried on with a minimum of capital, there being practically no outlay on fencing, buildings, or implements. The accumulation of capital is prevented by the occurrence of famine and the high rate of interest and extravagance of expenditure in marriage celebrations. The organization of co-operative credit which has been taken in hand by Government and which has already proved successful in many provinces will undoubtedly lead to an increase in Agricultural capital.

Equipment.—For power the ryat depends chiefly on cattle which, as a rule, are light and active but possess little hauling power. The necessary tilth for crops is brought about by frequency of ploughings, the result being that the soil is seldom tilled as it should be. This is not chiefly due to want of knowledge on the part of the people but through want of proper equipment. The Indian agriculturist, as a rule, possesses an intimate though limited knowledge of the essentials of his own business, and fails, not only through ignorance, but also through lack of ways and means.

Implements are made of wood although ploughs are usually tipped with iron points and there is a great similarity in their shape and general design. The introduction of iron ploughs has made much progress in the last few years and many hundred thousand are now in use. The levelling beam is used throughout the greater part of the country in preference to the harrow and roller; and throughout Northern India the plough and the levelling beam are the only implements possessed by the ordinary cultivator.

In the heavier soils of the Deccan trap a cultivating implement consisting of a single blade, resembling in shape a Dutch hoe, is much used. Seed drills and drill hoes are in use in parts of Bombay and Madras but throughout the greater part of the country the seed is either broadcasted or ploughed in. Hand implements consist of various sizes of hoes, the best known of which are the *kodal* or spade with a blade set at an angle towards the labourer who does not use his feet in digging, and the *khurpi* or small hand hoe. Of harvesting machinery there is none, grain is separated either by treading out with oxen or beating out by hand, and winnowing by the agency of the wind.

Cultivation.—Cultivation at its best is distinctly good but in the greater part of the country it has plenty of room for improvement. As in any other country success in agriculture varies greatly with the character of the people, depending largely as it does on thrift and industry. In most places considering the large population cultivation is none too good. Agriculture suffers through lack of organization and equipment. Owing to the necessity of protection against thieves, in most parts the people live in villages, many of them at considerable distances from their land. Again, holdings, small though they are, have become sub-divided without any regard for convenience. Preparatory tillage generally consists of repeated ploughings, followed as seed time approaches by harrowings with the levelling beam. The *Rabi* crops generally receive a more thorough cultivation than the *Kharif*, a finer seed bed being necessary owing to the dryness of the growing season. Manure is

AGRICULTURAL PRODUCE.

The following table shows the area under the principal crops, in British India, and their territorial distribution, for 1921-22. The sown area is always greater than the area of cultivated land, owing to double cropping. The figures represent acres :—

Province.	Rice.	Wheat.	Barley.	Other Food Grains and Pulses.	Total Food Grains and Pulses.	Oilseeds.	Sugar.	Cotton.	Jute.	Total Area sown.	Net sown Area after deducting Area sown more than once.
Bengal	21,832,300	124,100	83,400	1,302,300	23,342,100	1,267,000	276,600	48,300	1,316,000	28,161,000	23,700,500
Bihar and Orissa ..	15,220,400	1,133,800	1,372,900	9,424,700	27,151,800	2,017,500	306,100	78,700	108,700	31,594,500	25,383,400
Assam	4,516,982	..	..	188,206	4,699,188	339,345	40,972	39,659	80,827	6,227,390	5,701,903
United Provinces ..	6,847,401	6,873,462	4,356,050	20,660,122	38,737,035	718,285	1,152,255	807,543	..	44,092,638	35,810,916
Punjab	821,185	8,788,992	1,111,950	12,413,814	23,135,941	1,664,820	373,371	1,148,845	..	31,025,796	25,961,826
N. W. Frontier Province.	24,106	937,940	297,911	1,185,264	2,445,221	197,552	34,439	15,312	..	2,876,156	2,419,063
Burma	11,001,367	69,195	..	1,539,702	12,610,264	1,382,411	57,500	325,291	..	16,619,734	16,013,572
Central Provinces and Berar.	5,071,348	2,447,670	11,628	10,964,666	18,495,322	1,935,578	17,252	4,414,148	..	25,628,221	23,588,198
Madras	11,279,503	23,274	2,539	18,217,200	29,522,516	3,372,591	195,721	1,782,981	..	37,533,228	33,012,264
Bombay and Sind ..	3,000,148	1,983,222	43,302	19,006,653	23,983,325	1,278,027	61,184	2,976,760	..	31,968,163	30,898,547
Minor Areas	85,130	71,964	76,739	434,323	668,096	23,461	5,782	28,056	..	826,245	664,068
Total ..	79,699,870	22,403,559	7,356,429	95,330,950	204,790,808	14,196,570	2,522,176	11,665,395	1,505,527	256,553,071	223,154,257

generally applied to the maximum extent available, both to *Kharif* and to *Rabi* crops. Seeding is either done broadcast or by drilling behind a wooden plough or drill. Thinning and spacing are not nearly so well done as they might be, and intercultivation is generally too superficial. Harvesting is done by sickle where the crops are cut whole, and there is little waste involved. On the whole the methods of the ryot if carried out thoroughly would be quite satisfactory, but it is doubtful if this could be done with the number of cattle at his disposal.

Irrigation is necessary in order to grow full crops on the land, over the greater part of the country owing to insufficient rainfall and the vagaries of the monsoon. Canal irrigation has been greatly extended over the Punjab, Sind, United Provinces and Madras through Government canals which, in addition to securing the crops over existing cultivated land, have converted large desert tracts into fertile areas. The Punjab and parts of the United Provinces are naturally well suited to canal irrigation owing to the frequency of their rivers. The water is generally taken off at a point a little distance from where the rivers leave the hills and is conducted to the arid plains below. The main canal splits up into diverging branches, which again subdivide up into distributaries from which the village channels receive their supplies. Water rates are levied on the matured areas of crops, Government thus bearing a part of the loss in case of failure. Much of the land is supplied by what is termed flow irrigation, *i.e.*, the land is directly commanded by the canal water, but a great deal has to be lifted from one to three feet the canal running in such cases below the level of the land. Rates for lift irrigation are, of course, lower than those for flow.

Irrigation canals are generally classed into (1) perennial and (2) inundation canals. Perennial canals, which give supplies in all seasons generally have their headworks near the hills, thus commanding a great range of country. Farther from the hills, owing to the very gradual slope of the land and the lowness of the rivers in the cold weather, perennial irrigation is difficult and inundation canals are resorted to. These canals only give irrigation when the rivers are high. As a rule, in Northern India they begin to flow when the rivers rise owing to the melting of the snow on the hills in May and dry up in September.

Irrigation from Wells.—About one-quarter of the total irrigation of the country is got from lifting water from wells ranging in depth from a few feet to over fifty feet. Their numbers have greatly increased in recent years largely through Government advances for their construction. The recurring cost of this form of irrigation has, however, greatly increased owing to the high price of draught cattle and the increasing cost of their maintenance.

Tank irrigation is common in Central and Southern India. Large quantities of rain water are stored in lakes (or tanks) and distributed during the drier seasons of the year. The system of distribution is the same as that by canal.

Manures.—Feeding of animals for slaughter being practically unknown in India, the amount of farm yard manure generally available in other countries from this source thus does not exist. This is partially if not entirely made up for by the large numbers required for tillage and the amount of cows and buffaloes kept for milk. Unfortunately fuel is very scarce and a greater part of the dung of animals has to be used for burning. Most of the trash from crops is used up for the same purpose and the net return of organic matter to the soil is thus insignificant In some parts cakes of oil seed are used as manures for valuable crops like tea and sugarcane but in the greater part of the country the only manure applied is the balance of farm yard manure available after fuel supplies have been satisfied. Farm yard manure is particularly effective and its value is thoroughly appreciated but the people have much to learn in the way of storage of bulky manures and the conservation of urine.

Rice.—A reference to the crop statistics shows that rice is the most extensively grown crop in India, although it preponderates in the wetter parts of the country, *viz.*, in Bengal, Bihar and Burma and Madras. The crop requires for its proper maturing a moist climate with well assured rainfall. The cultivated varieties are numerous, differing greatly in quality and in suitability for various conditions of soil and climate, and the people possess an intimate acquaintance with those grown in their own localities. The better qualities are sown in seed beds and transplanted in the monsoon Broadcasted rice is grown generally in lowlying areas and is sown before the monsoon as it must make a good start before the floods arrive. Deep water rices grow quickly and to a great height and are generally able to keep pace with the rise in water level.

For transplanted rice the soil is generally prepared after the arrival of the monsoon and is worked in a puddle before the seedlings are transplanted. The land is laid out into small areas with raised partitions to regulate the distribution of the water supply. The seedlings are planted in small bunches containing from 4 to 6 plants each and are simply dibbled into the mud at distances of 6 to 12 inches apart. Where available, irrigation water is given at frequent intervals and the fields are kept more or less under water until the crop begins to show signs of ripening.

Wheat.—Wheat is grown widely throughout Northern India as a winter crop, the United Provinces and the Punjab supplying about two-thirds of the total area, and probably three-quarters of the total outturn in India. The maiority of the varieties grown belong to the Species Triticium Vulgare. Indian wheats are generally white, red and amber coloured and are mostly classed as soft from a commercial point of view. The grains are generally plump and well filled but the samples are spoiled through mixtures of various qualities. Indian wheat is generally adulterated to some extent with barley and largely with dirt from the threshing floor and although there is a good demand in England and the Continent for the surplus produce, prices compare unfavourably with those obtained for Canadian and Australian produce. The crop is generally grown after a summer fallow and, except in irrigated tracts, depends largely on the conservation of the soil moisture from the previous monsoon

AGRICULTURAL STATISTICS.

	1915-16.	1916-17.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Net Area by professional survey	619,520,804	619,239,653	620,334,850	625,166,316	625,149,442	621,226,065	666,619,454
Area under forest	85,079,169	85,070,524	86,924,932	87,728,572	88,507,190	88,245,141	85,469,544
Not available for cultivation	143,930,260	143,441,598	142,782,768	146,798,628	145,586,198	141,504,618	153,134,871
Cultivable waste other than fallow	113,819,949	112,485,364	111,485,761	113,812,543	113,257,698	114,848,090	151,202,709
Fallow land	51,731,002	45,493,149	48,465,917	72,668,244	52,252,408	61,346,523	50,552,951
Net area sown with crops	221,778,167	229,620,075	227,847,771	201,384,395	222,865,062	212,259,506	223,154,257
Area irrigated	46,897,715	48,003,917	45,866,845	47,222,442	49,384,203	48,956,811	47,853,733
Area under Food-grains—							
Rice	78,079,425	80,988,124	80,667,619	77,613,377	78,706,103	78,120,270	79,699,870
Wheat	23,871,366	25,043,686	26,427,904	19,147,231	23,589,300	20,367,787	22,403,559
Barley	8,012,987	7,971,897	8,505,286	6,464,123	7,518,736	6,268,171	7,356,429
Jowar	23,050,921	21,891,980	21,117,771	20,537,466	22,484,034	22,690,318	24,214,263
Bajra	14,343,377	15,227,957	12,699,297	11,200,972	14,577,440	12,062,023	15,900,829
Ragi	4,338,380	4,072,186	4,265,211	4,004,356	4,229,016	4,238,957	4,211,067
Maize	6,735,325	6,544,212	6,485,508	6,063,510	6,658,666	6,205,920	6,334,705
Gram	13,558,533	15,699,021	16,724,034	7,647,075	12,940,459	9,463,432	15,054,855
Other grains and pulse	31,144,723	31,334,065	30,543,956	25,165,555	29,022,912	27,533,165	29,615,231
Total Food-grains	203,735,037	208,773,108	207,436,586	177,843,665	199,667,196	186,890,043	204,790,808
Area under other food-crops (including fruits, vegetables, spices, &c.).	8,307,725	8,410,432	8,330,477	8,095,384	8,484,656	7,610,459	8,194,791
Area under—							
Sugar	2,550,608	2,614,788	2,992,616	3,015,571	2,813,428	2,705,773	2,522,176
Coffee	91,003	90,602	95,311	98,222	95,815	95,501	96,611
Tea	593,364	603,510	618,922	688,034	701,443	660,751	713,379

Rains in January and February are generally beneficial but an excess of rainfall in these months usually produces rust with a diminution of the yield. On irrigated land 2 to 4 waterings are generally given. The crop is generally harvested in March and April and the threshing and winnowing go on up till the end of May. In good years the surplus crop is bought up at once by exporters and no time is lost in putting it on the European market as other supplies are at that time of year scarce. In years of famines the local price is generally sufficiently high to restrict exports.

The Millets.—These constitute one of the most important group of crops in the country, supplying food for the poorer classes and fodder for the cattle. The varieties vary greatly in quality, height and suitability to various climatic and soil conditions. Perhaps the two best known varieties are Jowar (*Sorghum vulgare*) tall growing with a large open head, and Bajra with a close rat-tail head and thin stem. Generally speaking the jowars require better land than the bajras and the distribution of the two crops follows the quality of the soil. Neither for jowar nor bajra is manure usually applied and cultivation is not so thorough as for wheat, the main objective being to produce a fine seed bed. The crop is generally sown in the beginning of the mon soon and so it requires to be thoroughly weeded. In the case of jowar, however, very large areas are sown as a *rabi* crop. It is often grown mixed with the summer pulses and other crops in which case thin seedings are resorted to. The subsidiary crops are harvested as they ripen either before the millet is harvested or afterwards. The produce is consumed in the country

Pulses are commonly grown throughout India and the grain forms one of the chief foods of the people. Most kinds do well but are subject to failure or shortage of yield owing to a variety of circumstances among which rain at the time of flowering appears to be one of the most important. They are therefore more suitable to grow as mixed crops especially with cereals, and are generally grown as such. Being deep rooted and practically independent of a Nitrogen supply in the soil they withstand drought and form a good alternation in a cereal rotation. The chief crops under this heading are gram, mash, mung and moth, gram forming the main winter pulse crop while the others are grown in the summer. The pulses grow best on land which has had a good deep cultivation. A fine seed bed is not necessary. For gram especially the soil should be loose and well aerated. Indian pulses are not largely exported although they are used to some extent in Europe as food for dairy cows.

Cotton is one of the chief exports from India and the crop is widely grown in the drier parts of the country. The lint from Indian cotton is generally speaking short and coarse in fibre and unsuited for English mills. Japan and the Continent have, in the past, been the chief buyers. The crop is grown during the summer months and requires a deep moist soil and light rainfall for its proper growth. Rain immediately after sowing or during the flowering period is injurious. In parts of Central and Southern India the seed is sown in lines and the crop receives careful attention but over Northern India it is sown broadcast (often mixed with other crops) and from the date of sowing till the time of picking is practically left to itself. The average yield, which does not amount to more than 400 lbs. per acre of seed cotton, could doubtless be greatly increased by better cultivation.

Sugarcane.—Although India is not naturally as well suited for sugarcane growing as many other tropical countries, some 3½ millions of acres are annually sown. The crop is mostly grown in the submontane tracts of Northern India. The common varieties are thin and hard, yielding a low percentage of juice of fair quality, but cane of the highest quality and yield is grown in South India. In India white sugar is not made by the grower who simply boils down the juice and does not remove the molasses. The product called gur or gul is generally sold and consumed as such, although in some parts a certain amount of sugar-making is carried on. The profits, however, are small owing to the cheapness of imported sugar and there appears to be some danger to the crop if the present taste for gur were to die out. The question has been taken up by Government and a cane-breeding station has been recently opened near Coimbatore in Madras with the object of raising seedling canes and otherwise improving the supply of cane sets. A number of sugar factories of a modern type have been set up within recent years in Bihar and the United Provinces. The chief difficulty seems to be the obtaining of a sufficiently large supply of canes to offset the heavy capital charges of the undertakings.

Oilseeds.—The crops classified under this heading are chiefly sesamum, linseed and the cruciferous oilseeds (rape, mustard, etc.). Although oilseeds are subject to great fluctuation in price and the crops themselves are more or less precarious by nature—they cover an immense area.

Linseed requires a deep and moist soil and is thus grown chiefly in Bengal, Bihar, the United Provinces and the Central Provinces. The crop is grown for seed and not for fibre and the common varieties are of a much shorter habit of growth than those of Europe. The yield varies greatly from practically nothing up to 500 or 600 lbs. of seed per acre. The seed is mainly exported whole but a certain amount of oil pressing is done in the country.

Sesamum (or Gingelly) is grown mostly in Peninsular India as an autumn or winter crop. The seed is largely exported.

The Cruciferous Oilseeds form an important group of crops in Northern India where they grow freely and attain a fair state of development. They are one of the most useful crops in the rotation. They occupy the land for a few months only, and owing to their dense growth leave the soil clean and in good condition after their removal. A number of varieties are grown differing from each other in habit of growth, time of ripening, and size and quality of seed. The best known are rape, toria, and sarson. The crop is generally sown in September or early October and harvested from December to February. The crop is subject to the attack of aphis (green fly) at the time of flowering and sometimes suffers considerable damage from this pest. The seed

	1915-16.	1916-17.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Area under Oilseeds—							
Linseed	2,450,779	2,558,074	2,781,280	1,447,618	2,245,305	1,496,139	2,053,858
Sesamum (til)..	4,135,086	4,014,078	3,374,432	3,234,616	3,490,864	3,591,919	3,707,066
Rape and Mustard	4,075,575	4,010,944	4,358,909	3,058,688	3,679,789	2,979,484	3,721,813
Other Oilseeds..	3,574,149	4,052,492	3,593,756	2,731,753	3,155,346	4,302,850	4,713,833
Total Oilseeds ..	14,235,589	14,635,588	14,108,377	10,472,675	12,571,304	12,370,392	14,196,570
Area under—							
Cotton	11,435,135	13,836,607	15,403,088	14,440,560	15,318,089	14,114,276	11,665,395
Jute	2,349,381	2,671,302	2,700,324	2,472,634	2,799,937	2,472,938	1,305,527
Other fibres	787,351	830,540	887,676	576,331	746,440	728,815	683,521
Indigo	351,265	764,823	700,767	286,588	242,816	241,461	328,829
Opium	182,030	216,899	221,200	206,733	181,787	123,834	122,888
Tobacco	1,027,038	1,041,303	1,014,862	1,047,215	1,101,231	932,482	1,050,685
Fodder crops	7,076,258	8,173,058	8,193,925	7,227,846	8,206,286	8,108,016	8,608,219
Estimated yield* of—							
Rice (Cleaned) .. .. .. *tons.*	32,730,000	35,054,000	35,999,000	24,342,000	32,028,000	27,662,000	33,235,000
Wheat .. .. ,,	8,653,000	10,236,000	9,922,000	7,507,000	10,122,000	6,706,000	9,830,000
Coffee .. .. *lb.*	‡	‡	‡	‡	21,325,000	22,454,000	20,587,000
Tea † .. .. ,,	372,202,700	370,313,500	371,296,300	380,459,000	377,055,600	345,339,600	274,264,000
Cotton .. .. 400 *lb. bales*	3,738,000	4,492,000	4,055,000	3,977,000	5,799,000	3,600,000	4,479,000
Jute † .. .. .. ,, ,,	7,341,800	8,309,300	8,867,200	6,955,700	8,481,300	5,915,000	3,986,000
Linseed .. .. *tons.*	476,000	526,000	515,000	235,000	419,000	270,000	436,000
Rape and Mustard .. .. ,,	1,092,100	1,193,200	1,155,200	768 800	1,153,000	859,000	1,167,000
Sesamum (til).. .. .. ,,	482,000	513,000	382,000	278,000	449,000	382,000	518,000
Groundnut .. .. ,,	1,058,000	1,196,000	1,056,000	626,000	822,000	1,022,000	959,000
Indigo .. .. *cwt.*	55,100	95,700	127,000	48,600	43,300	43,700	61,600
Cane-sugar .. .. *tons.*	2,633,000	2,762,000	3,434,000	2,406,000	3,039,000	2,522,000	2,599,000
Rubber † .. .. *lb.*	....	....	....	....	13,615,000	13,789,000	9,056,000

* The acreage of crops given in this table is for British India only, but the estimated yield includes the crops in certain of the Indian States.

† The statistics of the production of tea, jute and rubber are for calendar years.

‡ Return of production discontinued up to 1918-19.

is very subject to injury from rain and great care has to be taken in the drying. The produce is largely exported whole, but there is a considerable amount of local oil-pressing—the cake being in demand for feeding purposes.

Jute.—Two varieties of the plant are cultivated as a crop, Capsularis and Olitorius. Jute growing is confined almost entirely to Eastern Bengal, in the Ganges-Brahmaputra Delta. The crop requires a rich moist soil. Owing to river inundation this part of India receives a considerable alluvial deposit every year and the land is thus able to sustain this exhausting crop without manure. The crop is rather delicate when young, but once established requires no attention, and grows to a great height (10 to 11 feet). Before ripening the crop is cut and retted in water. After about three weeks submersion the fibre is removed by washing and beating. At the recent high range of prices jute may be considered to have been for the last few years, the best paying crop in India.

Tobacco is grown here and there all over the country chiefly, however, in Bengal, Bihar, Bombay, Madras and Burma. Of two varieties cultivated Nicotiana Tabacum is by far the most common. Maximum crops are obtained on deep and moist alluvium soils and a high standard of cultivation including liberal manuring is necessary. The crop is only suited to small holdings where labour is plentiful as the attention necessary for its proper cultivation is very great. The seed is germinated in seed beds and the young plants are transplanted when a few inches high, great care being taken to shield them from the sun. The crop is very carefully weeded and hoed. It is topped after attaining a height of, say, 2 ft., and all suckers are removed. The crop ripens from February onwards and is cut just before the leaves become brittle. By varying the degree of fermentation of the leaves different qualities of tobacco are obtained. A black tobacco is required for *Hooka* smoking and this is the most common product but a certain amount of yellow leaf is grown for cigar making.

Live-stock consist mainly of cattle, buffaloes and goats, horses not being used for agricultural purposes. Sheep are of secondary importance.

For draught purposes cattle are in more general use than buffaloes especially in the drier parts of the country, but buffaloes are very largely used in the low lying rice tracts. For dairying buffaloes are perhaps more profitable than cows as they give richer milk and more of it: but they require more feeding. The poorer people depend largely on the milk of goats of which there are an enormous number throughout India. Cattle breeding is carried on mainly in the non-cultivated tracts in Central and Southern India, Southern Punjab and Rajputana, where distinct breeds with definite characters have been preserved. The best known draught breeds are Hansi, Nellore, Amritmehal, Gujrat, Malvi, and the finest milk cows are the Sahiwal (Punjab) Gir (Kathiawar) and Sind. Owing, however, to the encroachment of cultivation on the grazing areas well-bred cattle are becoming scarce and some of the breeds are threatened with extinction. Efforts to improve the quality of the cattle in the non-breeding districts by the use of selected bulls have hitherto been frustrated by the promiscuous breeding which goes on in the villages.

Dairying.—Though little noticed, dairying forms a very large indigenous industry throughout India. The best known products are native butter (ghee) and cheese (dahi). During recent years a considerable trade in tinned butter has sprung up in Gujrat (Bombay Presidency). While pure *ghee* and milk can be procured in the villages, in the towns dairy products can scarcely be bought unadulterated.

AGRICULTURAL PROGRESS.

The Agricultural Departments in India as they now exist may be said to be a creation of the last twenty years. There have for a good many years past been experimental farms, under official control, in various parts of India, but they were in the past to a large extent in the hands of amateurs, and the work of the Agricultural Departments, with which all the major provinces were provided by about 1884, was in the main confined to the simplification of revenue settlement procedure and the improvement of the land records system. In 1901 the appointment of an Inspector-General of Agriculture gave the Imperial Agricultural Department for the first time an expert head, and placed the Government of India in a position to enlarge the scope of their own operations and to co-ordinate the work being done on independent lines in various provinces. At that time the staff attached to the Government of India consisted of an Agricultural Chemist and a Cryptogamic Botanist, while trained Deputy Directors of Agriculture were employed only in Madras, Bombay and the United Provinces and the Economic Botanist in Madras was the only provincial representative of the more specialised type of appointments. Within the next few years a number of new appointments were made, so that by March 1905 there were altogether 20 sanctioned agricultural posts; of these seven were Imperial, including a number of specialist appointments attached to the Agricultural Research Institute and College, the establishment of which at Pusa in Bengal was sanctioned in 1903. A great impetus was given to the development of the Agricultural Departments by the decision of the Government of India in 1905 to set apart a sum of 20 lakhs (£133,000) a year for the development of agricultural experiment, research, demonstration and instruction. Their ultimate aim, as then expressed, was the establishment of an experimental farm in each large tract of country in which the agricultural conditions are approximately homogeneous, to be supplemented by numerous small demonstration farms; the creation of an agricultural college teaching up to a three years' course in each of the larger provinces: and the provision of an expert staff in connection with these colleges for purposes of research as well as education. The eventual cost, it was recognised, would largely exceed 20 lakhs a year. The Pusa Research Institute and College alone has cost nearly £150,000 including equipment. A part of the cost was met from a sum of £30,000 placed at Lord Curzon's dis-

AREA, CULTIVATED and UNCULTIVATED, in 1921-22: IN EACH PROVINCE.

Provinces.	Area according to Survey.	*Deduct* Indian States.	NET AREA. According to Survey.	NET AREA. According to Village Papers.
	Acres.	Acres.	Acres.	Acres.
Bengal	53,824,158	3,476,638	50,347,520	50,347,520
Madras	97,890,041	6,846,368	91,044,273	89,689,613
Bombay — Presidency.	85,719,926	37,005,760	48,714,166	48,714,166
Bombay — Sind	34,021,898	3,872,000	30,149,898	30,149,898
United Provinces — Agra	53,505,021	511,232	52,993,789	52,615,015
United Provinces — Oudh	15,306,720	....	15,306,720	15,485,164
Bihar and Orissa	71,446,650	18,334,720	53,111,840	53,111,840
Punjab	86,771,270	24,511,384	62,259,886	60,287,074
Burma	155,668,427	....	155,668,427	155,668,427
Central Provinces	72,552,216	19,960,727	52,591,489	52,799,415
Berar	11,374,676	....	11,374,676	11,374,676
Assam	39,487,713	7,969,920	31,517,793	31,517,793
North-West Frontier Province.	8,497,558	140,800	8,356,758	8,571,512
Ajmer-Merwara	1,770,921	....	1,770,921	1,770,921
Delhi	367,692	....	367,692	367,692
Coorg	1,012,260	....	1,012,260	1,012,260
Manpur Pargana	31,346	....	31,346	31,346
TOTAL	789,249,003	122,629,549	666,619,454	663,514,332

Provinces.	CULTIVATED. Net Area actually Sown.	CULTIVATED. Current Fallows.	UNCULTIVATED. Culturable Waste other than Fallow.	UNCULTIVATED. Not available for Cultivation.	Forests.
	Acres.	Acres.	Acres.	Acres.	Acres.
Bengal	23,700,500	5,027,499	5,816,260	11,533,235	4,270,026
Madras	33,012,264	10,032,332	12,179,134	21,411,099	13,054,784
Bombay — Presidency.	26,862,377	6,538,183	987,522	5,787,279	8,538,805
Bombay — Sind	4,036,170	5,377,637	6,163,988	13,819,804	722,299
United Provinces — Agra	26,604,960	2,065,254	7,560,887	7,694,318	8,689,596
United Provinces — Oudh	9,205,556	551,287	2,389,491	2,225,490	612,940
Bihar and Orissa	25,383,400	5,404,799	6,826,185	8,306,825	7,100,631
Punjab	25,961,826	3,531,179	16,088,683	12,525,591	2,179,795
Burma	16,013,572	3,909,281	61,112,080	55,378,454	19,255,040
Central Provinces	16,693,101	2,860,901	14,783,722	3,957,271	14,504,420
Berar	6,895,097	1,251,162	136,867	954,201	2,137,349
Assam	5,701,903	3,001,936	13,729,940	5,510,500	3,573,514
North-West Frontier Province.	2,419,063	590,747	2,546,440	2,654,536	360,726
Ajmer-Merwara	296,826	229,180	297,635	850,498	96,782
Delhi	220,094	12,053	64,702	70,843	....
Coorg	140,305	109,035	11,690	334,045	357,185
Manpur Pargana	6,843	486	7,483	882	15,652
TOTAL	223,154,257	50,552,951	151,202,709	153,134,871	85,469,544

posal by Mr. Phipps, an American visitor to India. This example of munificence has recently been followed by Sir Sassoon J. David, who placed the sum of £53,300 at the disposal of the Government of Bombay for the establishment of vernacular agricultural schools and the improvement of agricultural methods, in commemoration of the visit of Their Imperial Majesties to India. The headquarters of the Imperial Department of Agriculture at **Pusa** are maintained at a cost of slightly over £65,000 and the total expenditure of all Provincial Departments is £594,000, or about one half penny per acre per annum.

Recent Progress.—A survey of the results of the activities of the Agricultural Department in relation to the chief crops of India shows valuable results. First in importance of all grain crops in India is **Rice** and the demand for improved seed now far outruns the supply. One of the departmental grains which has been planted in the Madras Presidency produced 37,717 lbs. per acre representing a net profit to the cultivator of nearly £23 sterling per acre for the crop. The improved varieties of wheat produced at Pusa have now been extended to all the wheat-growing provinces. Each acre cultivated under Pusa wheat gives the grower an increased return of £ 1 sterling. **Sugar-cane** is dealt with in the report of the Indian Sugar Committee (q.v.). One of the main features of the sugar work of the Agricultural Department has been the promising results attending the cane produced in Coimbatore in the Madras Presidency. One variety of improved cane in the Central Provinces has given over a period of eight years an average outturn of 2,488 lbs. of rough sugar per acre more than the variety it displaced. The improvement of the **Cotton** crop is dealt with in detail in the report of the Cotton Committee (q. v.) and in the operations of the Cotton Board set up in accordance with its recommendations. The demand for seed for the new and improved varieties of jute recommended by the Department is greater than ever and cannot be satisfied. In the case of **Tobacco** the demand for Pusa type 28 which combines both yield and quality and is suitable both for cigarette-making and general cultivation has increased more than fourfold.

Experiment has shown that the fruit-growing industry has a great field before it. But the possibility of establishing a system of co-operative marketing has yet to be tested. The study of pests, animal and vegetable is making progress. Experiments seem to show that a rat consumes 6 lbs. of grain a year and as the total rat population is 8 hundred millions the loss caused to the population by this animal per year is about 15 millions sterling.

Amongst the most important measures is the improvement of the cattle population. At Pusa cattle breeding is directed mainly along two lines, the breeding of ordinary country milch cattle and the experiment of breeding by crossing varieties of high milk-yielding pedigrees. The progress is slow largely on account of the magnitude of the task. In regard to implements, the scope of tractor cultivation appears to be limited since irrigated lands are not suitable for tractor cultivation and the fields are too small for the purpose. The co-operative credit societies are now greatly facilitating the distribution of the results of the experimental work done by the Agricultural Department.

Work of the Departments.

The work of the Agricultural Department has two main aspects. On the one hand, by experiment and research, improved methods or crops are developed, or the means of combating a pest are worked out; on the other hand, ascertained improvements must be demonstrated and introduced as far as possible into the practice of the Indian cultivator. There is an essential difference between agricultural departments in the East and in the West in that, whereas the latter have arisen to meet the spontaneous demands of the cultivators of the soil, the former are entirely the creation of a government anxious to give all the assistance it can to its agricultural subjects. The demand for improved agriculture has not in India, except in special cases, come from the cultivator, and it is necessary for the Department to put forth every effort, first to ascertain the needs of the cultivators and then to demonstrate how they can most effectively be met. It is only a few years since work on modern lines was commenced by the reorganised agricultural departments, and, in the first place, a great deal of spade work had to be performed. An important advance in the direction of bringing the provincial agricultural departments more closely into touch with one another was made in 1905 by the creation of the Board of Agriculture. The Board, which includes the Imperial and provincial experts, meets biennially to discuss the programme of agricultural work, and agricultural questions generally, and makes recommendations which are submitted to the Government of India for consideration.

Machinery.

The rapid extension in India in recent years of the use of machinery in connection with agriculture and irrigation has created a demand for expert assistance to meet which Agricultural Engineers have been appointed in Bombay and several other Provinces to advise cultivators as to engines, pumps, threshing machinery, etc. Experiments have at various times and in various parts of India been made with steam ploughing machinery and since the war trials have been made with the petroleum driven tractors that were specially developed in England during the war. But while there is everywhere immense scope for the employment of the most modern machinery, progress is greatly hampered by the laissez faire attitude of the manufacturers of it. The reports of the Agricultural Departments constantly bear witness of this. Makers have generally no direct representatives in India, being content with representation by agents in the large towns. There are no stocks of machinery in the country, spare parts are difficult to get and exorbitant prices are often charged for them.

Information and assistance in regard to the choice of implements suitable for various conditions has, under present circumstances, to be interpreted and brought home to Indian cultivators largely by the agricultural departments which have therefore to do a good deal of this work. Up to the present, the departments perform to a certain extent the functions of dealers in implements, but it is becoming difficult to control the work as the area covered by the introduction is gradually becoming large.

AREA UNDER IRRIGATION IN 1921-22: IN EACH PROVINCE.

Provinces.	Total Area Sown.	Area Irrigated.				
		By Canals.		By Tanks.	By Wells.	Other Sources.
		Government.	Private.			
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Bengal	28,161,000	179,566	96,232	827,510	10,421	6,0,65 3
Madras	37,533,228	3,747,239	203,343	3,476,738	1,702,171	496,654
Bombay { Presidency	27,599,573	213,546	53,328	102,173	549,138	33,229
Bombay { Sind ..	4,368,590	2,777,966	2,386	4,900	39,196	157,971
United Provinces { Agra ..	(a) 32,198,532	2,240,216	16,317	60,911	3,709,181	1,442,522
United Provinces { Oudh ..	11,894,106	..	..	..	1,552,004	847,058
Bihar and Orissa ..	31,594,500	992,277	875,168	1,711,485	613,153	1,306,336
Punjab	31,025,796	8,997,363	546,654	15,297	3,587,018	140,969
Burma	16,619,734	583,030	265,770	154,708	19,944	291,672
Central Provinces ..	18,693,911	330,824	2,102	609,920	117,057	42,003
Berar	6,934,310	..	..	57	30,801	229
Assam	6,227,390	120	194,441	..	..	42,250
North-West Frontier Province	2,876,156	355,968	423,006	....	68,176	112,335
Ajmer-Merwara ..	351,758	..	..	33,571	85,191	7
Delhi	323,636	26,348	..	544	15,125	..
Coorg	143,695	2,565	..	1,345	..	..
Manpur Pargana ..	7,156	..	..	..	119	..
TOTAL ..	256,553,071	20,477,028	2,678,753	6,999,069	12,128,995	5,569,888

(a) Includes 343,215 acres in the Agra province for which details are not available;

Provinces.	Area Irrigated.	Crops Irrigated. *				
	Total Area Irrigated.	Rice.	Wheat.	Barley.	Jowar or cholum (great millet).	Bajra or cumbu (spiked millet.)
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Bengal	1,764,382	1,530,761	13,872	10,917	110	710
Madras	9,626,145	8,027,526	5,561	16	600,505	303,912
Bombay — Presidency.	981,414	174,709	176,108	14,434	214,489	79,778
Bombay — Sind ..	2,982,419	1,044,442	309,159	15,786	301,160	605,719
United Provinces — Agra ..	7,469,447	337,706	2,491,820	1,672,184	28,396	3,912
United Provinces — Oudh ..	2,399,062	11,761	1,120,893	469,764	78	5
Bihar and Orissa ..	5,528,419	3,700,764	299,551	79,620	1,001	957
Punjab	13,293,211	625,476	4,905,324	394,782	266,323	416,527
Burma	1,315,130	1,262,877	1,239	..	..	..
Central Provinces ..	1,101,906	948,907	64,410	2,724	1,079	5
Berar	31,087	87	4,727	1	..	..
Assam	236,811	229,105	20	..	..	..
North-West Frontier Province	959,485	24,083	332,811	102,231	26,627	15,307
Ajmer-Merwara ..	118,769	69	11,507	42,651	1,123	475
Delhi	42,017	51	17,922	3,422	534	138
Coorg	3,910	3,910	..	..	..	..
Manpur Pargana ..	119	..	80	..	..	..
TOTAL ..	47,853,733	17,922,234	9,755,004	2,808,832	1,531,425	1,425,445

* Includes the area irrigated at both harvests.

Provinces.	Crops Irrigated. *						
	Maize.	Other cereals and pulses.	Sugar cane.	Other Food crops.	Cotton.	Other Non-food crops.	Total.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Bengal	11,687	147,032	61,505	118,166	1,040	98,252	1,994,052
Madras	3,657	1,443,381	107,121	271,246	132,158	522,959	11,418,042
Bombay { Presidency.	37,200	61,280	54,072	141,662	2,901	152,335	1,108,968
Bombay { Sind ..	2,802	272,276	2,857	57,174	140,246	312,597	3,152,218
United Provinces { Agra ..	73,565	1,787,408	716,638	197,464	200,197	333,983	†7,879,478
United Provinces { Oudh ..	37	555,127	136,427	54,903	4	76,899	2,425,898
Bihar and Orissa ..	61,676	967,682	150,516	156,978	1,509	119,858	5,540,112
Punjab	517,980	1,470,433	325,560	239,112	1,053,777	3,391,690	13,606,984
Burma	..	5,904	6,063	66,717	..	3,926	1,346,726
Central Provinces ..	28	6,582	15,464	59,528	174	3,005	1,101,906
Berar	162	365	512	22,463	..	2,825	31,142
Assam	..	1,701	..	4,177	..	1,805	236,811
North-West Frontier Province.	253,530	26,019	34,425	27,369	12,740	108,359	963,501
Ajmer-Merwara ..	38,142	10,433	212	7,121	23,077	2,118	136,028
Delhi	276	887	6,438	4,280	610	7,459	42,017
Coorg	..	..	..	..	..	..	3,910
Manpur Pargana ..	..	3	..	36	..	..	119
Total ..	1,000,742	6,756,516	1,617,810	1,428,396	1,568,433	5,138,075	50,988,812

* Includes the area irrigated at both harvests.
† Includes 35,900 acres for which details are not available.

AREA UNDER DIFFERENT CROPS CULTIVATED IN 1921-22 IN EACH PROVINCE.

Provinces.	Food Grains.				
	Rice.	Wheat.	Barley.	Jowar or Cholum (Great Millet).	Bajra or Cumbu (Spiked Millet).
	Acres.	Acres.	Acres.	Acres.	Acres.
Bengal	21,832,300	124,100	83,400	3,800	2,900
Madras	11,279,503	23,274	2,539	5,572,510	3,197,487
Bombay .. Presidency	1,955,718	1,500,946	23,717	8,041,184	5,005,738
Bombay .. Sind	1,044,430	432,276	19,585	573,848	1,107,354
United Provinces. Agra	4,335,265	5,024,399	3,202,862	2,293,792	2,226,201
United Provinces. Oudh	2,512,136	1,849,063	1,153,188	389,764	435,889
Bihar and Orissa	15,220,400	1,133,800	1,372,906	84,000	70,000
Punjab	821,185	8,788,992	1,111,950	1,213,701	3,322,587
Burma	11,001,367	69,195	....	865,088	....
Central Provinces	5,039,768	2,284,704	11,635	2,419,627	40,299
Berar	31,580	162,966	3	2,563,786	133,955
Assam	4,516,982	....	....	....	....
North-West Frontier Province ..	24,106	937,940	297,911	107,554	262,295
Ajmer-Merwara	323	18,638	57,090	51,648	30,925
Delhi	67	51,904	19,646	31,263	65,141
Coorg	84,587	....	....	3	....
Manpur Pargana	153	1,362	3	2,692	55
TOTAL	79,699,870	22,403,559	7,356,429	24,214,263	15,900,829

Provinces	Food Grains.				
	Ragi or Marua (Millet)	Maize.	Gram (pulse).	Other Food Grains and Pulses.	Total.
	Acres.	Acres.	Acres.	Acres.	Acres.
Bengal	5,500	90,400	141,600	1,058,100	23,342,100
Madras	2,493,421	104,041	112,017	6,737,724	20,522,516
Bombay .. Presidency	627,777	209,546	487,955	2,512,768	20,365,349
Bombay .. Sind	478	2,827	174,714	262,464	3,617,976
United Provinces Agra	154,063	1,320,067	4,531,120	4,628,891	27,716,663
United Provinces Oudh	37,940	757,858	1,527,074	2,357,460	11,020,372
Bihar and Orissa	837,700	1,800,300	1,481,200	5,151,500	27,151,800
Punjab	26,756	1,112,169	5,147,160	1,591,438	23,135,941
Burma	....	233,405	164,371	276,838	12,610,264
Central Provinces	21,647	158,330	843,093	4,123,576	14,942,679
Berar	1,481	3,754	55,634	599,484	3,552,643
Assam	....	947	*	181,259	4,699,188
North-West Frontier Province ..	....	462,368	269,114	83,933	2,445,221
Ajmer-Merwara	41	74,992	17,227	38,983	289,867
Delhi	13	2,593	101,594	8,341	280,562
Coorg	4,250	....	222	2,235	91,297
Manpur Pargana	....	1,108	760	237	6,370
TOTAL	4,211,067	6,334,705	15,054,855	29,615,231	204,790,808

* Included under "Other Food Grains and Pulses."

AREA UNDER DIFFERENT CROPS CULTIVATED IN 1921-22 IN EACH PROVINCE.

Provinces.	Oil-Seeds.							
	Linseed.	Sesamum (til or jinjili).	Rape and Mustard	Ground-nut.	Cocoa-nut.	Castor.	Other Oil-Seeds.	Total.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Bengal	132,900	207,700	895,200	300	700	..	30,200	1,267,000
Madras	7,252	778,447	39,887	1,459,122	559,404	380,629	147,850	3,372,591
Bombay { Presidency.	112,819	221,640	10,353	272,847	38,004	69,274	177,876	902,813
Bombay { Sind ..	3	37,638	327,132	..	45	4,718	5,678	375,214
United Provinces { Agra ..	193,374	228,074	102,141	1,484	..	3,717	14,854	546,644
United Provinces { Oudh ..	86,532	22,225	55,915	6,105	..	17	847	171,641
Bihar and Orissa ..	701,100	189,900	787,100	200	28,500	31,800	275,900	2,017,500
Punjab	37,147	156,068	953,015	..	..	430	518,160	1,664,820
Burma . ..	419	1,053,674	3,295	305,789	11,674	..	7,560	1,382,411
Central Provinces ..	747,890	708,394	39,544	10,192	..	37,915	254,852	1,798,787
Berar	19,318	68,562	685	5,169	..	3,607	39,429	136,791
Assam	11,490	15,048	307,509	..	..	5,298	..	339,345
North-West Frontier Province.	9	3,757	193,375	..	..	..	411	197,552
Ajmer-Merwara ..	486	15,469	99	..	..	..	178	16,232
Delhi	..	54	6,245	..	..	..	94	6,393
Coorg	..	150	21	..	..	..	13	184
Manpur Pargana ..	89	266	297	..	..	..	..	652
TOTAL ..	2,053,858	3,707,066	3,721,813	2,061,199	638,327	540,405	1,475,902	14,196,570

Provinces.	Condiments & Spices.	Sugar Cane.	Sugar Others. †	Fibres.			
				Cotton.	Jute.	Other fibres.	Total.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Bengal	160,800	220,900	55,700	48,300	1,316,000	79,400	1,443,700
Madras	705,074	119,313	76,408	1,782,981	..	144,724	1,927,705
Bombay .. { Presidency.	189,209	54,336	822	2,835,385	..	104,016	2,939,401
Bombay .. { Sind ..	5,115	2,884	3,142	141,175	..	410	141,585
United Provinces { Agra ..	68,420	951,314	..	757,299	..	131,798	889,097
United Provinces { Oudh ..	19,802	200,941	..	50,244	..	32,999	83,243
Bihar and Orissa ..	64,500	895,900	200	78,700	108,700	39,600	227,000
Punjab	25,142	373,371	..	1,148,845	..	47,917	1,196,762
Burma	80,836	35,032	22,468	325,291	..	1,270	326,561
Central Provinces ..	56,508	16,740	..	1,274,264	..	53,365	1,327,629
Berar	27,184	512	..	3,139,884	..	46,541	3,186,425
Assam	..	40,972	..	39,659	80,827	..	120,486
North-West Frontier Province.	864	34,439	..	15,312	..	410	15,722
Ajmer-Merwara ..	3,641	217	..	26,408	..	92	26,500
Delhi	849	6,510	..	1,548	..	606	2,154
Coorg	4,325	50	..	5	..	344	349
Manpur Pargana ..	..	5	..	95	..	29	124
TOTAL ..	1,412,359	2,363,436	158,740	11,665,395	1,505,527	683,521	13,854,443

† Area under sugar-yielding plants other than sugarcane.

AREA UNDER DIFFERENT CROPS CULTIVATED IN 1921-22 IN EACH PROVINCE.

Provinces.	Dyes and Tanning materials.		Drugs and Narcotics.					Fodder Crops.
	Indigo.	Others.	Opium.	Tea.	Coffee.	Tobacco.	Other Drugs and Narcotics.	
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Bengal	10,600	..	..	177,000	..	298,100	4,900	103,600
Madras	197,282	2,620	..	44,762	55,798	203,088	155,885	306,449
Bombay—Presidency	35	509,948	..	22	45	108,553	28,067	1,916,220
Bombay—Sind	2,640	582	..	..	..	11,567	88	125,175
United Provinces—Agra	42,862	1,381	56,855	6,559	..	72,050	1,018	1,087,737
United Provinces—Oudh	1,708	52	64,699	..	..	17,332	1,518	179,667
Bihar and Orissa	39,900	7,100	..	2,100	..	118,400	..	34,000
Punjab	33,121	3,426	1,334	9,797	..	90,013	1,415	4,092,973
Burma	601	..	..	54,264	66	86,251	67,439	212,555
Central Provinces	34	123	..	..	..	10,653	2,760	433,698
Berar	13	..	..	..	..	13,655	27	541
Assam	..	..	..	417,800	..	10,768	..	..
North-West Frontier Province.	14	16	..	..	..	8,958	..	91,451
Ajmer-Merwara	15	..	..	..	..	62	..	4,728
Delhi	4	..	..	..	..	1,208	..	19,425
Coorg	..	..	..	1,075	40,702	27	239	..
Manpur Pargana	..	..	..	..	..	..	..	..
TOTAL	328,829	525,248	122,888	713,379	96,611	1,050,685	263,356	8,608,219

Provinces.	Fruits and Vegetables, including Root Crops.	Miscellaneous Crops.		Total Area Sown.	*Deduct* Area Sown more than once.	Net Area Sown.
		Food.	Non-Food.			
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Bengal	673,300	282,900	120,400	28,161,000	4,460,500	23,700,500
Madras	654,881	50,028	138,828	37,533,228	4,520,964	33,012,264
Bombay—Presidency	569,857	2,177	5,629	27,599,573	737,196	26,862,377
Bombay—Sind	51,524	45	31,053	4,368,590	332,420	4,036,170
United Provinces—Agra	316,329	92,297	6,091	(*b*) 32,198,532	5,593,572	26,604,960
United Provinces—Oudh	126,069	6,292	770	11,894,106	2,688,150	9,205,956
Bihar and Orissa	729,400	589,100	307,600	31,594,500	6,211,100	(*c*) 25,383,400
Punjab	262,677	132,282	2,722	31,025,796	5,063,970	25,961,826
Burma	1,528,146	25,272	187,568	16,619,734	606,162	16,013,572
Central Provinces	101,912	1,938	45	18,693,911	2,900,810	16,693,101
Berar	15,683	636	200	6,934,310	39,213	6,895,097
Assam	464,393	(*a*)	134,438	6,227,390	525,487	5,701,903
North-West Frontier Province.	31,399	49,402	1,118	2,876,156	457,093	2,419,063
Ajmer-Merwara	1,197	5,220	4,079	351,758	54,932	296,826
Delhi	5,247	381	903	323,636	103,542	220,094
Coorg	5,447	..	..	143,695	3,390	140,305
Manpur Pargana	1	..	4	7,156	313	6,843
TOTAL	5,537,462	1,244,970	941,853	256,553,071	33,398,814	223,154,257

(*a*) Included under non-food crops.
(*b*) Includes 343,215 acres in the Agra province for which details are not available.
(*c*) Subject to revision.

The following is a summary of the various **crop forecasts** relating to the season 1922-23 issued by the Commercial Intelligence Department, India :—

Crop.	Tracts comprised in the figures and percentage of total Indian crop represented by them.	Estimated Area.	Per cent. of preceding year (100= final figure of preceding year).	Estimated outturn.	Per cent. of preceding year (100= final figure of preceding year).
		Acres.			
Jute*	Bengal, Bihar and Orissa, and Assam (100 per cent. of the total Jute area in India.)	1,456,000	96	4,237,000 bales	104
Sugarcane ..	U. P., †Punjab, Bihar and Orissa, Bengal, Madras, Bombay and Sind,† Assam, N.-W. F. Province, C. P. and Berar, Delhi, Mysore and Baroda (99 per cent of total sugarcane area of British India.)	2,721,000	114	2,989,000 tons	115
Cotton ..	All cotton growing tracts. ..	21,151,000	115	5,196,000 bales.	116
Sesamum ..	Burma, U. Provinces, Madras, C. P. and Berar, Bengal, Bombay and Sind†, Bihar and Orissa, Punjab, Ajmer-Merwara, Hyderabad, Kotah(Rajputana) and Baroda (99 6 per cent. of total sesamum area of British India).	5,014,000	87	486,000 tons	94‡
Indigo ..	Madras, United Provinces, Bihar and Orissa, Punjab, Bombay, and Sind† and Bengal, (containing practically the whole area under indigo in British India.)	296,500	93	54,600 cwts.	89
Rice	Bengal, Bihar and Orissa, Madras, Burma, United Provinces,† C. P. and Berar,† Assam, Bombay, and Sind† Coorg, Mysore, Hyderabad, and Baroda (99 per cent. of total rice area of British India.)	81,533,000	100	33,167,000 tons	100
Groundnut ..	Madras, Burma Bombay † and Hyderabad (99 per cent of total Groundnut area of British India)	2,530,000	118	1,161,000 tons	121
Rape and Mustard.	United Provinces, Bengal, Punjab, Bihar, and Orissa, Assam Bombay and Sind, † North-West Frontier Province, Delhi, Baroda, Alwar (Rajputana)and Hyderabad (98·7 per cent. of total area under Rape and Mustard in British India.)	6,213,000	98	1,213,000 tons	104
Linseed ..	Central Provinces and Berar, † United Provinces, Bihar and Orissa, Bengal, Bombay, † Punjab, Kotah (Rajputana)and Hyderabad (99·2 per cent. of total linseed area of British India.)	3,358,000	111	532,000 tons	122
Wheat	Punjab, † United Provinces, † Central Provinces and Berar, † Bombay and Sind, † Bihar and Orissa, North-West Frontier Province, Bengal, Delhi, Ajmer-Merwara, Central India, Gwalior, Rajputana, Hyderabad, Baroda and Mysore (98·4 per cent of total area under wheat in India).	30,835,000	109	9,895,000 tons	101

* Issued by the Director of Agriculture, Bengal. † Including Indian States.

‡ Excluding Burma the percentage is 84 if compared with the corresponding estimate of yield for last year.

Meteorology.

The meteorology of India like that of other countries is largely a result of its geographical position. The great land area of Asia to the northward and the enormous sea expanse of the Indian Ocean to the southward are determining factors in settling its principal meteorological features. When the Northern Hemisphere is turned away from the sun, in the northern winter, Central Asia becomes an area of intense cold. The meteorological conditions of the temperate zone are pushed southward and we have over the northern provinces of India the westerly winds and eastward moving cyclonic storms of temperate regions, while, when the Northern Hemisphere is turned towards the sun, Southern Asia becomes a super-heated region drawing towards it an immense current of air which carries with it the enormous volume of water vapour which it has picked up in the course of its long passage over the wide expanse of the Indian Ocean, so that at one season of the year parts of India are deluged with rain and at another persistent dry weather prevails.

Monsoons.—The all-important fact in the meteorology of India is the alternation of the seasons known as the summer and winter monsoons. During the winter monsoon the winds are of continental origin and hence, dry, fine weather, clear skies, low humidity and little air movement are the characteristic features of this season. The summer rains cease in the provinces of the North-West Frontier Province and the Punjab about the middle of September after which cool westerly and northerly winds set in over that area and the weather becomes fresh and pleasant. These fine weather conditions extend slowly eastward and southward so that by the middle of October, they embrace all parts of the country except the southern half of the Peninsula, and by the end of the year have extended to the whole of the Indian land and sea area, the rains withdrawing to the Equatorial Belt. Thus the characteristics of the cold weather from October to February over India are:—Westerly winds of the temperate zone over the extreme north of India to the south of these the north-east winds o. the winter monsoon or perhaps more properly the north-east Trades and a gradually extending area of fine weather which, as the season progresses, finally embraces the whole Indian land and sea area. Two exceptions to these fine weather conditions exist during this period, *viz.*, the Madras coast and the north-west of India. In the former region the north-east winds which set in over the Bay of Bengal in October coalesce with the damp winds of the retreating summer monsoon, which curren curves round over the Bay of Bengal, and, blowing directly on to the Madras coast gives to that region the wettest and most disturbed weather of the whole year, for while the total rainfall for the four months June to September *i.e.*, the summer monsoon, at the Madras Observatory amounts to 15·36 inches the total rainfall for the three months October to December amounts to 29·48 inches. The other region in which the weather is unsettled, during this period of generally settled conditions, is North-west India. This region during January, February and part of March is traversed by a succession of shallow storms from the westward. The number and character of these storms vary very largely from year to year and in some years no storms at all are recorded. In normal years, however, in Northern India periods of fine weather alternate with periods of disturbed weather (occurring during the passage of these storms) and light to moderate and even heavy rain occurs. In the case of Peshawar the total rainfall for the four months; December to March, amounts to 5·26 inches while the total fall for the four months, June to September, is 4·78 inches, showing that the rainfall of the winter is, absolutely, greater in this region than that of the summer monsoon. These two periods of subsidiary "rains" are of the greatest economic importance. The fall in Madras is, as shown above, of considerable actual amount, while that of North-west India though small in absolute amount is of the greatest consequence as on it largely depend the grain and wheat crops of Northern India.

Spring Months.—March to May and part of June form a period of rapid continuous increase of temperature and decrease of barometric pressure throughout India. During this period there occurs a steady transference northward of the area of greatest heat. In March the maximum temperatures, slightly exceeding 100, occur in the Deccan; in April the area of maximum temperature; between 100° and 105°, lies over the south of the Central Provinces and Gujarat; in May maximum temperatures, varying between 105° and 110°, prevail over the greater part of the interior of the country while in June the highest mean maximum temperatures exceeding 110° occur in the Indus Valley near Jacobabad. Temperatures exceeding 120° have been recorded over a wide area including Sind, Rajputana; the West and South Punjab and the west of the United Provinces, but the highest temperature hitherto recorded is 126° registered at Jacobabad on June 12th, 1897. During this period of rising temperature and diminishing barometric pressure, great alterations take place in the air movements over India, including the disappearance of the north-east winds of the winter monsoon, and the air circulation over India and its adjacent seas, becomes a local circulation, characterised by strong hot winds down the river valleys of Northern India and increasing land and sea winds in the coast regions. These land and sea winds, as they become stronger and more extensive, initiate large contrasts of temperature and humidity which result in the production of violent local storms. These take the forms of dust storms in the dry plains of Northern India and of thunder and hailstorms in regions where there is inter-action between damp sea winds and dry winds from the interior. These storms are frequently accompanied with winds of excessive force, heavy hail and torrential rain and are on that account very destructive.

By the time the area of greatest heat has been established over North-west India, in the last week of May or first of June, India has become the seat of low barometric pressures relatively to the adjacent seas and the whole character of the weather changes. During

the hot weather period, discussed above, the winds and weather are mainly determined by local conditions. Between the Equator and Lat. 30° or 35° south the wind circulation is that of the south-east trades, that is to say from about Lat. 3°-35° south a wind from south-east blows over the surface of the sea up to about the equator. Here the air rises into the upper strata to flow back again at a considerable elevation to the Southern Tropic or beyond. To the north of this circulation, *i.e.*, between the Equator and Lat. 20° to 25° North, there exists a light unsteady circulation, the remains of the north-east trades, that is to say about Lat. 20° North there is a north-east wind which blows southward till it reaches the thermal equator where side by side with the south-east Trades mentioned above, the air rises into the upper strata of the atmosphere. Still further to the northward and in the immediate neighbourhood of land there are the circulations due to the land and sea breezes which are attributable to the difference in the heating effect of the sun's rays over land and sea. It is now necessary to trace the changes which occur and lead up to the establishment of the south-west monsoon period. The sun at this time is progressing slowly northward towards the northern Tropic. Hence the thermal equator is also progressing northward and with it the area of ascent of the south-east trades circulation. Thus the south-east trade winds cross the equator and advance further and further northward, as the thermal equator and area of ascent follows the sun in its northern progress. At the same time the temperature over India increases rapidly and barometric pressure diminishes, owing to the air rising and being transferred to neighbouring cooler regions—more especially the sea areas. Thus we have the southern Trades circulation extending northward and the local land and sea circulation extending southward until about the beginning of June the light unsteady interfering circulation over the Arabian Sea finally breaks up, the immense circulation of the south-east Trades, with its cool, moisture laden winds rushes forward, becomes linked on to the local circulation proceeding between the Indian land area and the adjacent seas and India is invaded by oceanic conditions—the **south-west monsoon** proper. This is the most important season of the year as upon it depends the prosperity of at least five-sixths of the people of India.

When this current is fully established a continuous air movement extends over the Indian Ocean, the Indian seas and the Indian land area from Lat. 30° S. to Lat. 30° N., the southern half being the south-east trades and the northern half the south-west monsoon. The most important fact about it is that it is a continuous horizontal air movement passing over an extensive oceanic area where steady evaporation is constantly in progress so that where the current enters the Indian seas and flows over the Indian land it is highly charged with aqueous vapours.

The Current enters the Indian seas quite at the commencement of June and in the course of the succeeding two weeks spreads over the Arabian Sea and Bay of Bengal up to their extreme northern limits. It advances over India from these two seas. The Arabian Sea current blows on to the west coast and sweeping over the Western Ghats prevails more or less exclusively over the Peninsula, Central India, Rajputana and north Bombay. The Bay of Bengal current blows directly up the Bay. One portion is directed towards Burma; East Bengal and Assam while another portion curves to south at the head of the Bay and over Bengal, and then meeting with the barrier of the Himalayas curves still further and blows as a south-easterly and easterly wind right up the Gangetic plain. The south-west monsoon continues for three and a half to four months, *viz.*, from the beginning of June to the middle or end of September. During its prevalence more or less general though far from continuous rain prevails throughout India, the principal features of the rainfall distribution being as follows. The greater portion of the Arabian Sea current, the total volume of which is probably three times as great as that of the Bengal current, blows directly on to the west coast districts. Here it meets an almost continuous hill range, is forced into ascent and gives heavy rain alike to the coast districts and to the hilly range, the total averaging about 100 inches most of which falls in four months. The current after parting with most of its moisture advances across the Peninsula giving occasional uncertain rain to the Deccan and passes out into the Bay where it coalesces with the local current. The northern portion of the current blowing across the Gujarat, Kathiawar and Sind coasts gives a certain amount of rain to the coast districts and frequent showers to the Aravalli Hill range but very little to Western Rajputana, and passing onward gives moderate to heavy rain in the Eastern Punjab, Eastern Rajputana and the North-west Himalayas. In this region the current meets and mixes with the monsoon current from the Bay.

The monsoon current over the southern half of the Bay of Bengal blows from south-west and is thus directed towards the Tenasserim hills and up the valley of the Irrawady to which it gives very heavy to heavy rain. That portion of this current which advances sufficiently far northward to blow over Bengal and Assam gives very heavy rain to the low-lying districts of East Bengal and immediately thereafter coming under the influence of the Assam Hills is forced upwards and gives excessive rain (perhaps the heaviest in the world) to the southern face of these hills. The remaining portion of the Bay current advances from the southward over Bengal, is then deflected westward by the barrier of the Himalayas and gives general rain over the Gangetic plain and almost daily rain over the lower ranges of the Himalayas from Sikhim to Kashmir.

To the south of this easterly wind of the Bay current and to the north of the westerly wind of the Arabian Sea current there exists a debatable area running roughly from Hissar in the Punjab through Agra, Allahabad and part of Chota Nagpur to Orissa, where neither current of the monsoon prevails. In this area the rainfall is uncertain and would probably

be light, but that the storms from the Bay of Bengal exhibit a marked tendency to advance along this track and to give it heavy falls of occasional rain.

The Total Rainfall of the monsoon period (June to September) is 100 inches over part of the west coast, the amount diminishes eastward, is below 20 inches over a large part of the centre and east of the Peninsula and is only 5 inches in South Madras; it is over 100 inches on the Tenasserim and South Burma coast and decreases to 20 inches in Upper Burma; it is over 100 in the north Assam Valley and diminishes steadily westward and is only 5 inches in the Indus Valley.

The month to month distribution for the whole of India is:—

May	.. 2·6	inches.
June	.. 8·3	,,
July	..11·9	,,
August	..10·5	,,
September	.. 7·2	,,
October	.. 3·2	,,

Cyclonic storms and cyclones are an almost invariable feature of the monsoon period. In the Arabian Sea they ordinarily form at the commencement and end of the season, *viz.*, May and November, but in the Bay they form a constantly recurring feature of the monsoon season. The following gives the total number of storms recorded during the period 1877 to 1901 and shows the monthly distribution:—

	Jan.	Feb.	Mar.	Apl.	May	June
Bay of Bengal	..	..	1	4	13	28
	July	Aug.	Sep.	Oct.	Nov.	Dec.
Bay of Bengal	41	36	45	34	22	8
	Jan	Feb.	Mar.	Apl.	May	June
Arabian Sea	..	..	..	2	15	
	July	Aug.	Sep.	Oct.	Nov.	Dec
Arabian Sea	2	..	1	1	5	..

The preceding paragraphs give an account of the normal procession of the seasons throughout India during the year, but it must be remembered, that every year produces **variations from the normal**, and that in some years these variations are very large. This is more particularly the case with the discontinuous element rainfall. The most important variations in this element which may occur are:—

(1) Delay in the commencement of the rains over a large part of the country, this being most frequent in North Bombay and North-west India.

(2) A prolonged break in July or August or both.

(3) Early termination of the rains, which may occur in any part of the country.

(4) The determination throughout the monsoon period of more rain than usual to one part and less than usual to another part of the country. Examples of this occur every year.

About the middle of September fine and fresh weather begins to appear in the extreme north-west of India. This area of fine weather and dry winds extends eastward and southward, the area of rainy weather at the same time contracting till by the end of October the rainy area has retreated to Madras and the south of the Peninsula and by the end of December has disappeared from the Indian region, fine clear weather prevailing throughout. This procession with the numerous variations and modifications which are inseparable from meteorological conditions repeats itself year after year.

(*For monsoon of* 1923, *see page* 284).

Average Monthly and Annual Means of Air Temperature at Selected Stations in India.

Stations.	Elevation in feet	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual Mean.
HILL STATIONS.		°	°	°	°	°	°	°	°	°	°	°	°	°
*Shillong	4,920	49.5	51.8	60.4	65.2	66.6	68.8	70.0	69.2	68.4	63.1	56.5	50.7	61.7
Darjeeling	7,376	40.1	41.6	49.7	56.2	58.3	59.9	61.5	60.9	59.4	55.2	47.8	41.8	52.7
Simla	7,224	38.8	40.6	51.5	59.3	66.0	66.9	64.3	62.8	60.9	56.7	50.1	43.4	55.1
Murree	6,333	40.5	41.1	51.1	61.2	68.3	72.3	69.4	67.2	65.9	61.3	52.8	45.0	58.0
Srinagar	5,204	30.7	33.0	45.1	55.7	63.9	69.9	73.0	70.8	64.0	53.2	44.0	36.3	53.3
Mount Abu	3,945	58.2	61.0	69.9	78.0	79.8	74.9	69.8	67.6	69.6	71.6	65.2	59.9	68.8
*Ootacamund	7,327	54.0	55.5	58.6	61.5	61.3	58.2	56.9	57.4	57.3	57.2	55.4	54.3	57.3
*Kodaikanal	7,688	55.0	56.7	59.6	61.5	61.9	59.4	57.6	57.8	57.6	56.9	54.9	55.0	57.8
COAST STATIONS.														
Karachi	49	65.3	68.4	75.0	80.6	84.7	86.8	84.3	82.4	82.0	80.0	74.0	67.4	77.6
Veraval	18	69.4	70.2	74.0	79.1	81.5	82.5	80.0	79.1	79.0	79.5	77.2	72.3	77.0
Bombay	37	74.5	74.8	78.0	82.1	84.6	82.4	79.5	79.4	79.4	80.7	79.3	76.4	79.3
Ratnagiri	110	76.2	76.0	78.5	82.8	84.3	80.7	78.3	78.4	78.2	79.8	79.5	77.6	79.2
Mangalore	65	78.2	79.3	81.1	83.9	83.5	78.8	77.1	77.3	77.6	78.9	79.8	79.0	79.6
Calicut	27	77.8	79.8	81.6	83.6	83.1	78.5	76.7	77.4	78.3	79.1	79.5	78.3	75.9
Negapatam	31	75.5	77.4	80.5	84.8	87.7	87.0	85.6	84.4	83.4	80.9	78.3	76.0	81.8
Madras	22	75.3	76.6	79.5	84.1	88.7	88.4	85.7	84.5	83.9	80.8	77.9	75.7	81.8
Masulipatam	15	73.6	76.7	80.3	85.2	89.8	87.8	83.9	83.4	83.0	81.2	77 4	74.0	81.4
Gopalpur	21	70.0	74.8	78.3	81.6	84.1	83.7	81.8	82.0	82.2	79.6	74 3	69.8	78.6
Rangoon	57	74.7	77.3	81.2	85.0	82.2	79.5	78.8	78.7	79.1	80.0	78 3	75.6	79.2

* As the average mean figures for Shillong, Ootacamund and Kodaikanal are not available, means of normal maximum and minimum temperatures uncorrected for diurnal variation are given.

Average Monthly and Annual Means of Air Temperature at Selected Stations in India.

Stations.	Elevation in feet.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual Mean.
STATIONS ON THE PLAINS.		°	°	°	°	°	°	°	°	°	°	°	°	°
Toungoo	183	70.0	74.7	81.9	86.7	85.3	81.3	80.1	80.1	81.3	81.4	77.4	71.6	79.3
Mandalay	250	68.8	73.8	82.1	89.2	88.5	85.4	85.2	84.7	83.5	82.5	75.9	69.5	80.8
Silchar	104	63.8	67.0	73.9	78.0	80.1	81.4	82.6	82.4	81.7	79.7	73.1	66.1	75.9
Calcutta	21	65.2	70.3	79.3	85.0	85.7	84.5	83.0	82.4	82.6	80.0	72.4	65.3	77.9
Burdwan	99	65.7	70.0	80.4	86.7	86.5	84.9	83.6	82.8	83.1	80.7	73.0	66.3	78.6
Patna	183	60.8	65.3	76.9	86.2	88.0	86.4	83.5	83.1	83.3	79.5	70.1	62.2	77.1
Benares	267	60.0	65.3	76.6	86.8	91.3	89.4	84.1	83.1	83.0	77.9	67.8	60.2	77.2
Allahabad	309	59.5	64.9	76.8	87.6	92.5	90.8	84.5	83.2	83.0	77.6	67.5	59.8	77.3
Lucknow	368	58.7	63.7	75.2	86.4	90.6	90.2	85.3	83.4	83.2	77.1	66.3	58.9	76.6
Agra	555	60.1	64.8	76.7	88.1	94.0	93.4	86.0	84.2	84.2	79.4	68.7	61.2	78.4
Meerut	738	56.0	60.1	71.1	82.7	88.4	89.4	85.0	83.2	81.7	74.7	63.5	56.7	74.4
Delhi	718	57.9	62.2	74.1	86.2	91.7	92.2	86.4	84.5	83.9	78.5	67.6	59.6	77.1
Lahore	702	53.0	57.3	69.0	80.9	88.9	93.0	89.1	87.1	84.8	75.7	63.2	54.6	74.7
Multan	420	55.6	59.8	71.6	82.9	91.4	94.9	92.7	90.4	88.0	78.6	67.1	57.7	77.5
Jacobabad	186	57.3	62.4	74.5	85.5	94.2	97.7	95.0	91.6	88.8	79.2	67.5	58.9	79.3
Hyderabad (Sind)	96	63.6	67.1	77.6	86.2	91.6	91.7	88.6	86.0	86.0	82.7	73.4	65.0	79.9
Bikaner	771	59.2	63.6	76.6	88.4	94.1	94.7	90.4	87.3	87.4	82.4	70.5	61.4	79.6
Rajkote	429	66.8	70.0	77.4	85.1	89.2	87.5	81.7	80.6	80.8	80.4	74.1	68.4	78.5
Ahmedabad	163	70.3	74.0	82.7	91.2	92.9	89.4	83.7	83.0	83.5	84.3	78.3	72.9	82.1
PLATEAU STATIONS.														
Akola	930	68.5	73.7	81.9	90.1	93.3	86.2	80.6	78.9	79.7	77.9	71.7	66.8	79.2
Jubbulpore	1,327	61.8	66.8	76.5	86.3	91.9	85.7	79.0	78.0	79.0	74.8	66.6	60.3	75.8
Nagpore	1,025	68.8	74.3	82.4	90.6	94.5	86.6	80.4	79.4	80.4	78.4	72.2	67.1	79.6
Raipur	970	67.7	73.6	81.9	90.3	93.6	86.0	79.6	79.0	80.3	78.1	71.5	66.0	79·0
Ahmednagar	2,152	67.1	71.3	77.5	82.5	83.8	79.2	76.2	74.9	74.5	75.1	70.5	67.1	75.0
Poona	1,840	69.8	73.9	80.1	83.9	83.8	78.7	74.9	73.7	74.4	76.2	72.5	68.9	75.9
Sholapur	1,590	72.7	77.7	84.2	88.4	88.9	81.8	78.9	77.7	77.3	77.7	74.6	71.3	79.3
Belgaum	2,539	69.8	73.0	77.5	79.2	78.0	72.8	70.1	69.7	70.4	72.9	70.9	69.3	72.8
Hyderabad (Deccan)	1,690	70.4	77.1	83.1	88.0	90.1	82.6	77.9	77.1	77.4	76.8	72.3	69.1	78.5
Bangalore	3,021	67.5	72.0	76.7	79.9	78.5	74.0	72.0	71.8	71.8	71.8	69.6	67.5	72.8
Bellary	1,475	73.2	79.6	85.6	89.2	89.0	83.4	80.9	80.6	80.2	79.1	75.3	72.5	80.8

Average Monthly and Annual Rainfall at Selected Stations in India.

Stations.	Elevation in feet.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual Total.
HILL STATIONS.		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Shillong	4,920	0.49	0.81	1.85	4.29	10.06	16.46	13.48	12.79	14.75	6.23	0.98	0.25	82.44
Darjeeling	7,376	0.76	1.08	2.01	4.08	7.83	24.19	31.74	25.98	18.34	5.35	0.24	0.20	121.80
Simla	7,224	3.21	5.07	2.48	2.32	3.71	7.84	18.42	17.87	6.17	1.19	0.41	1.28	67.97
Murree	6,333	3.73	4.14	3.96	3.62	2.99	3.41	12.51	12.40	5.64	1.86	1.27	1.37	57.90
Srinagar	5,204	3.36	4.24	3.10	3.30	2.72	1.77	2.78	1.95	1.18	1.14	0.41	1.08	27.03
Mount Abu	3,945	0.27	0.31	0.15	0.08	0.97	5.59	22.05	21.51	9.58	1.46	0.28	0.24	62.49
Ootacamund	7,327	0.35	0.38	1.00	3.46	5.93	6.18	5.94	4.70	4.44	8.57	4.00	1.65	46.60
Kodaikanal	7,688	1.17	1.48	3.59	5.29	6.47	4.01	3.89	5.99	6.70	12.49	8.17	5.57	64.82
COAST STATIONS.														
Karachi	49	0.64	0.30	0.15	0.13	0.03	0.43	3.16	1.77	0.66	0.04	0.16	0.19	7.66
Veraval	18	0.01	0.03	0.00	0.00	0.02	5.31	8.92	7.27	2.40	0.81	0.66	0.10	25.53
Bombay	37	0.12	0.02	0.01	0.05	0.55	20.56	24.56	14.91	10.93	1.76	0.47	0.05	73.99
Ratnagiri	110	0.60	0.02	0.05	0.15	1.27	31.32	34.25	20.19	12.53	3.62	0.65	0.06	104.71
Mangalore	65	0.13	0.07	0.11	2.06	7.26	38.47	37.39	22.88	11.09	7.90	1.97	0.50	129.83
Calicut	27	0.17	0.16	0.79	3.70	9.04	36.46	29.36	14.89	7.39	9.12	3.80	1.32	116.20
Negapatam	31	1.15	0.72	0.32	1.02	1.81	1.30	1.74	3.29	3.55	10.08	15.02	11.23	51.23
Madras	22	0.83	0.28	0.37	0.65	1.96	2.06	3.80	4.66	4.84	10.93	13.30	5.25	48.93
Masulipatam	15	0.17	0.16	0.26	0.40	1.34	4.33	5.67	6.09	6.56	8.36	4.43	0.53	38.30
Gopalpur	21	0.23	0.43	0.56	0.73	2.01	5.76	6.11	7.20	6.86	9.84	3.50	0.72	43.95
Rangoon	57	0.11	0.23	0.16	1.74	11.73	18.30	21.37	19.65	15.89	7.12	2.52	0.07	98.89

Average Monthly and Annual Rainfall at Selected Stations in India.

Stations.	Elevation in feet.	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Annual Total.
STATIONS ON THE PLAINS.		in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.
Toungoo	183	0.06	0.12	0.08	1.90	6.43	13.63	17.48	18.53	11.46	6.95	1.25	0.16	78.05
Mandalay	250	0.06	0.08	0 21	1.19	5.26	5.71	3.26	4.16	6.21	4.54	1.67	0.28	32.63
Silchar	104	0.64	2.32	7.93	13.56	15.72	20.39	19.98	18.69	13.95	6.40	1.31	0.54	121.43
Calcutta	21	0.29	1.02	1.14	1.54	5.60	11.04	12.31	12.69	10.40	3.87	0.62	0.31	60.83
Burdwan	99	0.38	0.89	1.24	2.20	5.56	10.17	12.32	11.49	8.59	3.93	0.61	0.13	57.54
Patna	183	0.72	0.53	0.35	0.30	1.70	7.76	11.41	10.72	7.82	2.89	0.20	0.14	44.54
Benares	267	0.74	0.51	0.33	0.15	0.56	5.45	12.54	11.19	6.54	2.24	0.17	0.17	40.59
Allahabad	309	0.82	0.48	0.38	0.14	0.29	5.09	12.24	10.88	6.32	2.40	0.25	0.23	39.52
Lucknow	368	0.90	0.45	0.32	0.11	0.91	5.34	11.39	11.32	6.61	1.33	0.08	0.44	39.20
Agra	555	0.55	0.33	0.25	0.16	0.64	2.84	9.67	7.11	4.41	0.39	0.06	0.29	26.70
Meerut	788	1.05	0.83	0.63	0.34	0.70	3.60	9.37	7.64	4.55	0.43	0.08	0.40	29.62
Delhi	718	1.02	0.61	0.67	0.35	0.71	3.18	8.38	7.44	4.42	0.39	0.10	0.43	27.70
Lahore	702	0.87	1.13	0.89	0.51	0.80	1.86	6.65	4.88	2.10	0.43	0.11	0.47	20.70
Multan	420	0.39	0.36	0.42	0.27	0.39	0.43	2.19	1.66	0.60	0.07	0.06	0.27	7.11
Jacobabad	186	0.28	0.27	0.25	0.17	0.15	0.10	1.18	1.25	0.19	0.01	0.10	0.15	4.10
Hyderabad (Sind)	96	0.24	0.22	0.10	0.07	0.11	0.41	2.61	2.77	0.54	0.00	0.10	0.05	7.22
Bikaner	771	0.38	0.24	0.18	0.14	0.84	1.65	3.29	3.14	1.08	0.09	0.06	0.18	11.27
Rajkote	429	0.05	0.10	0.01	0.01	0.31	5.21	10.89	6.41	3.75	0.67	0.33	0.06	27.80
Ahmedabad	163	0.02	0.10	0.01	0.03	0.46	3.94	11.49	8.26	4.42	0.55	0.19	0.05	29.52
PLATEAU STATIONS.														
Akola	930	0.45	0.18	0.43	0.16	0.31	5.12	8.74	6.48	6.24	2.14	0.44	0.58	31.27
Jubbulpore	1,527	0.72	0.52	0.48	0.22	0.47	8.53	18.82	15.13	8.38	1.55	0.37	0.26	55.45
Nagpore	1,025	0.58	0.42	0.57	0.46	0.68	8.44	13.49	9.79	8.11	2.14	0.51	0.45	45.62
Raipur	970	0.30	0.33	0.59	0.59	0.76	9.38	14.94	12.72	7.75	2.09	0.62	0.20	50.27
Ahmednagar	2,152	0.27	0.12	0.15	0.40	1.16	4.73	3.03	3.60	6.75	3.12	0.89	0.44	24.66
Poona	1,840	0.18	0.05	0.13	0.58	1.45	5.35	6.90	4.03	4.43	4.11	0.85	0.20	28.26
Sholapur	1,590	0.06	0.08	0.29	0.63	1.09	4.41	4.19	5.42	7.77	3.63	0.87	0.30	28.74
Belgaum	2,539	0.06	0.03	0.49	2.05	2.73	9.32	15.37	9.15	4.05	5.09	1.33	0.24	49.91
Hyderabad (Deccan)	1,690	0.05	0.12	0.67	0.73	0.78	4.44	6.22	6.76	7.10	2.98	1.53	0.17	31.55
Bangalore	3,021	0.06	0.22	0.72	1.19	4.53	3.13	4.13	6.00	7.11	6.74	2.61	0.39	36.83
Bellary	1,475	0.10	0.03	0.42	0.83	1.93	1.84	1.41	2.18	4.12	4.04	1.20	0.20	18.30

MONSOON OF 1923.

The S. W. Monsoon not only arrived late in the season but its incidence was also feeble on both sides of the current. On the Arabian Sea side the first rains gathered were on the 11th June on the Malabar coast, and though the current was fairly effective on the coastal stations on the Malabar and the Konkan, it failed to penetrate further inland. The Bay branch similarly, though fairly active in Burma and Assam, was also feebly incident over the remainder of North East India and unable to advance further up the Gangetic plain. Thus during the month most pronounced deficiencies of rainfall were returned from all parts of the country except from Burma and Assam. And though the mean of India indicated a defect of 16 per cent. only, due chiefly to the heavy rains in Burma, Bombay's deficiency was 65 per cent., of the United Provinces 83, of North-West Provinces and Sind 100, of Central India 96 and of Central Provinces and Hyderabad 65 per cent.

Conditions improved in July and fairly well distributed rain was gathered during the month practically over the whole country. All divisions were well served with excess of rainfall with the single exception of Sind which continued to return a deficiency of 95 per cent even for this month. The mean of India was 21 per cent. in excess.

During the month of August both branches though initially weak were kept fairly active under the influence of four successive cyclonic depressions which in the main determined for the month the distribution of rainfall over the whole country. For while the Bay current was enabled to serve more or less effectively almost the whole area of its own field, the Arabian Sea current was more actively directed to the North and North-Westwards in its own field at the expense of the Peninsular zone. Of the 15 divisions hence only 3—namely Bombay, Hyderabad and Mysore—returned a deficiency of 19, 52 and 55 per cent. respectively while the rest showed excess—Sind, North West Provinces and Punjab indicating excesses of as much as 156, 96 and 68 per cent. respectively. The mean of India was 24 per cent. in excess. In September the Bay current continued to be fairly active but chiefly in Burma and North East India, while the activity of the Arabian Sea branch was restricted also in the main to the north of the Peninsula and the Central Provinces. In the latter half of the month however the circulation was again affected by two depressions and heavy falls were gathered in areas influenced by the storms. The distribution was abnormally affected again, for while Sind, Rajputana, Punjab and North-West Provinces registered deficiencies of 100, 82, 76 and 43 per cent. respectively most of the other divisions returned normal falls or small excesses. The mean of India was 8 per cent. in defect.

The retreat of the monsoon from the United Provinces began about the 4th October and the recession was more or less complete about the 16th October on which date the establishment of the North East monsoon was noted in South-East Madras.

Nine disturbances in all—3 in July, 4 in August and 2 in September—formed in the Bay and Inland, to which reference has been already made. These in the main controlled the distribution and sustained the pulses of the weak monsoon throughout the season practically, carrying much needed rains at many places specially to the north of the Western Presidency just in time to save critical situations. On the other hand heavy downpours along the storm tracks caused damage to life and property by floods in July in the rivers Tunga and Kaver and rivers in South Canara, and in the districts of Kolaba, Kolhapur and in Portuguese territory due to heavy downpours on the Western Ghauts. Similarly in August floods in the Sone river and in the Ganges and the Gogra inundated large tracts of the surrounding country. To the September disturbances were due the floods in the Goomti which inundated Lucknow and surrounding districts. Several disturbances from the west also, as it is usual in a weak monsoon of the type, continued to affect the weather of the extreme north throughout the season.

Averaged over the plains of India the rainfall was 2·5 inches or 6 per cent. above normal.

The following table gives detailed information of the rainfall of the period :—

DIVISION.	RAINFALL, JUNE TO SEPTEMBER 1923.			
	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	Inches.	Inches.	Inches.	
Burma	103.7	83.8	+ 19.9	+ 24
Assam	60.5	61.1	— 0.6	— 1
Bengal	61.1	60.9	+ 0.2	+ 0
Bihar and Orissa	42.4	45.5	— 3.1	— 7
United Provinces	36.2	36.1	+ 0.1	+ 0
Punjab	17.0	15.7	+ 1.3	+ 8
North-West Frontier Province ..	7.9	5.0	+ 2.9	+ 58
Sind	4.2	4.7	— 0.5	— 11
Rajputana	18.8	18.1	+ 0.7	+ 4
Bombay	35.1	37.9	— 2.8	— 7
Central India	38.0	33.8	+ 4.2	+ 13
Central Provinces	43.1	40.5	+ 2.6	+ 7
Hyderabad	25.2	26.7	— 1.5	— 6
Mysore	12.0	15.5	— 3.5	— 23
Madras	27.5	26.3	+ 1.2	+ 5
Mean of India	42.8	40.3	+ 2.5	+ 6

Hydro-Electric Development.

India promises to be one of the leading countries of the world in regard to the development of hydro-electric power and great strides in this direction have already been made. India not only specially lends itself to projects of the kind, but peremptorily demands them. Cheap motive power is one of the secrets of successful industrial development and the favourable initial conditions caused by the war, the enthusiasm for industrial development which has seized nearly all classes of educated Indians, and the special attention which the circumstances of the war have compelled Government to direct towards the scientific utilisation of Indian natural resources all point to a rapid growth of industrial enterprise in all parts of India within the next few years. Indeed, the process, for which sound foundations had been laid before the war, is now rapidly under way. India is severely handicapped compared with other lands as regards the generation of power by the consumption of fuel, coal or oil. These commodities are all difficult to obtain, and costly in India except in a few favoured areas. Coal supplies, for example, are chiefly centred in Bengal and Chota Nagpur and the cost of transport is heavy. Water power and its transmission by electricity offer, on the other hand, immense possibilities, both as regards the quantity available and the cheapness at which the power can be rendered, in all parts of India.

Water power schemes, pure and simple, are generally difficult in India, because the power needs to be continuous, while the rainfall is only during a small portion of the year. Perennial rivers with sufficient water throughout the year are practically non-existent in India. Water, therefore, must be stored for use during the dry season. Favourable sites for this exist in many parts in the mountainous and hilly regions where the heaviest rainfalls occur and the progress already made in utilising such opportunities by the electrical transmission of power affords high encouragement for the future. Further, hydro-electric schemes can frequently be associated with important irrigation projects, the water being first used to drive the turbines at the generating stations and then distributed over the fields. Water, as was pointed out in an interesting paper on the subject presented to the Indian Industrial Commission of 1916-18 by Mr.R.B. Joyner, C.I.E., M. Inst.C.E., lately in the Irrigation Branch of the Bombay Public Works Department and engaged in the Tata's Hydro-Electric Works in Western India up to the time of his death, "can be stored in this country at a third or a quarter of the cost which there would be in other countries. This is not merely on account of the cheaper labour, which would be the chief reason in an earthen dam, but in masonry or concrete dams. It is also because we do not use cement, which, for some reason not well-known to me, is generally deemed essential elsewhere, though it cannot really be so suitable."

The Industrial Commission emphasized the necessity for a Hydrographic Survey of India. On this recommendation the Government of India in 1918 appointed the late Mr. G. T. Barlow, C.I.E., then Chief Engineer, Irrigation Branch, United Provinces, to undertake the work, associating with him Mr. J. W. Meares, M.I.C.E., Electrical Adviser to the Government of India. Mr. Barlow died, but Mr. Meares issued a preliminary report in September, 1919, summarising the present state of knowledge of the problem in India and outlining a programme of investigation to be undertaken in the course of the inquiry. Mr. Meares showed that industries in India now absorb over a million horse power, of which only some 285,000 h. p. is supplied by electricity from steam, oil or water. The water power so far actually in sight amounts to 1¾ million horse-power, but this excludes practically all the great rivers, which are at present uninvestigated. Thus the minimum flow of the seven great rivers eastward from the Indus is stated to be capable of giving not less than three million horse-power for every thousand feet of fall from the Himalayas, while similar considerations apply to rivers in other parts. Some doubt is expressed as to the estimate of seven million horse-power in the Irrawaddy and Chindwin rivers, given in the report of the London Conjoint Board of Scientific Studies.

The Report points out that the Bombay Presidency holds a unique position owing to its great existing and projected schemes at Lonavla, the Andhra Valley, the Nila Mula and the Koyna Valley and has the still greater advantage of possessing a firm ready to develop its resources.

Bombay Hydro-Electric Works.

The greatest water-power undertakings in India—and in some respects the greatest in the world—are the Tata hydro-electric schemes recently brought to fruition, and constantly undergoing expansion, for the supply of power in the city of Bombay. Bombay is after London the most populous city in the British Empire and it is the largest manufacturing town in Asia. Its cotton mills and other factories use over 100,000 horse power of mechanical energy and until a year or two ago this was almost entirely provided by steam, generated by coal coming from a distance—mostly Bengal. The Tata Hydro-Electric Power Scheme, now an accomplished fact, marked one of the big steps forward made by India in the history of its Industrial development. It was the product of the fertile brain of Mr. David Gostling, one of the well known characters of Bombay, a little over a decade ago. The exceptional position of the Western Ghats, which rise 2,000 feet from sea-level within a very short distance of the Arabian Sea, and force the monsoon as it sweeps to land, to break into torrential rain at the mountain passes was taken full advantage of, and the table lands behind the Ghats form a magnificent catchment area to conserve this

heavy rainfall in. Mr. Gostling pressed the scheme on the attention of Mr. Jamsetji Tata for years, and with perseverance collected data which he laid before that pioneer of the larger industries in India. He summoned the aid of experts from England to investigate the plan. The scheme was fully considered for six long years. Meanwhile both Mr. J. N. Tata and Mr. David Gostling passed away, but the sons of the former continued the work of their father and on Mr. Gostling's death, Mr. R. B. Joyner's aid was sought to work out the Hydraulic side of the undertaking.

The scheme completed, a syndicate secured the license from Government and an endeavour was made to enlist the support of financiers of England who tried to impose terms which were not acceptable. Meanwhile, the attention of Sir George Clarke (now Lord Sydenham), then Governor of Bombay, and an engineer of distinction himself, was drawn to the scheme. The interest shown by him drew the attention of Indian Chiefs in the Presidency of Bombay and outside it to its possibilities, funds flowed in and a company with an initial capital of 1,75,00,000 Rupees was started.

The hydro-electric engineering works in connection with the project are situated at and about Lonavla above the Bhor Ghat. The rainfall is stored in three lakes at Lonavla, Walwhan and Shirawta, whence it is conveyed in masonry canals to the forebay or receiving reservoir. The power-house is at Khopoli, at the foot of the Ghats, whither the stored water is conveyed through pipes, the fall being one of 1,725 feet. In falling from this height the water develops a pressure of 750 lbs. per square inch and with this force drives the turbines or water wheels. The scheme was originally restricted to 30,000 electrical horse power, but the Company, in view of the increasing demand for power from the Bombay mills, decided to extend the works by building the Shirawta Dam and issued further shares bringing the capital to Rs.3,00,00,000, the capacity of the scheme being increased to more than 40,000 electrical horse power. Issued Capital 7 per cent. Preference 8,735 shares fully paid and Ordinary 18,000, out of which 10,000 are fully paid and 8,000 new shares, on which Rs. 400 have been called up. There is also a Debenture Loan of Rs. 85 lakhs. The works were formally opened by H. E. the Governor of Bombay on the 8th February 1915. At present there are altogether 44 mills with motors of the aggregate B. H. P. of 53,000 H. P. in service. In addition to the cotton and flour mills which have contracted to take supply from the Company for a period of ten years, an agreement has been completed whereby the Tata Hydro-Electric Company, the Andhra Valley Power Supply Company and the Tata Power Company will between them supply the whole of the electric power required by the Bombay Electric Supply and Tramways Company, Limited, and also the power for the electrification of the Harbour Branch and Bombay-Kalyan section of the G. I. P. Railway. There remain many prospective buyers of electrical energy and the completion of the Company's full scheme will not suffice for all such demands. Besides the Bombay cotton mills, which alone would require about 100,000 horse power, there are: for instance, tramways, with possibilities of suburban extensions. The probable future demand is roughly estimated at about 160,000 H. P. During the past year the Company has embarked upon a considerable scheme of extensions, these involving the impounding of a fourth lake at Lonavla, the duplication of the pipe line and the installation of additional machinery at the power house at Khopoli.

Investigations undertaken by Mr. H. P. Gibbs, with a view to further developing the electrical supply led to the discovery of a highly promising water storage site in the valley of the Andhra River, situated near the present lakes previously overlooked, as altogether different treatment and design were required. In this instance the draw off point is 11 miles upstream from the dam and at a level 112 ft. above the lowest river bed level at the dam. The water is taken through a tunnel 8,700 ft. long driven in solid trap rock through the scarp of the ghauts of which the pressure pipes are an extension. Seventy feet of the upper water in the lake can be drawn off comprising 75 per cent. of the total amount of water stored, both above and below draw off level. A scheme was prepared to be carried out by a separate company and providing for holding up the Andhra River by a Dam, about a third of a mile long and 192 feet high, at Tokerwadi. This dam holds up a lake nearly twelve miles long, the further end of which approaches the brink of the Ghats at Khand. Here, a tunnel, a mile and a quarter long, carries the water to the surge chamber, whence it enters the pipes for a vertical drop of about 1,750 feet to the generating station at Bhivpuri, about 17 miles from the generating station at Khopoli. The scheme is designed to yield 100,000 horse power in its full development. A new company to operate the scheme was formed on the 31st August, 1916, with an initial capital of Rs. 2,10,00,000, divided into 160,000 Ordinary shares of Rs. 1,000 each and 5,000 Preference shares of Rs. 1,000 each, this being the Andhra Valley Power Supply Company, Limited. This Company will pay annually to the Tata Hydro-Electric Power Supply Company 15 per cent. upon the profits (after making certain deductions), or a sum of Rs. 50,000, whichever shall be the larger sum, the intention being that the new company shall pay annually to the Tata Hydro-Electric Power Supply Company a minimum sum of Rs. 50,000. The areas intended to be supplied by this Company are the town and island of Bombay and the Suburban Municipalities of Bandra and Kurla. The supply of power commenced in 1922 and the whole project was completed in the following year.

Just as the Andhra project has been developed as a northward extension of the original scheme, so a southward development also originated by Mr. Gibbs and developable on lines similar to those of the Andhra project, is now being carried out under the name of the Nila-Mula scheme, the name arising from the fact that the valleys of the Nila and Mula rivers are being dammed for the conservation of water for it. A company entitled The Tata Power Co., Ltd., was floated in the autumn of 1919 for the purpose, having a capital of Rs. 9 crores, divided into 30,000 7½% cumulative preference

shares of Rs. 1,000 each and 60,000 shares of Rs. 1,000 each, the first and present issue being of 10,000 preference shares and 35,000 ordinary shares. One lake will be formed and from it water will be conducted direct through a short tunnel to a pipe descent to a turbine power house 1,750 feet below the forebay. The head of water will suffice to generate 150,000 horse power and the length of the transmission line to Bombay will be 70 miles. Half of the scheme, *i. e.*, for the supply of 75,000 h. p., will first be completed and is expected to come into operation in about three years the construction works at present are in progress and lands have been acquired for the Dam and the lake sites.

Nearly 100 miles southward of this Messrs. Tata propose to erect two dams in the huge valley of the Koyna river, proposed by Mr. A. T. Arnall and developable on lines similar to the two projects by Mr. Gibbs above mentioned partly to supply power to Bombay and partly to develop a great assembly of electro-chemical industries near the power installation. The preliminary investigations for this scheme are still proceeding. The catchment area for the lake will be 346 square miles and there will be a total storage after the rains of 112,600 million cubic feet, which will be sufficient to supply a normal load of 350,000 horse power for 8,000 hours per year. The preliminary estimates provided for a capital of Rs. 810 lakhs to carry out the scheme.

Mysore Installation.

The first hydro-electric scheme undertaken in India or, indeed, in the East, was that on the River Cauvery, in Mysore State, which was inaugurated, with generating works at Sivasamudram, in 1902. The Cauvery rises in the British district of Coorg, and flows right across Mysore. The first object with which the installation was undertaken was the supply of power to the goldfields at Kolar. These are 92 miles distant from Sivasamudram and for a long time this was the longest electrical power transmission line in the world. Current is also sent to Bangalore, 59 miles away, where it is used for both industrial and lighting purposes.

The initial undertaking has constantly been expanded since its inauguration, so that its total capacity, which was at first 6,000 horse power, is now approximately 25,000 h.p. This is the maximum obtainable with the water which the Cauvery affords and, therefore, with the number of consumers, large and small, rapidly increasing, the necessity of a completely new installation elsewhere, to be operated in parallel with or separately from that at Sivasamudram, has been recognised. Two projects offer themselves. The first would involve the use of the River Shimsha, a tributary of the Cauvery which has natural falls, and the second, known as the Mekadatu project, would have its power house on the Cauvery, 25 miles down-river from Sivasamudram and just within the borders of Mysore State, adjacent to the Madras Presidency. The head of water available at Sivasamudram is 400 feet, that on the Shimsha 618 feet net, which would generate 39,500 e. h. p. At Mekadatu the Cauvery runs in rapids and a dam and a channel 20,000 feet long with a 22½ feet bed would be necessary. There would be three generating units, each giving an output of 4,000 e. h. p. Future extensions yielding an additional 8,000 h. p. could be made. The progressive spirit which has marked the management of the works since their inception now characterises the manner in which the problem of further extensions are being considered.

Works in Kashmir.

A scheme of much importance from its size, but more interesting because of the developments that may be expected from it than for the part which its current supply already plays in the life of the countryside, is one installed a few years ago by the Kashmir Durbar, utilising the River Jhelum, near Baramulla, which lies thirty-four miles north-west of Srinagar. The head works of the Jhelum power installation are situated six and a half miles from the power house and the main connection between the two is a great timber flume. These works and the forebay at the delivery end of the flume have a capacity for carrying water sufficient for the generation of 20,000 electrical horse power. Four pipes 600 feet long lead from the forebay to the power house, and from forebay to waterwheel there is an effective head of 395 feet. There are four vertical waterwheels, each coupled on the same shaft to a 1,000 k.w., 3-phase, 2,300 volt, 25-period generator running at 500 r.p.m., and each unit is capable of taking a 25 per cent. overload, which the generator end is guaranteed to maintain with safety for two hours. The power house is of sufficient capacity to allow of 15,000 k.w. generating plant being installed within it. Two transmission lines run side by side as far as Baramulla, 21 miles distant, at which point one terminates. The other continues to Srinagar, a further 34 miles. The installation at Baramulla was originally utilised for three floating dredgers and two floating derricks, for dredging the river and draining the swampy countryside and rendering it available for cultivation, but these operations have temporarily been curtailed, so that only one dredger is now in operation. The lighting of Baramulla has been taken in hand with satisfactory results and it is expected that the lighting demand will rapidly increase and that a small demand for power will soon spring up. At Srinagar, the line terminates at the State silk factory, where current is supplied not only for driving machinery and for lighting, but for heating. The greater part of Srinagar city is now electrically lighted and during the past year a motor load of over 100 k.w. has been connected with the mains, motors being hired out to consumers by the Electrical Department. This step was taken with a view to educating the people in the use of electric power and it has been entirely successful.

Progress in 1923.

Apart from the development of the three projects in the Bombay Presidency mentioned above, the year 1923 witnessed comparatively little progress in hydro-electric works. A small plant was completed and put into operation at Naini Tal during the year, and the erection of another small plant was commenced at Shillong, but otherwise there is nothing to

record. It is interesting to note, however, that preliminary investigations are proceeding with a view to the erection of hydro-electric plants in various parts of India. In the tea districts of Kalimpong and Kurseong, for example, it is proposed to harness a promising water-power site and to supply current to an important area in which are situated more than two hundred tea factories, whilst the Mandi (Punjab) project has advanced a stage and may be commenced early in 1924. Another Punjab scheme, the Sutlej Hydro-Electric Project, at one time appeared to be one of the most promising propositions in the country, but owing to financial considerations it has now been indefinitely shelved. In Southern India a large number of sites have been investigated, and of these one on the Pykara river in the Nilgiris and another on the Kallar river on the borders of Travancore have been selected for development if and when the financial considerations can be satisfactorily settled. The Pykara river scheme is of some magnitude, and it is estimated that upwards of 50,000 horse-power will be available for electro-chemical industries which it is proposed to establish at Calicut on the West Coast. The Kallar river project is very much smaller, but it is interesting in being a scheme in which the Government of Madras and the Travancore Darbar will be jointly responsible, for the power house will be located on the British side of the river and the current transmitted to and distributed in Travancore State. Finally, there is a big combined project of hydro-electrification and irrigation in Hyderabad State. This scheme is still very much in the air, but the fact that it is under consideration is worthy of being placed on record in view of the somewhat unusual circumstance in India, that the tail water from the turbines will be made available for agricultural purposes and not allowed to run to waste.

The fact that the Bombay Electric Supply and Tramways Company has definitely decided to shut down its steam-driven generating plant and to take supply in bulk from the various Tata companies has been recorded above, and it is of more than passing interest to note that the Poona Electric Supply Company has put forward a similar proposition with effect from the time when power is available from the Tata Power Company's installation at Nila-Mula. This is a phase of hydro electric distribution which is quite in its infancy in India, but it is possible to foresee the time when every village within a couple of hundred miles of a hydro-electric power station will receive its supply of electric current in bulk, thus greatly reducing capital and administrative charges and minimising the price of current to the consumer. It is a system which has become something of a fine art in California, where current is transmitted by overhead wires for many hundreds of miles at a pressure of 200,000 volts, or double the pressure commonly employed in India for overhead long-distance transmission.

The Indian Retrenchment Committee.

The report of the Indian Retrenchment Committee, commonly called the Inchcape Committee, was issued shortly before the Budget was introduced in 1923.

The Committee consisted of: Lord Inchcape (Chairman), Sir Thomas Catto, Mr. Dadiba Dalal Sir Rajendra Nath Mookerjee, Sir Alexander Murray and Sir Purshotamdas Thakurdas: with Mr. H. F. Howard (Secretary) and Mr. J. Milne (Attached Officer).

The terms of reference were—"To make recommendations to the Government of India for effecting forthwith all possible reductions in the expenditure of the Central Government, having regard especially to the present financial position and outlook. In so far as questions of policy are involved in the expenditure under discussion, these will be left for the exclusive consideration of the Government, but it will be open to the Committee to review the expenditure and to indicate the economies which might be effected if particular policies were either adopted, abandoned, or modified."

Military Services.

In regard to the Expenditure on the Army the Committee recommend that—

(1) The reductions which they have indicated be effected in the strength of the fighting services, saving Rs. 303 lakhs per annum;

(2) steps be taken to organise an effective reserve and so enable the peace strength of Indian battalions to be reduced to 20 per cent. below the war establishment, saving Rs. 63 lakhs net per annum;

(3) the necessity for retaining the present system of four Commands be reviewed in 12 months' time, and that in the meantime the number of districts be reduced as far as possible;

(4) the authorised establishment of motor vehicles, including reserves, be limited to 1,600, the number of vehicles in use and mileage run be strictly limited, and a system of rationing petrol be introduced;

(5) the supply services be reorganised on a less expensive basis, and the stocks held at depots reduced;

(6) commercial accounts be kept for all manufacturing establishments and for the Remount department;

(7) the basis of the capitation rate for British troops, now under revision, be determined in the manner indicated in their report;

(8) the Government of India be given a full opportunity of reviewing any proposed changes in the administration of British troops involving large expenditure before such changes are brought into operation;

(9) stocks of stores generally be largely curtailed, and stocks of Ordnance stores including reserves be reduced from Rs. 14 crores to Rs. 8 crores, all surplus Ordnance stores being disposed of; and

(10) the budget estimate for 1923-24 be limited to Rs. 51,47,00,000, a reduction of Rs. 8,95,30,000 compared with the budget estimates for 1922-23, subject to such adjustment as may be necessary on account of the delay which must ensue in carrying out the proposed changes.

The Royal Air Force.—The Committee make no recommendations in view of the fact that the potentialities of the Air Force in India are only now being proved, and there is a possibility that the extended use of the Force may result in economies in expenditure on ground troops.

The Royal Indian Marine.—The Committee recommend that

(1) The Service be drastically curtailed and reorganised on lines suggested;

(2) the Dockyard be worked as a separate entity on a commercial basis;

(3) The three troopships, "Dufferin," "Hardinge" and "Northbrook" be laid up forthwith and placed under care and maintenance parties until sold;

(4) only such vessels as are necessary for the essential duties of the Royal Indian Marine and for use as training ships for Indians be retained;

(5) the "Dalhousie," "Minto," "Nearchus," one patrol boat and four trawlers be dispensed with immediately and the number of military launches and Bombay yard craft be reduced;

(6) the cost of maintaining the "Lawrence" be transferred to the Political estimates;

(7) the recoveries from Port Trusts, etc., for Marine Survey work include a charge for interest on capital, depreciation and pension allowances;

(8) the budget estimate for 1923-24 be limited to Rs. 62 lakhs, a reduction of Rs. 75 lakhs, including Rs. 4,62,000 transferred to the Political Estimates, the actual saving thus being Rs. 70,38,000.

Military Works Department.—The Committee recommend that—

(1) The constructional programme of the Army already sanctioned by the Government of India be reviewed;

(2) reappropriation of funds be prohibited except for works included in the sanctioned programme, when the reappropriation should be subject to the surrender of savings being justified by the financial situation; and

(3) the budget estimate for 1923-24 be limited to Rs. 3,78,05,000 (net), a reduction of Rs. 76,92,000 including Rs. 10,00,000 transferred to the Royal Air Force, or a net saving of Rs. 66,92,000.

The General Conclusions of the Committee in regard to the Military Services are that—

(1) The total *net* budget for 1923-24 be fixed at Rs. 57,75,00,000, subject to such addition as may be necessary on account of the delay which must ensue in carrying out the proposed changes; and

(2) Military Expenditure after a few years be brought down to a sum not exceeding Rs. 50 crores.

Railways

The recommendations of the Committee in respect to Railways are that—

(1) Steps be taken to curtail working expenses as necessary to ensure that, under normal conditions, an average return of at least 5½ per cent. is obtained on the capital invested by the State in railways;

(2) the present system of programme revenue expenditure be abolished, and that adequate financial provision be made annually by each railway for the maintenance and renewal of permanent way and rolling stock in the manner indicated in paragraph 7;

(3) the agents of railways be designated General Managers and made responsible for the administration, working and financial results of their railways;

(4) a Financial Adviser be immediately appointed to ensure that financial considerations are given their due weight before expenditure is incurred;

(5) the preparation of a scheme of grouping the railways be taken up forthwith; and

(6) the budget provision for working expenses, including surplus profits in 1923-24 be limited to Rs. 64 crores, subject to a further allowance to meet any increase in traffic, a reduction of Rs. 4,59,00,000 on the budget estimate for 1922-23, and of Rs. 3,50,00,000 on the preliminary estimate proposed for 1923-24.

Posts and Telegraphs.

The recommendations of the Committee regarding the Posts and Telegraphs Department are that—

(1) Steps be taken to maintain a strict relation between the telegraph staff employed and the work performed, and to improve the average out-put;

(2) the use of motor services be restricted in future to large towns and important lines carrying heavy mails;

(3) outside tenders be obtained for the construction of all large Postal and Telegraph buildings;

(4) house-rent and local allowances be reviewed and economic rents charged for all staff accommodation provided, subject to the ordinary rule as to limit of salary;

(5) the reserve stock of constructional and general stores be limited to 9 months' supply;

(6) contracts for clothing be dealt with at a central office, the scales of clothing provided be reviewed and the period between issues extended where possible;

(7) a Financial Adviser be associated with the Director-General to assist in the control of existing and future expenditure;

(8) the Budget Estimate for 1923-24 for the Posts and Telegraphs Department be limited to Rs. 8,82,00,000 including Rs. 1,22,000 transferred from the Indo-European Telegraphs Department, a reduction of Rs. 1,37,27,000; and

(9) the capital expenditure on the Telegraph Department be limited to Rs. 94,30,000, a reduction of Rs. 50,70,000.

Indo-European Telegraph Dept.—The Committee recommend (subject to a minute of dissent by Sir Purshotamdas Thakurdas) that—

(1) Steps be taken to maintain a strict relation between the telegraph staff employed and the volume of work performed and to improve the present output per operator;

(2) the necessity for the various existing allowances be examined with a view to curtailment;

(3) the arrangements for purchase and control of stationery and stores be examined and placed on a proper footing, and the stocks held reduced to essential requirements;

(4) the question of disposing of the Government lines to a commercial concern be explored, and if the undertaking is not disposed of, endeavour be made to come to a favourable arrangement with some commercial cable company for the repair of the Department's cables and so admit of the sale of the "Patrick Stewart"; and

(5) the Budget estimate for 1923-24 for the Indo-European Telegraph Department be limited to Rs. 36,01,000, a reduction of Rs. 7,34,000, including Rs. 1,22,000 to be transferred to the Indian Posts and Telegraph Department, giving a net saving of Rs. 6,12,000.

Irrigation.

The Committee note that, "a reduction of Rs. 1,78,000 is anticipated in 1923-24 in the expenditure on irrigation and we recommend that the closing down of one irrigation division be expedited, and a further saving of Rs. 40,000 effected, giving a total reduction of Rs. 2,18,000."

General Administration.

The recommendations of the Committee are that—

(1) The Railway Department and the Posts and Telegraphs Department be grouped in a single portfolio, that the activities of certain departments be curtailed, and the remaining subjects dealt with by them be concentrated in two departments, namely, the Commerce Department and the General Department, on the lines set out in the table in paragraph 22, the total cost of the Secretariat being restricted to Rs. 53,55,000, a saving of Rs. 14,08,000;

(2) the appointment of Inspector-General of Irrigation be abolished and the functions of the Central Intelligence Bureau curtailed, and a saving of Rs. 3,95,000 effected in the cost of the "Attached Offices";

(3) a reduction of Rs. 40,500 be made in expenditure in the Minor Administrations;

(4) the grant-in-aid from the Treasury to the cost of the India Office be reviewed, and the net cost of that office be reduced by £48,700 under the head General Administration and by £2,700 under Stationery and Printing;

(5) the arrangements for the purchase of stores by the High Commissioner be reviewed as indicated in paragraphs 51 and 52;

(6) the net cost of the High Commissioner's Office be reduced by £52,000 under General Administration and by £2,000 under Stationery and Printing; and

(7) the Budget Estimate for 1923-24 for General Administration be limited to Rs. 1,48,68,000, a reduction of Rs. 49,89,000 including £109,000 or Rs. 16,35,000 transferred to the head Interest. This will give a net saving to the country of Rs. 33,54,000.

To the above recommendations is appended in the report a lengthy supplementary note on India Office Expenditure by Sir Purshotamdas Thakurdas.

Political Expenditure.

The Committee recommend that—

(1) Nor further increase be made in the strength of the Scouts and other irregular forces on the North-West Frontier and that existing establishments be reviewed as soon as the position on the frontier is stabilised, with a view to effecting progressive reductions in the cost of frontier defence;

(2) the present arrangements for the administration of Aden and the incidence of charges be reviewed on the lines which we propose;

(3) the present principles governing the incidence of expenditure in Persia be revised without delay and that India's liabilities in Persia be strictly defined and limited;

(4) if the groups of States and Estates in the Bombay Presidency remain with the Local Government, it be considered whether the charges cannot be transferred to provincial revenues, or, in the alternative, whether the bulk of the States and Estates cannot be grouped under a single Agent to the Governor General and the expenditure reduced to pre-war level;

(5) the charges for political expenditure in Burma be provincialised; and

(6) Political expenditure for 1923-24 be limited to Rs. 2,47,44,000, a saving of Rs. 45,70,000.

Civil Administrative Depts.

The Committee recommend in respect to **Audit** that—

(*a*) The possibility of separating accounts and audit be considered;

(*b*) the question of the further simplification of existing rules be explored; and

(*c*) the budget estimate for audit in 1923-24 be limited to Rs. 79,40,000, saving Rs. 3,76,000;

Regarding **Administration of Justice** that the estimates for 1923-24 be limited to Rs. 9,68,000, saving Rs. 61,000;

Regarding **Jails and Convict Settlements** that—

(1) When the contract for the S. S. Maharaja comes to an end, more favourable terms be secured for the service, if it is considered necessary to maintain it; and

(2) the budget estimate for 1923-24 be limited to Rs. 39,35,000 saving Rs. 4,80,000;

Regarding **Police** that the budget estimates for 1923-24 be limited to Rs. 80,83,000. This represents a reduction of Rs. 1,07,000 on the estimates for 1922-23, after deduction of the cuts made by the Assembly, but the real saving compared with the expenditure now estimated for 1922-23 is over Rs. 9 lakhs;

Regarding **Ports and Pilotage** that—

(1) Steps be taken at an early date to make the various services included under this head self-supporting; and

(2) the expenditure under this head in 1923-24 be limited to Rs. 24,21,000, saving Rs. 2,11,000;

Regarding **Ecclesiastical Expenditure** that early decisions be arrived at on the proposals for the formation of an Army Chaplain's Department and for an autonomous Church in India; that vacancies in the establishment of chaplains should not be filled until the future policy in regard to ecclesiastical matters is definitely settled; and that a reduction of Rs. two lakhs be made in the provision for 1923-24.

To this Sir Purshotamdas Thakurdas adds a supplementary note, reviewing the existing system and recommending a total ultimate saving on the estimates of Rs. 11,09,409 in addition to the saving recommended by his colleagues. He also states that expenditure on religious teachers for Indian troops is unnecessary except on the frontiers or outside India.

Regarding **Scientific Departments** the Committee recommend that—

(1) The cadre of military officers in the Survey of India be progressively reduced and vacancies filled by less expensive civil agency;

(2) survey work required for local Governments and local bodies be undertaken on special terms to be arranged, or the number of survey parties be reduced, securing, with other economies suggested a reduction of Rs. 7,09,000 in the net expenditure of the Survey of India;

(3) existing vacancies in the Geological Survey remain unfilled until Indian recruits are available and arrangements be made with other local Governments on the lines adopted for Burma;

(4) the purchase of quinine be restricted to Rs. 15,45,000 and the area to be planted annually in Mergui be reduced to 250 acres;

(5) the list of protected monuments and the provision for repair and maintenance of monuments and gardens be reduced and the provision for Archæology restricted to Rs. 10,00,000; and

(6) the total provision for 1923-24 under the head "Scientific Departments" be limited to Rs. 82,58,000, a saving of Rs. 30,02,000.

Regarding **Education** that—

(1) The whole educational policy be revised, the present system of grants being modified to secure that such funds as are available are applied for the extension of primary education rather than to secondary and higher education;

(2) grants for secondary and higher education be curtailed and fixed at a lump sum for each administration for the next five years, any additional expenditure required being met from increased fees, increased grants from local bodies and private contributions;

(3) grants for primary education be fixed as far as possible on the basis of an average of one teacher per 25 pupils rising to one teacher per 30 pupils within five years;

(4) the scheme for the Delhi University be reconsidered; and

(5) the budget estimate for 1923-24 for education be limited to Rs. 27,77,000, a saving of Rs. 5,19,000 on the sanctioned estimate for 1922-23 and of Rs. 7,74,000 on the estimate originally presented to the Legislative Assembly.

Regarding **Medical Services and Public Health** that—

(1) the Medical and Public Health services be amalgamated;

(2) the grant to the Indian Research Fund Association be discontinued as they have now at their disposal an accumulated reserve of Rs. 33,26,000 derived from Government;

(3) port quarantine regulations be revised on the lines of those obtaining in Great Britain;

(4) the total estimates for Medical Services and Public Health (including expenditure in England) be limited in 1923-24 to Rs. 26,44,000 and Rs. 8,53,000 respectively, saving Rs. 6,40,000 under the former and Rs. 7,79,000 under the latter head, and making a total saving for the combined departments of Rs. 14,19,000.

Regarding **Agriculture** that—

(1) Two of the Military Dairy Farms be transferred forthwith to the Agriculture Department;

(2) the necessity for retaining the sugar bureau be examined;

(3) the Muktasar Institute be placed on a self-supporting basis and

(4) the budget estimate for 1923-24 be limited to Rs. 20,50,000, a reduction of Rs. 2,86,000.

Regarding **Industries** that—

(1) The construction of the School of Mines and Geology be postponed for three years; and

(2) expenditure in 1923-24 be limited to Rs. 30,000 a saving of Rs. 1,29,000, apart from such new expenditure as it may be necessary to incur in connection with the British Empire Exhibition.

Regarding **Miscellaneous Departments** that—

(1) Including the saving propose by the Department the expendture of the Commercial Intelligence Department be reduced by Rs. 2,80,000;

(2) the provision for the completion of the 1921 census be limited to Rs. 1,00,000;

(3) the fees for external emigration be fixed at the level necessary to cover the full cost of administration, and that the expenditure on internal emigration be reduced by Rs. 58,000 as proposed by the Department;

(4) the Board of Examiners be abolished, saving Rs. 50,000;

(5) fees be charged to local Governments and local bodies for inspections carried out by the Explosives Department on their behalf and that the budget of the Department in 1923-24 be limited to Rs. 89,000;

(6) the expansion of the Indian Stores Department be postponed and a reduction of Rs. 83,000 effected;

(7) the compilation of provincial trade statistics in the minor administrations be abolished, saving about Rs. 15,000;

(8) the appointment of Indian Trade Commissioner, London, be abolished saving Rs. 1,15,000 and a reduction of Rs. 45,000 be effected in other expenditure in England; and

(9) the budget estimate for 1923-24 for the miscellaneous departments be limited to Rs. 15,53,000, a reduction of Rs. 11,18,000.

Revenue Collecting Services.

The Committee recommend that the strength and pay at the various **Customs Houses** should be examined with a view to possible economies; and, in regard to **Salt** that—

(1) The accounts of the Government Salt Manufacturing Departments be compiled on a commercial basis; and

(2) the Budget estimate for 1923-24 be limited to Rs. 1,54,60,000, a reduction of Rs. 19,15,000 compared with the budget estimate for 1922-23.

As to **Opium** they recommend only that the price paid to cultivators for opium be carefully watched with a view to reduction.

The Committee are of opinion that the Budget Estimate for **Land Revenue** in 1923-24 should not exceed Rs. 11,67,000 excluding expenditure transferred to the Survey of India estimates, thereby effecting a net saving of Rs. 2,49,600 apart from any reduction made under the head of survey expenditure.

In regard to **Stamps** the Committee recommend that—

(1) The Minor Administrations be debited with the cost of all stamps, plain paper, etc., supplied to them;

(2) expenditure incurred in England on indents from provincial depots be charged direct to the Provincial Accounts;

(3) the reserve stocks of stamps in the Calcutta depot be reduced with a view to effecting a saving of Rs. 4,00,000 in 1923-24;

(4) the whole of the expenditure, including overhead charges incurred by the central depot be recovered and the depot be made self-supporting, the Controller being responsible for effecting recoveries;

(5) the provision for net expenditure on stamps be reduced in 1923-24 by Rs. 25,50,000 which, after allowing for an increased debit of Rs. 3,50,000 to the Posts and Telegraphs

Department, will leave a net saving of Rs. 22 lakhs in 1923-24, and Rs. 18 lakhs in future years.

The recommendations as to **Forests** are that—

(1) Control of the Forest Department be vested in a manager with commercial experience in the timber industry;

(2) the accounts of the Department be placed on a commercial basis; and

(3) the estimates for 1923-24 be limited to Rs. 45,55,000, saving Rs. 6,90,000.

Currency.—It is recommended that if a saving would accrue from the discontinuance of the one-rupee note, the issue of those notes should be abandoned.

Mints.—It is recommended that—

(*a*) The two Mints be retained with a minimum establishment, but that an early decision be arrived at on the question of removing the Calcutta Mint to a cheaper site;

(*b*) the possibility of closing the silver minting portion of the Calcutta Mint and the nickel portion of the Bombay Mint be explored; and

(*c*) the expenditure under this head in 1923-24 be limited to Rs. 18,22,000, saving Rs.4,12,000.

Public Works Department.—The Committee recommend that—

(1) The practice of calling for tenders and giving out work on inclusive contract be adopted wherever possible and establishments reduced;

(2) reappropriation of funds be strictly limited and the subject to the surrenders of savings being justified by the financial situation; and

(3) allowing for the transfer of Rs. 6,21,000 to other heads, the budget estimate for 1923-24 be limited to Rs. 1,40,33,000, a total reduction of Rs.21,54,000, and a net saving of Rs.15,30,000.

The New Delhi.—The Committee refrain from expressing any opinion on the expenditure which has been or will have to be incurred on New Delhi but are of opinion, that there is no financial justification for the construction of the new railway station, and that the estimated cost of the proposed station buildings (2 lakhs) is extravagant.

Pensions. In regard to Superannuation allowances and pensions the Committee recommend that—

(1) An actuarial examination be made of the cost to the state of any proposals put forward in future for the revision of pension scales before these are sanctioned; and

(2) a uniform practice of debiting commercial departments with pensionary charges be adopted.

Stationery and Printing.—The Committee recommend that—

(1) The present system of printing at Government presses be continued but that the presses be reorganized on the lines recommended by Mr. Ascoli, and the system of costing be revised;

(2) the introduction of the other economies suggested by Mr. Ascoli be expedited, including the organisation of the Publication Branch;

(3) the press employes be removed from the operation of the fundamental rules for leave purposes and placed under special leave rules;

(4) if satisfactory tenders are not received for a new contract for printing Government forms, fresh tenders be invited for alternative periods of 3, 5, 7 and 10 years;

(5) the forms used in the Departments of Income tax, Customs, etc., be standardised and printed at the Central Government Press;

(6) the stocks held at the Stationery Office be examined with a view to reduction; and

(7) the provision for 1923-24 be limited to Rs. 65,19,000, effecting a saving of Rs. 10,37,000 in addition to any further saving that may be secured by a reduction of stocks.

Miscellaneous.

Under this heading the recommendations are that—

(1) Large Commissions and Committees of Enquiry be appointed only in exceptional circumstances, and

(2) the provision under this head be limited to Rs. 55,15,000, saving Rs. 14,03,000.

Minor Administrations.

Further recommendations are that—

(1) A settlement be entered into for a period of years with the North-West Frontier Province and Baluchistan and these Administrations be required to work within their revenues as so fixed, and

(2) special enquiries be made locally into the cost of the administration of Ajmer-Merwara, Rajputana and Central India, with a view to effecting further reductions.

Pay and Allowances.

The Committee recommend that—

(1) The whole question of pay and leave conditions of the subordinate services be made the subject of an enquiry in which local Administrations should be associated;

(2) salary limits entitling officers to particular classes of rail accommodation be raised; and

(3) the travelling allowance rules be revised on the basis that officers required to travel by rail on duty be granted the actual fare paid including a limited number of servants' fares and a daily allowance.

* The Peoples of India.

It is essential to bear in mind, when dealing with the people of India, that it is a continent rather than a country. Nowhere is the complex character of Indians more clearly exemplified than in the physical type of its inhabitants. No one would confuse the main types, such as Gurkhas, Pathans, Sikhs, Rajputs, Burmans, Nagas, Tamils, etc., nor does it take long to carry the differentiation much farther. The typical inhabitants of India—the Dravidians—differ altogether from those of Northern Asia, and more nearly resemble the tribes of Malaya, Sumatra and Madagascar. Whatever may be their origin, it is certain that they have settled in the country for countless ages and that their present physical characteristics have been evolved locally. They have been displaced in the North-West by successive hordes of invaders, including Aryans, Scythians, Pathans and Moghals, and in the North-East by Mongoloid tribes allied to those of Burma, which is India only in a modern political sense. Between these foreign elements and the pure Dravidians is borderland where the contiguous races have interadmingled.

The people of the Indian Empire are divided by Sir Henry Risley (Caste, Tribe and Race, Indian Census Report, 1901; the Gazetteer of India, Ethnology and Caste, Volume I, Chapter 5) into seven main physical types. There would be eight if the Andamese were included, but this tiny group of Negritos may be disregarded.

The Turko-Iranian, represented by the Baloch, Brahui and Afghans of Baluchistan and the North-West Frontier Province. Probably formed by a fusion of Turki and Persian elements, in which the former predominate. Stature above mean; complexion fair; eyes mostly dark but occasionally grey; hair on face plentiful; head broad, nose moderately narrow, prominent and very long. The feature in these people that strikes one most prominently is the portentious length of their noses, and it is probably this peculiarity that has given rise to the tradition of the Jewish origin of the Afghans.

The Indo-Aryan occupying the Punjab, Rajputana, and Kashmir, and having as its characteristics members the Rajputs, Khattris, and Jats. This type, which is readily distinguishable from the Turko-Iranian, approaches most closely to that ascribed to the traditional Aryan colonists of India. The stature is mostly tall; complexion fair; eyes dark; hair on face plentiful, head long; nose narrow, and prominent, but not specially long.

The Scytho-Dravidian, comprising the Maratha Brahmans, the Kunbis, and the Coorgs of Western India. Probably formed by a mixture of Scythian and Dravidian elements. This type is clearly distinguished from the Turko-Iranian by a lower stature, a greater length of head, a higher nasal index, a shorter nose, and a lower orbito-nasal index. All of these characters, except perhaps the last, may be due to a varying degree of intermixture with the Dravidians. In the higher groups the amount of crossing seems to have been slight; in the lower the Dravidian elements are more pronounced.

The Aryo-Dravidian or Hindustani, found in the United Provinces, in parts of Rajputana, and in Bihar and represented in its upper strata by the Hindustani Brahman and in its lower by the Chamar. Probably the result of the intermixture, in varying proportions, of the Indo-Aryan and Dravidian types. The head-form is long with a tendency to medium; the complexion varies from lightish brown to black; the nose ranges from medium to broad, being always broader than among the Indo-Aryans; the stature is lower than in the latter group, and usually below the average according to the scale. The higher representatives of this type approach the Indo-Aryans, while the lower members are in many respects not very far removed from the Dravidians. The type is essentially a mixed one, yet its characteristics are readily definable, and no one would take even an upper class Hindustani for a pure Indo-Aryan or a Chamar for a genuine Dravidian. The distinctive feature of the type, the character which gives the real clue to its origin and stamps the Aryo-Dravidian as racially different from the Indo-Aryan is to be found in the proportions of the nose.

The Mongolo-Dravidian, or Bengali type of Lower Bengal and Orissa, comprising the Bengal Brahmans and Kayasthas, the Mahomedans of Eastern Bengal, and other groups peculiar to this part of India. Probably a blend of Dravidian and Mongoloid elements, with a strain of Indo-Aryan blood in the higher groups. The head is broad; complexion dark; hair on face usually plentiful; stature medium; nose medium, with a tendency to broad. This is one of the most distinctive types in India, and its members may be recognised at a glance throughout the wide area where their remarkable aptitude for clerical pursuits has procured them employment. Within its own habitat the type extends to the Himalayas on the north and to Assam on the east, and probably includes the bulk of the population of Orissa; the western limit coincides approximately with the hilly country of Chota Nagpur and Western Bengal.

The Mongoloid type of the Himalayas, Nepal, Assam, and Burma, represented by the Kanets of Lahul and Kulu; the Lepchas of Darjeeling and Sikkim; the Limbus, Murmis and Gurungs of Nepal; the Bodo of Assam; and the Burmese. The head is broad; complexion dark, with a yellow tinge; hair on face scanty; stature short or below average; nose fine to broad; face characteristically flat; eyelids often oblique.

The Dravidian type extending from Ceylon to the valley of the Ganges, and pervading Madras, Hyderabad, the Central Provinces, most of Central India and Chota Nagpur. Its most characteristics representatives are the Paniyans of Malabar and the Santals of Chota Nagpur. Probably the original type of the population of India, now modified to a varying extent by the admixture of Aryan, Scythian, and Mongoloid elements. In typical specimens the stature is short or below mean; the complexion very dark, approaching black; hair plentiful, with an occasional tendency to curl; eyes dark; head long; nose very broad, sometimes depressed at the root, but not so as to make the face appear

* The Census was taken in 1921. Provisional figures only are available and these are given at the end of this article.

	1911.	1901.	1891.	1881.	1872.	1921.
INDIA	315,156,396	294,261,056	287,314,671	253,896,330	206,162,360	318,942,480
PROVINCES	248,033,178	231,259,098	220,873,388	198,545,380	184,858,172	247,003,293
Ajmer-Merwara	501,395	476,912	542,358	460,722	396,331	495,271
Andamans and Nicobars	26,459	24,649	15,609	14,028	....	27,086
Assam	6,714,299	5,842,480	5,477,880	4,908,321	4,151,231	7,606,230
Baluchistan	414,412	382,106	....	....	....	420,648
Bengal	45,482,605	42,141,060	39,089,217	36,316,360	34,119,176	43,695,536
Bihar and Orissa	34,489,544	33,242,887	32,876,660	30,388,557	26,485,754	34,002,189
Bihar	23,752,429	23,360,309	23,581,561	22,418,004	19,734,899	26,280,288
Orissa	5,131,753	4,982,142	4,666,227	4,343,964	3,608,156	4,968,873
Chota Nagpur	5,605,362	4,900,429	4,628,792	4,225,989	3,147,999	5,6 3,028
Bombay (Presidency)	19,696,266	18,574,289	18,004,606	16,514,923	16,315,006	19,346,219
Bombay	16,136,606	15,319,405	15,985,427	14,063,006	14,089,152	16,012,342
Sind	3,513,435	3,210,916	2,875,100	2,417,057	2,206,565	3,276,377
Aden	46,165	43,974	43,079	34,860	19,289	56,500
Burma	12,115,217	10,490,624	7,722,053	3,736,771	2,747,148	13,212,192
Central Provinces and Berar	13,916,158	11,971,328	13,048,845	11,943,251	9,951,189	13,012,760
Central Provinces	10,858,996	9,217,312	10,151,354	9,270,548	7,723,535	10,837,444
Berar	3,057,162	2,754,016	2,897,491	2,672,673	2,227,654	2,075,316
Coorg	174,976	180,607	173,055	178,302	168,312	163,838
Delhi	413,447	405,409	372,766	350,499	....	488,188
Madras	41,405,404	38,229,654	35,644,428	30,841,154	31,280,622	42,518,985
North-West Frontier Province (Districts and Administered Territories).	2,196,933	2,041,534	1,857,519	1,575,943	} 17,623 931*	2,251 340
Punjab	19,578,573	19,942,227	18,652,202	16,038,910		20,685,024
United Provinces of Agra and Oudh	46,807,490	47,313,339	46,502,250	43,777,039	41,669,442	45,375,787
Agra	34,249,486	34,430,171	33,851,326	32,389,207	30,448,309	33,209,145
Oudh	12,558,004	12,823,168	12,650,924	11,287,832	11,221,043	12,166,642

* Includes Delhi.

flat. This race, the most primitive of the Indian types, occupies the oldest geological formation in India, the medley of forest-clad ranges, terraced plateau, and undulating plains which stretches roughly speaking, from the Vindhyas to Cape Comorin. On the east and the west of the peninsular area the domain of the Dravidian is conterminous with the Ghats, while further north it reaches on one side to the Aravallis, and on the other to the Rajmahal Hills. Where the original characteristics have been unchanged by contact with Indo-Aryan or Mongoloid people, the type is remarkably uniform and distinctive. Labour is the birthright of the pure Dravidian whether hoeing tea in Assam, the Duars, of Ceylon, cutting rice in the swamps of Eastern Bengal or doing scavenger's work in the streets of Calcutta, Rangoon and Singapore, he is recognizable at a glance by his black skin, his squat figure, and the negro-like proportions of his nose. In the upper strata of the vast social deposit which is here treated as Dravidian these typical characteristics tend to thin and disappear, but even among them traces of the original stock survive in varying degrees.

It must, however, be clearly understood that the areas occupied by these various types do not admit of being defined as sharply as they must be shown on an ethnographic map. They melt into each other insensibly; and, although at the close of a day's journey from one ethnic tract to another, an observer whose attention had been directed to the subject would realise clearly enough that the physical characteristics of the people had undergone an appreciable change, he would certainly be unable to say at what particular stage in his progress the transformation had taken place.

Contrasts.—The linguistic survey has distinguished in India about a hundred and thirty indigenous dialects belonging to six distinct families of speech. In the domain of religion, though the bulk of the people call themselves Hindus, there are millions of Mahomedans, Animists, Buddhists, Jains, Sikhs, and Christians. So also in respect of social customs. In the north near relatives are forbidden to marry; but in the south cousin marriage is prescribed and even closer alliances are sometimes permitted. As a rule, female chastity is highly valued, but some communities set little store by it, at any rate prior to marriage, and others make it a rule to dedicate one daughter to a life of religious prostitution. In some parts the women move about freely; in others they are kept secluded. In some parts they wear skirts; in others trousers. In some parts again wheat is the staple food; in others rice, and in others millets of various kinds. All stages of civilisation are found in India. At one extreme are the land-holding and professional classes, many of whom are highly educated and refined; at the other various primitive aboriginal tribes such as the head-hunting Nagas of Assam and the leaf-clad savages of the southern hills who subsist on vermin and jungle products.

MAIN STATISTICS OF THE INDIAN EMPIRE.

According to the revised areas adopted in the Census of 1911, the Indian Empire contains 1,802,657 square miles, or some 36,000 more than in 1901. About 23,000 square miles have been added owing to the enumeration for the first time of the Agency tracts attached to the North-West Frontier Province. A further 6,500 represent the area of the Sunderbans, or swampy littoral of the Ganges delta, which was left out of account at previous enumerations. Finally the Frontier State of Manipur has been found to contain about 5,000 square miles more than the estimate made in 1901.

Population Divisions.—The provinces under British administration comprise 1,093,074 square miles, or 60·6 per cent. of the total. The remainder is included in the Native States. The total population is 315,156,396, of which British territory contains 244,267,542, or 77·5 per cent. and the Native States 70,888,854 or 22·5 per cent.

Comparisons with Europe.—These stupendous figures can be grasped only by contrast. The Indian Empire is equal to the whole of Europe, except Russia. Burma is about the same size as Austria-Hungary; Bombay is comparable in point of area with Spain; Madras, the Punjab, Baluchistan, the Central Provinces and Berar and Rajputana are all larger than the British Islands; the United Provinces and Bihar and Orissa than Italy; and Hyderabad and Kashmir than Great Britain excluding Yorkshire.

The population of India exceeds that of Europe without Russia, and is considerably more than three times that of the United States of America. The United Provinces and Bengal, with the States attached to them, both have as many inhabitants as the British Islands, Bihar and Orissa as France, Bombay as Austria, and the Punjab as Spain and Portugal combined. The population of the Central Provinces and Berar approaches that of Brazil; Hyderabad and Burma have as many inhabitants as Egypt; Central India and Rajputana as Scotland and Ireland combined; and Assam as Belgium.

Density.—In the whole Empire there are on the average 175 persons to the square mile, or much the same as Europe outside Russia. In British territory the number to the square mile is 223 and in the Native States 100; the former figure exceeds by 34 the density ratio in France and the latter is identical with that in Spain.

There are great local variations in density. In nearly two-thirds of the districts, and States, the number of persons to the square mile is less than 200, and in about a quarter it ranges from 200 to 500. The units with less than 100 persons to the square mile covers two-fifths of the total area, but contains only one-eleventh of the population.

Causes of Density.—The productiveness of the soil is the main factor in determining the density of the Indian people. The most thickly peopled tracts are the level plains where practically every inch of the land is fit for tillage. This is notably the case in Bengal and Bihar and the United Provinces East. The next most densely peopled tracts are the low-lying plains along the sea coast in the southern part of the peninsula. In the United Provinces West and the Punjab East the configuration of the surface is equally favourable; the rainfall is more scanty and less

STATES AND AGENCIES	1911.	1901.	1891.	1881.	1872.	1921.
	71,229,218	63,101,978	66,435,283	55,259,930	21,304,185	71,939,187
Assam State (Manipur)	346,222	284,465	....	221,070	....	384,016
Baluchistan States	420,291	428,640	....	....	....	378,977
Baroda State	2,032,798	1,952,692	2,415,396	2,182,158	1,997,598	2,126,522
Bengal States	822,565	740,299	716,310	698,261	567,827	896,926
Bihar and Orissa States	3,945,209	3,314,474	3,028,018	2,410,611	1,723,900	3,959,669
Bombay States	7,338,051	6,893,920	8,055,815	6,917,508	6,784,326	7,409,429
Central India Agency †	9,356,980	8,497,805	10,136,403	9,261,907	....	9,183,098
Central Provinces States	2,117,152	1,631,264	1,712,689	1,387,406	928,195	2,066,900
Hyderabad State	15,374,676	11,141,142	11,537,040	9,845,594	....	12,471,770
Kashmir State	3,158,126	2,905,578	2,543,952	....	....	3,320,518
Madras States	4,811,841	4,188,086	3,700,622	3,344,849	3,289,392	5,460,312
Mysore State	5,806,193	5,539,399	4,943,604	4,186,188	5,055,402	5,978,892
N.-W. F. Province (Agencies and Tribal areas) ..	1,622,094	83,962	....	....	....	2,825,136
Punjab States	4,212,794	4,424,398	4,263,280	3,861,683	....	4,416,036
Rajputana Agency	10,536,432	9,853,366	12,171,749	9,934,255	....	9,844,384
Sikkim State	87,920	59,014	30,458	....	....	81,721
United Provinces States	1,189,874	1,163,454	1,179,947	1,099,463	957,548	1,134,881

† Includes Gwalior.

regular; but it is supplemented in many parts by water from the canals. The natural divisions which contain the coast districts of Orissa and north Madras, with a rainfall of 50 inches, has a relatively low mean density, but this is because it includes on the west a considerable hilly area, while on the east near the sea the ground is swampy and impregnated with salt. In the intermediate strip, between the littoral and the hills, the density is as great as in parts of the lower Gangetic Plain. Want of water is the main explanation of the comparatively sparse population in several more or less level tracts such as Gujarat, Rajputana East and Central India West, and the North-West dry area. In Assam there are extensive tracts of hill and jungle and sandy stretches in the strath of the Brahmaputra River, where permanent cultivation is out of question. The agricultural returns show that three-quarters of the whole area is cultivable but this simply means that crops of some kind can occasionally be grown. The proportion of the area fit for permanent cultivation must be less than half that shown in the returns.

TOWNS AND VILLAGES.

The definition of a town in the Indian census statistics includes every municipality; all Civil Lines not included within municipal limits; every cantonment; every other continuous collections of houses inhabited by not less than 5,000 persons, which may be treated as a town for census purposes. Only 9·5 per cent. of the population of India are found in towns as defined above, compared with 78·1 per cent. in England and Wales and 45·6 per cent. in Germany. Rather more than half the urban population of India is found in towns containing upwards of 20,000 inhabitants, about one-fifth in towns with from ten to twenty thousand, and the same proportion in those with from five to ten thousand; the remainder, about one-fifteenth, live in towns with less than five thousand. The tendency to urban aggregation is most marked in the west of India and least so in the north-east. The proportion of the urban to the total population in the main provinces ranges from 18 per cent. in Bombay to only 3 per cent. in Assam. The urban population of Upper India is much larger than it otherwise would be because of the numerous old capitals which are found there. In the future the main factors will be the expansion of trade and industrial development.

Sex in Towns.—In respect of the distribution by sex, the urban population in India presents a striking contrast to that of European countries. In Europe the proportion of females is larger in towns than in the general population, but in India it is considerably smaller, and the number of females per thousand males is only 847, compared with 953 in the population as a whole. The reason is that in this country the great majority of the domestic servants, shop hands and factory employees are males. The disproportion is most marked in large trading and industrial centres where the number of immigrants is large. In Calcutta, for example, the foreign-born population contains only 357 females per thousand males.

Religion in Towns.—Of the Parsis no fewer than six out of every seven are resident in towns; of the Jains, the proportion is nearly one-third; and of the Christians more than one-fifth. There is a marked contrast between these proportions and those for Hindus and Mahomedans who form the bulk of the population. Of the Mahomedans less than one-eighth, and of the Hindus less than one-eleventh, reside in towns. In the case of the former the proportion rises to one-sixth if we exclude the figures for Bengal, where the majority of the Mahomedans are the descendants of local converts. Amongst the Hindus the higher castes have hitherto shown a greater predilection for town-life than the lower, but the disproportion is gradually disappearing; modern industrial developments are attracting the lower castes to towns in ever-increasing numbers.

Urban and Rural.—The proportion of the urban to the total population has fallen during the decade from 9·9 to 9·5 per cent. The main explanation of this is undoubtedly the fact that plague has been far more prevalent in town than in rural areas. This scourge has now spread to all parts of the Empire except the east and south. At the time of the census an epidemic was raging in many towns, especially in those of the United Provinces, Central India and the Central Provinces and Berar, and a large number of the regular inhabitants had gone away. In addition, however, to driving people away, plague has been responsible in many towns for a terribly heavy mortality. It is impossible to make any estimate of the direct and indirect effects of plague on the growth of towns, but it is quite certain that they have been enormous.

Urban Tendencies.—We cannot draw any conclusions as to the tendency to urban aggregation from a comparison of the statistics of the present census with those of the previous one, when plague was still a new and more or less local visitation, but there can be no doubt that there is a growing tendency for people to congregate in towns of a certain kind. The introduction of machinery is rapidly causing the old cottage industries to be replaced by mills and factories; and these are necessarily located at those places where there are the best facilities for collecting the raw material and distributing the manufactured article. The jute industry is practically confined to the banks of the Hooghly near the port of Calcutta. Cotton mills are found chiefly in Western India and woollen and leather factories at Cawnpore and Delhi. The increasing trade of the country and the improvements in railway communications also encourage the growth of towns. Not only are the great seaports attracting an ever-growing population, but various inland towns are benefiting from the same cause. The extent to which modern conditions of trade and industry are causing the growth of towns is obscured not only by plague, which is generally far more prevalent in towns than in rural areas, but also by the decay of old centres of population, which owed their importance to past political and economic conditions. Throughout India there are many former capitals of defunct dynasties whose population is steadily dwindling. During the last ten years, Mandalay, the last capital of the kings of Ava, has lost a quarter of its population.

SUMMARISED GROWTH OF THE INDIAN POPULATION.

	1911 to 1921.	1901 to 1911.	1891 to 1901.	1881 to 1891.	1872 to 1881.	Net variation in period 1872 to 1921 Increase (+). Decrease (—).
INDIA	+3,786,084	+29,795,340	+7,046,385	+33,418,341	+47,733,970	+112,780,120
PROVINCES	+3,070,115	+12,674,080	+10,379,710	+22,334,008	+13,687,208	+62,145,121
Ajmer-Merwara	—6,124	+24,483	—65,446	+81,636	+64,391	+98,940
Andamans and Nicobars	+627	+1,810	+9,040	+ 981	....	....
Assam	+ 891,931	+871,819	+364,600	+569,559	+757,090	+3,454,999
Baluchistan	+6,236	+32,306	....	....	....	....
Bengal	+1,212,931	+3,341,545	+3,051,847	+2,772,857	+2,197,184	+12,576,360
Bihar and Orissa	—48,355	+1,246,264	+306,240	+1,888,043	+4,502,803	+7,516,435
Bihar	—372,141	+392,120	—221,272	+1,162,977	+2,683,705	+3,645,389
Orissa	—162,880	+149,611	+315,915	+322,263	+740,808	+1,365,717
Chota Nagpur	+47,666	+704,933	+271,637	+402,803	+1,078,290	+2,505,329
Bombay (Presidency)	—348,047	+1,121,977	—33,317	+2,389,682	+199,917	+3,033,213
Bombay	—124,324	+817,261	—665,022	+1,922,421	—26,146	+1,923,190
Sind	—234,058	+302,525	+335,810	+458,043	+210,492	+1,072,812
Aden	+10,335	+2,191	—105	+9,219	+15,571	+37,211
Burma	+1,096,975	+1,624,593	+2,768,571	+3,985,282	+989,623	+10,465,044
Central Provinces and Berar	—3,398	+1,944,873	—1,077,517	+1,105,594	+1,992,062	+3,961,571
Central Provinces	—21,552	+1,641,684	—934,642	+880,776	+1,547,043	+3,113,909
Berar	+18,154	+303,146	—143,475	+224,818	+445,019	+847,662
Coorg	—11,138	—5,631	+7,552	—5,247	+9,990	—4,474
Delhi	+74,741	+8,038	+32,643	+22,267	....	....
Madras	+913,. 81	+3,175,750	+2,585,226	+4,803,274	—380,468	+11,088,363
North-West Frontier Province (Districts and Administered Territories).	+ 51,407	+155,399	+184,015	+281,576	} +1,241,391*	+5 800,591*
Punjab	+1,106,451	—363,654	+1,290,025	+1,713,292		
United Provinces of Agra and Oudh ..	—1,431,703	—505,849	+811,089	+2,725,211	+2,107,597	+3,706.345
Agra	—1,040,341	—230,685	+628 845	+1,462,119	+1,940,808	+2,760,746
Oudh	—391,362	—275,164	+182,244	+1,263,092	+166,789	+945,599

*Includes Delhi.

CITIES.

The general practice of statisticians is to treat as cities only those places which have a population of more than 100,000. According to this standard there are in India only 30 cities, with a population of 7,075,782, or 2·2 per cent. of the population. Here there is an extraordinary difference between the Indian conditions and those of Western countries. In England the cities contain 45 per cent. of the total population, in Germany 21, and in France 14 per cent. But even in these countries the growth of cities is comparatively recent. In 1871 England had only 27 cities with 9 5 million inhabitants and Germany only 8 with 2 millions. There are signs that in India the growth will be more rapid in the future than it has been. The population of cities has risen since 1872 by 64 per cent. and the net increase, comparing like with like, is 43 per cent. The most rapid growth during this period is shown by Rangoon which has trebled its population. Next comes Karachi with an increase of 168 per cent. and then Madura and Howrah with 158 & 113 per cent. respectively. Since 1901, two new places, Jubbulpore and Dacca, have entered the list of cities, while Baroda has disappeared from it. Eighteen cities have gained, and twelve have lost, population. Of the latter, a few like Mandalay are really decadent, but in most, such as Nagpur and Cawnpore, the loss was due wholly to the temporary influence of plague. The progressive cities are differentiated from those which are decadent by their large immigrant population. In Bombay, Calcutta and Howrah this exceeds 70 per cent. of the total and in Rangoon and Karachi it is close on 60 per cent. In Patna, Mandalay and Bareilly, on the other hand, it is barely 10 per cent.

Calcutta.—In speaking of Calcutta we may mean Calcutta proper, or the area administered by the Calcutta Municipal Corporation with the port, fort and canals, the population of which is 896,067, or this area plus the suburban municipalities of Cossipur-Chitpore, Manicktola and Garden Reach with 1,043,307 inhabitants, or lastly Greater Calcutta, which also includes Howrah, with an aggregate population of 1,222,313. The suburban municipalities differ from Calcutta only in respect of their Municipal Government. From a structural point of view they cannot be distinguished. The buildings are continuous throughout, and there is nothing to show where one municipality begins and the other ends. A striking feature of the statistics is the large number of immigrants. Less than 29 per cent. of the inhabitants of Calcutta proper claim it has as their birthplace. The vast majority are immigrants, of whom 204,000 come from Bihar and Orissa and 90,000 from the United Provinces. Of the Bengal districts, the largest contributions are those from the 24 Parganas (88,000), Hooghly (48,000) and Midnapur (29,000). The volume of immigration is equally great in the suburbs and Howrah.

The first regular census of Calcutta proper taken in 1872 showed a population of 633,009. In 1881 there was practically no change, but in 1891 a gain of 11·4 per cent. was recorded. In 1901 here was a further increase of 24·3 per cent., but part of this was due to improved enumeration. At the present census the rate of increase in Calcutta proper has dropped to 5·7 per cent. The falling off is due largely to the growing tendency of the inhabitants to make their home in the suburbs or even further afield. The suburban municipalities have grown during the decade by 45·3 per cent.

Bombay—which has now a population of 979,445 was a petty town with about ten thousand inhabitants when it passed into the possession of the British in 1661. The population was estimated to be 100,000 in 1780, 180,000 in 1814 and 236,000 in 1836. At the first regular census in 1872 it had risen to 644,405, and nineteen years later, in 1891, it was 821, 764. In the next decade plague, which first appeared in September 1896, caused a serious set-back; and it is estimated that by 1901 this disease had already been responsible for 114,000 deaths. The census of that year showed a decrease of about 6 per cent., but this was not wholly due to deaths. At the time when the census was taken, a virulent epidemic was in progress, and large numbers of the permanent residents had sought safety in flight. A fresh enumeration taken in 1906 by the Health Department of the Municipality gave a population of 959,537. The number now returned exceeds that of 1901 by 26 per cent. but it is only 2 per cent. more than it was at the time of the local enumeration of 1906. It is said that the census of 1911 was taken at a time when many of the immigrants from neighbouring districts had gone to their permanent homes for the Holi holidays, and that many of the cotton mills had closed down temporarily owing to the prohibitive price of the raw material. Like other large trading and industrial centres, Bombay is peopled mainly by immigrants; and more than 80 per cent. of its inhabitants were born elsewhere. Most of them come from the neighbouring districts; more than one-fourth of the total number are from Ratnagiri, while four other districts together supply more than a third. There are 30,000 Goanese, most of whom are in domestic service. Of the immigrants from outside the province, some 50,000, chiefly mill hands, are from the United Provinces, and 12,000 mainly shopkeepers, from Rajputana. Of the immigrants from outside India the largest number (6,000) come from the United Kingdom.

Madras.—Unlike Calcutta and Bombay, Madras, which is handicapped by its distance from the coal-fields, has but few large industries. The indigenous handicrafts are decaying and their place is not being taken by factories of the modern type. Apart from its being the headquarters of the Local Government, Madras owes whatever importance it possesses to its position as a distributing centre. Of its total population (518,660), only one-third are immigrants, and of these only 12 per cent. have come from places beyond the limits of the Madras Presidency. The great majority are natives of the four districts in the immediate vicinity of the city.

The population grew fairly rapidly during the twenty years prior to 1901, but since then it has been almost stationary. There has been an increase of about one per cent. in the number of persons born in the city, but fewer of them

SUMMARISED GROWTH OF THE INDIAN POPULATION—*contd.*

STATES AND AGENCIES	1911 to 1921.	1901 to 1911.	1891 to 1901.	1881 to 1891.	1872 to 1881.	Net variation in period 1872 to 1921. Increase (+). Decrease (—).
Assam State (Manipur)	+37,794	+61,757	....	....	....	....
Baluchistan States	—41,314	—8,349	....	....	....	....
Baroda State	+93,724	+80,106	—462,704	+233,238	+184,560	+128,924
Bengal States	+74,361	+82,266	+23,989	+18,049	+130,434	+329,099
Bihar and Orissa States	+14,460	+630,735	+286,456	+617,407	+686,711	+2,235,769
Bombay States	+21,578	+494,131	—1,161,895	+1,138,307	+133,182	+625,103
Central India Agency †	—173,882	+859,175	—4,704,636	+874,496	....	....
Central Provinces States	—50,252	+485,862	—81,425	+325,283	+459,211	+1,138,705
Hyderabad State	—962,906	+2,233,534	—395,898	+1,691,446	....	....
Kashmir State	+162,392	+252,548	+361,626	....	....	....
Madras States	+648,471	+623,755	+487,464	+355,773	+55,457	+2,170,920
Mysore State	+172,699	+266,794	+595,795	+757,416	—869,214	+923,490
N.-W. F. Province (Agencies and Tribal areas) ..	+1,203,042	+1,538,132	....	....	....	....
Punjab States	+203,242	—211,604	+161,118	+401,597	....	....
Rajputana Agency	—686,948	+677,066	—2,318,383	+2,237,494	....	....
Sikkim State	—6,199	+28,906	+28,556	....	....	....
United Provinces States	—54,993	+26,420	—16,493	+80,487	+141,912	+177,333

have been enumerated within the city limits. As compared with 1901 the net gain due to migration is less than 9,000. It is possible that the great demand for labour in Burma, where wages are very high, has attracted many of the labouring classes who would otherwise have sought their living in Madras.

Hyderabad.—Next to the three Presidency towns, the largest city in India is Hyderabad, the capital of the Nizam's Dominions. Its population is shown in the local Census Report as 500,623. Hyderabad has hitherto made very little industrial progress, and less than a quarter of its population is drawn from outside.

HOUSES AND FAMILIES.

Generally speaking it may be said that the labouring classes in India live in one, or at the most two, single room huts. The home of a well-to-do peasant consists of a public sitting room and a cook room and several apartments which are arranged round and open on to a courtyard. In spite of the joint family system the number of houses corresponds very closely to the number of families in the European sense. The total number of houses is 63·7 million, and there are 64·6 million married females aged 15 and over. Except amongst the higher castes who form but a small fraction of the total population the joint family system is not nearly so common as is frequently supposed. Where it is in vogue, there is often a strong disruptive tendency. In the towns and cities, owing to the high rents, the unit for all below the middle class is the room, not the house.

Average population per house

1881	5·8
1891	5·4
1901	5·2
1911	4·9

MOVEMENT OF THE POPULATION.

According to the census returns, the total population of India has increased by 7·1 per cent. during the last decade, and by 52·9 per cent since 1872, but the real gain since the latter date is very much less than this. Large tracts of country, including the Central India and Rajputana Agencies, Hyderabad and the Punjab States, which were omitted from the census returns of 1872, were included in those of 1881. In 1891 the greater part of Upper Burma and Kashmir and several smaller units were enumerated for the first time. In 1901 the most important additions were a portion of Upper Burma and the greater part of Baluchistan. In 1911 the Agencies and tribal areas in the North-West Frontier Province, together with a few smaller areas, were included within the scope of the enumeration. The real increase in the population in the last 39 years is estimated at about 50 millions, or 19 per cent. This is less than half the increase which has taken place in the same period amongst the Teutonic nations of Europe, but it considerably exceeds that of the Latin nations. In France the population has grown by less than 7 per cent. since 1870, but this is because of its exceptionally low birth-rate. In India the birth-rate is far higher than in any European country; and it is the heavy mortality especially amongst infants, which checks the rate of increase.

Famine and Disease.—In addition to the causes which ordinarily govern the movement of the population, India is subject to two special factors—famine and epidemic disease. The decade preceding the census of 1911 was free from widespread famines such as those of the preceding ten years. In 1907 there was a partial failure of the monsoon which was felt over a wide area, extending from Bihar to the Punjab and Bombay, and causing actual famine in the United Provinces and in a few districts elsewhere. Prices ruled high in most years and there was an extension of special crops, such as jute and cotton, which are more profitable to the cultivator than food grains. It was on the whole a period of moderate agricultural prosperity. From the point of view of public health, the censal period would have been an average one, but for the ravages of plague. Breaking out in Bombay in 1896, it has by March 1901 caused a recorded mortality of half a million. Since then it has continued its ravages, especially in Bombay and Upper India. The mortality from it rose from about a quarter of a million in 1901 to 1·3 millions in 1907. It fell below a quarter of a million in each of the next two years, but in 1910 it exceeded half a million. The total number of deaths from plague during the decade was nearly 6·5 millions of which over one-third occurred in the Punjab and two-fifths in the United Provinces and Bombay, taken together. The disease fortunately has failed to establish itself in Bengal, Assam, and on the East Coast and in the extreme south of the Peninsula. This however is only the recorded mortality; in time of epidemic the reporting agency breaks down and large numbers of deaths escape registration. Plague attacks women more than men, and people in the prime of life more than the young and old. If plague is omitted, and it is assumed that the mortality of the decade would otherwise have remained normal, the population of the census of 1911 would have been greater than it was by at least 6·5 millions. In other words, the population would have increased by 9·3 instead of 7·1 per cent.

General Conclusions.—The most noticeable feature is the continuous rapid growth in Burma. Lower Burma has grown by 135 per cent. since 1872 and the whole Province including Upper Burma, which was annexed in 1886, by 37 per cent. since 1891. In Assam including Manipur the increase since 1872 amounts to 70 and in the Central Provinces and Berar to 47 per cent. In the other main provinces the rate of growth has been much slower. In some provinces, such as Burma, Assam and Bengal there has been continuous progress but others, at some time or another, have sustained a set-back. In the larger provinces at least, the internal variations are also frequently considerable. In Bengal one district has at the present time a smaller population than it had in 1872, while four others have more than doubled their population since that date.

In British territory there has been a gain of 9·1 per cent. over about nine-tenths of the area

VARIATION IN POPULATION OF THE 30 CHIEF TOWNS.

	1921.	1911.	1901.	1891.	1881.	1872.
CALCUTTA AND FORT *	907,851	896,067	847,796	682,305	612,307	633,009
BOMBAY	1,175,914	979,445	776,006	821,764	773,196	644,405
MADRAS AND CANTONMENT	526,911	518,660	509,346	452,518	405,848	397,552
Agra and Cantonment	185,532	185,449	188,022	168,662	160,203	149,008
Ahmedabad and Cantonment	274,007	232,777	199,609	159,366	137,041	128,505
Allahabad and Cantonment	157,226	171,697	172,032	175,246	160,118	143,693
Amritsar and Cantonment..	160,218	152,756	162,429	136,766	151,896	.....
Bangalore Civil and Military Station † ..	118,940	100,834	89,599	100,081	93,540	81,810
Bareilly and Cantonment	129,459	129,462	133,167	122,837	115,138	104,553
Benares and Cantonment	198,447	203,804	213,079	223,375	218,573	178,300
Cawnpore and Cantonment	216,436	178,557	202,797	194,048	155,369	125,877
Dacca	119,450	108,551	89,733	81,585	78,369	68,595
Delhi and Cantonment	304,420	232,837	208,575	192,579	173,393	.....
Howrah	195,301	179,006	157,594	116,606	90,813	84,069
Hyderabad and Cantonment	404,187	500,623	448,466	415,039	367,417	.....
Jaipur	120,207	137,098	160,167	158,787	142,578	.....
Jubbulpore and Cantonment	108,793	100,651	90,533	84,682	76,023	55,469
Karachi and Cantonment	216,883	151,903	116,663	105,199	73,560	56,753
Lahore and Cantonment	281,781	228,687	202,964	176,854	157,287	.....
Lucknow and Cantonment	240,566	252,114	256,239	264,953	253,729	276,356
Madura	138,894	135,115	106,832	88,136	74,389	52,231
Mandalay and Cantonment	148,917	138,299	183,816	188,815	.....	.....
Meerut and Cantonment	122,609	116,631	118,539	119,805	99,911	81,669
Nagpur	145,193	101,415	127,734	117,014	98,299	84,441
Patna	119,976	136,153	134,785	165,192	170,654	158,900
Poona and Cantonment	214,796	188,701	175,463	182,099	144,340	125,613
Rangoon and Cantonment..	341,962	293,316	234,881	180,324	134,176	98,745
Srinagar and Cantonment	141,735	126,344	122,618	118,960	.....	.....
Surat and Cantonment	117,434	114,868	119,306	109,229	109,844	107,855
Trichinopoly and Cantonment	120,422	123,512	104,721	90,609	84,449	76,530

The above figures for Calcutta exclude the population of Cossipore-Chitpur, Manicktola, Garden Reach and South Suburban and Tallyganj Municipalities. These places have a separate Municipal administration, but for all practical purposes they form an integral part of Calcutta. So also does Howrah except that it lies on the opposite bank of the Hoogly. If the first-mentioned Municipalities be added, the population of Calcutta rises to 1,132,256. If Howrah also be included, it comes to 1,327,547.

† Bangalore City and Bangalore Civil and Military Station are structurally a single unit, but for the purpose of the census they have been treated as separate places.

with three quarters of the total population, and a loss of 5·8 per cent. In the remaining one-tenth of the area and one-fourth of the population. The contrast in different parts of the Native States is still more striking. The net increase of 10·3 per cent. is the outcome of a gain of 14·3 per cent. in four-fifths of the total area and population, coupled with a loss of 6·2 per cent. elsewhere. The relatively greater net increase in the Native States as compared with British territory is explained by the fact that many of the States suffered severely from famine in the previous decade when they sustained a net loss of 5 per cent., while British territory gained 4·7 per cent. Apart from this, in ordinary circumstances a comparatively high rate of increase is to be expected in the Native States, as they are, on the whole, more undeveloped than British territory, and contain a much larger proportion of cultivable waste land. The net increase in India as a whole during the last decade is the resultant of a gain of 10·3 per cent. in an area of 1,517,000 square miles, with a population of 245 millions and a present density of 162 to the square mile, and a loss of 5·5 per cent. in an area of 218,000 square miles with a population of 68 millions and a density of 312 to the square mile.

MIGRATION.

In India there are two currents of migration—minor and major. The chief of the minor movements is the custom, almost universal amongst Hindus, whereby parents seek wives for their sons in a different village from their own. Of the 26·5 million natives of India who were enumerated in a district other than that in which they were born, 16·5 millions, or 62 per cent. were born in a district adjoining that in which they were enumerated. The major currents of migration are governed by economic conditions. The most noticeable movements are the large streams of emigration from Bihar and Orissa, Madras, the United Provinces and Rajputana, and of immigration into Bengal, Assam and Burma. Owing to its fertile soil, Bengal is able to support practically the whole of its dense indigenous population by agriculture. It is necessary therefore to man the jute mills by imported labour, as also the tea gardens of Darjiling and Jalpaiguri and to draw the general labour supply from outside. In Bengal the net excess of immigrants over emigrants is close on 1,400,000. Of these about 236,000 are Natives of a district in Bihar and Orissa, or Assam, contiguous to the Bengal district in which they were enumerated. Assam and Burma are sparsely populated and the land available for cultivation being ample, very few of the indigenous inhabitants find it necessary to work for hire. The tea gardens of Assam and the rice mills and oil wells of Burma have to obtain their coolies elsewhere. In Assam 12·5 per cent. and in Burma 5 per cent. of the population are immigrants. On an average 51,000 labourers and dependants go each year to the tea gardens of Assam. In Burma, Madras supplies labourers for the rice-milling, oil and other industries, whilst many coolies flock into the province from Chittagong, chiefly for the rice harvest. The net loss to Bihar and Orissa on account of migration is about 1·5 millions. The United Provinces sustain a net loss of about 800,000 from migration, chiefly in the direction of Bengal. Madras being very backward from an industrial point of view, there is no great local demand for labour. At the same time there is an exceptionally large population of the "untouchable" castes, who have no scruples about seeking their livelihood oversea. It provides Ceylon with labour for its plantations, Burma with labour for its industries, and the Federated Malay States with labour for their rubber plantations. The enterprising Marwari traders of Rajputana have penetrated to all parts of India and are to be found in very important bazars throughout Bengal and even in Assam Bombay is industrially more advanced than Bengal, but as its soil is less productive there is a large local supply of labourers chiefly from the southern coast strip called the Konkan. The United Provinces give more than four times as many labourers to Bengal as to Bombay. As for the migration between British India and Native territory, it involves a loss of 135,000 to the Native States.

Asiatic Immigration.—Of the 504,000 persons born in other Asiatic countries who were resident in India at the time of the census, more than half were natives of Nepal. Of the 92,000 immigrants from Afghanistan all but 11,000 were enumerated in Northern India. The rest were cold weather visitors who travel about the country peddling piece-goods and other articles of clothing. These Cabuli pedlars cause great trouble in Bengal by their truculence. The number of Chinese is 80,000. Most of these are found in Burma, but the Chinaman is making his way into Bengal, where he is appreciated as a shoemaker and carpenter. From Arabia come 23,000 immigrants, chiefly to Bombay.

Non-Asiatic Immigration.—The total number of immigrants from countries outside Asia is 146,265. Of these 131,968 come from Europe. The United Kingdom sends 122,919; Germany comes next with only 1,860 and then France with 1,478. As compared with 1901 there is an increase of about 26,000 in the number of immigrants from the United Kingdom. Of the British-born 77,626 were serving in the army as compared with 60,965 at the time of the previous census, when a strong contingent had been sent from India to reinforce the British garrison in South Africa. The rest of the increase is accounted for by the industrial development which has taken place, the extension of railways, and the growing extent to which Englishmen in India marry. The number of females born in the British Islands and enumerated in India has risen during the decade from 14,663 to 19,494. The figures for other European countries do not call for any special comment.

Emigration from India.—The Indian census statistics naturally tell us nothing of the emigration from India to other countries. This emigration is of two kinds, the movement across the border which separates India from contiguous countries, such as China, Nepal, Afghanistan and Persia, much of which is of the casual type, and emigration to distant countries. No statistics are available regarding the emigration from India to the countries on its borders. There is probably very little in vernal from Burma into China

STATISTICS OF RELIGIONS

Religion.	India.	British Provinces.	Indian States.
INDIA	318,942,480	247,003,293	71,939,187
Hindu	216,734,586	163,144,700	53,589,886
Brahmanic	216,260,620	162,712,188	53,548,432
Arya	467,578	426,682	40,896
Brahmo	6,388	5,830	558
Sikh	3,238,803	2,367,021	871,782
Jain	1,178,596	455,855	722,741
Buddhist	11,571,268	11,490,815	80,453
Zoroastrian (Parsi)	101,778	88,464	13,314
Musalman	68,735,233	59,444,331	9,290,902
Christian	4,754,064	3,027,881	1,726,183
Jew	21,778	19,221	2,557
Animistic	9,774,811	6,904,167	2,870,444
Minor Religions and Religion not returned .. .	18,004	17,745	259
Not enumerated by Religion	2,813,759	43,093	2,770,666

POPULATION ACCORDING TO RELIGION AND EDUCATION (CENSUS OF 1911).

Religions.	Total Population.	Illiterate.	Literate.	Literate in English.
Males.				
Hindu	110,895,763	98,114,946	12,783,857	1,579,388
Sikh	1,844,483	1,671,204	173,279	21,272
Jain	610,279	296,866	313,416	22,557
Buddhist	5 716,211	2,947,266	2,768,945	48,556
Parsi	52,364	11,054	41,310	27,577
Muhammadan	35,967,380	33,046,931	2,920,449	306,275
Christian	2,456,629	1,697,344	759,285	277,177
Animistic	4,895,422	4,826,354	69,068	2,693
Minor and Unspecified	23,658	11,829	11,829	3,694
Total Males	162,465,129	142,623,691	19,841,438	2,289,188
Females.				
Hindu	105,828,980	104,372,567	1,456,413	68,562
Sikh	1,393,770	1,374,522	19,248	655
Jain	568,317	524,854	43,463	883
Buddhist	5,855,024	5,291,833	563,191	6,578
Parsi	49,414	16,211	33,203	11,757
Muhammadan	32,703,237	32,461,241	242,096	9,078
Christian	2,207,309	1,882,675	424,634	138,566
Animistic	4,878,237	4,872,056	6,181	198
Minor and Unspecified	15,714	11,930	3,784	1,890
Total Females	153,590,102	150,807,889	2,782,213	238,162
Total Population	*316,055,231	293,431,580	22,623,651	2,527,350

* Excludes 2,887,249 persons not enumerated by religion.

but, on the other hand, it is believed that the emigration into the somewhat sparsely peopled Nepal teral from some of the adjacent British districts, where the population is much congested, exceeds the countervailing immigration. Very few people go from British territory to settle permanently in Afghanistan or Persia, but at the time when the last census was taken owing to drought in Baluchistan, a considerable number of Nomad Brahuis from Chagai, and of Baloch from Mekran had passed over temporarily into Afghanistan and Persia. At a rough guess the number of emigrants across the Indian Frontier may be taken to be about a fifth of a million.

Emigration to Distant Countries.—Of the emigrants to distant countries a certain number find their way to French or Dutch Colonies, such as Surinam, Martinique and Guadeloupe. But the majority go to other parts of the British Empire. The total number of emigrants from India to other parts of the British Empire slightly exceeds a million, of whom about two-thirds are males; more than four-fifths of the aggregate are Hindus and only one-tenth are Mahomedans. Of the total number, about 474,000 were enumerated in Ceylon, 231,000 in the Straits Settlements and the Malay States, 88,000 in British Guiana, 73,000 in Natal, 51,000 in Trinidad, 35,000 in Mauritius, 29,000 in Fiji and 8,000 each in Jamaica and Zanzibar. About one-fifth of these emigrants failed to specify their province of birth; of the remainder no less than 693,000 or 85 per cent. were from Madras, 32,000 from Bengal, about 20,000 each from the United Provinces and Bombay, 16,000 from Bihar and Orissa, 13,000 from the Punjab and 8,000 from the Mysore State. The number who emigrated from other parts of India was inconsiderable. Most of these emigrants to the colonies went as ordinary labourers in sugar, tea, coffee, rubber and other plantations, but a large number of those from Bombay and Bengal are lascars on ships, while many of the natives of the Punjab are employed in the army or military police.

Ceylon.—The movement to Ceylon is of long-standing. Owing to the rapid expansion of tea cultivation, the number of natives of India enumerated in that Island increased by 65 per cent. in the decade ending in 1901. Since then there has been a further increase of nearly 10 per cent. chiefly on account of the new rubber plantations. The great majority of these emigrants are from the southern districts of Madras. Mysore sends about 8,000, Travancore 7,000 and Cochin and Bombay 3,000 each. Most of them are temporary emigrants, who return after a time to their homes in Southern India. The total number of Tamils enumerated in Ceylon exceeds a million, but about half of them have been domiciled in the Island for many centuries and barely 100,000 are the offspring of recent settlers.

Malaya.—The emigration to the Straits Settlements and the Malay States is of quite recent growth, and is due almost entirely to the demand for labour on the rubber plantations. Most of the emigrants are temporary settlers, who return to their homes when they have saved a little money; and the total number of Indians enumerated there exceeds by only 12 per cent. the number who returned to India as their birthplace. Almost four-fifths of the total number are males. Here also Madras is the principal source of supply, the Punjab (8,754) being the only other province which sends an appreciable number.

South Africa.—In Natal, there has been a great deal of permanent settlement; and of the total number of Indians enumerated there, nearly half were born in the colony. Many of these have forgotten their native language and now talk only English. But it is in Mauritius that the process of colonisation has made most headway. The introduction of Indian coolies to work the sugar plantations dates from the emancipation of the slaves, three quarters of a century ago: and from that time onwards many of the coolies who have gone there have made the island their permanent home. Though it now contains only 35,000 persons who were born in India, the total number of Indians is 258,000, or about 70 per cent. of the whole population. A large part of the island is now owned by Indians, and they are dominant in commercial, agricultural and domestic callings.

RELIGIONS.

India is a land of many religions. All the great religious faiths of mankind are represented in its population by communities, whose origin carries us back to the early history of their respective creeds Hinduism and its offshoots, Buddhism and Jainism, are autochthonous. The Jews of Cochin have traditions which carry back their arrival on the coast to the time of their escape from servitude under Cyrus in the sixth century B. C. The Syrian Christians of Malabar ascribe the introduction of Christianity and the establishment of their original Church to the Apostle St. Thomas, in the year 52 A.D. Nearly two centuries before the followers of Mahomed obtained a footing in India as conquerors, a peaceful trading colony of Arabs had settled on the Malabar coast. The Parsi settlement in Gujarat dates from about the same period. These facts are recalled here because not only Europeans, but even educated Indians, speak as if the first foreign settlement in India was that which followed the Mahomedan conquest, and that Christianity was first brought to the country by the Portuguese. They also dispose of another erroneous idea that up to the time of the Mahomedan conquest, Hinduism absorbed all the foreign elements which found their way into the country. No doubt Greeks, Bactrians and Scythians were so absorbed into the structure of Hinduism, but the fact that the Jews, the Syrian Christians and the Parsis have remained distinct from Hinduism, shows that this was not the case universally. If we may hazard a conjecture, it would seem that the ancient Hindu policy towards immigrants who came by land differed from that observed in the case of immigrants by sea. The Indo-Aryan himself entered the country through the mountain passes in the North-West, and knew something of the land which lay beyond. But the sea was always something of a mystery and a terror to him, and those

OCCUPATIONS OF THE INDIAN PEOPLES.

INDIA	316,055,231
A.—PRODUCTION OF RAW MATERIALS	231,194,403
I.—Exploitation of the Surface of the Earth	230,692,450
Pasture and agriculture	229,045,019
(*a*) Ordinary cultivation	221,649,143
(*b*) Growing of special products and market gardening	2,46 ,642
(*c*) Forestry	483,833
(*d*) Raising of farm stock	4,42 ,907
(*e*) Raising of small animals	26,089
Fishing and hunting	1,607 331
II.—Extraction of Minerals	542,053
Mines	398,968
Quarries of hard rocks	74,945
Salt, etc.	68,140
B.—PREPARATION AND SUPPLY OF MATERIAL SUBSTANCES	55,612,694
III.—Industry	33,167,018
Textiles	7,847,829
Hides, skins and hard materials from the animal kingdom	731,124
Wood	3,613,583
Metals	1,802,208
Ceramics	2,215,041
Chemical products properly so called, and analogous	1,194,263
Food industries	3,100,351
Industries of dress and the toilet	7,425,213
Furniture industries	27,065
Building industries	1,753,720
Construction of means of transport	52,793
Production and transmission of physical forces (heat, light, electricity, motive power, etc.).	24,881
Other Miscellaneous and undefined industries	3,878,937
IV.—Transport	4,331,054
Transport by water	745 399
Transport by road	2,145,949
Transport by air	629
Transport by rail	1,231 672
Post Office, telegraph and telephone services	207,405
V.—Trade	18,114 622
Banks, establishments of credit, exchange and insurance	493,492
Brokerage, commission and export	212,628
Trade in textiles	1,286 277
Trade in skins, leather and furs	233 862
Trade in wood	224,667
Trade in metals	64 638
Trade in pottery	62 447
Trade in chemical products	120,038
Hotels, cafes, restaurants, etc.	708,332
Other trade in food stuffs	9,282,651
Trade in clothing and toilet articles	284,863
Trade in furniture	173,188

who came from beyond the sea were looked upon as beings of a different clay. They were treated hospitably, and in course of time they assimilated much of the influences of their Hindu environment. But they remained all the same separate communities, and no attempt was made to incorporate them in the great mass of Hinduism. The prohibition of sea voyage to members of the higher castes is another proof of the peculiar prejudice which ancient Indians cherished against inhabitants of countries divided from India by intervening seas.

Origin of Hinduism.—We have spoken alone of Hinduism as being autochthonous. The opinion generally held is that the ancestors of the Vedic Indians were immigrants from Central Asia. An Indian scholar of some repute has recently endeavoured to show that the received opinion is not borne out by the evidence available in the ancient literatures of India. Whatever may be the value attaching to his contention that the Vedic Indians were not immigrants or descendants of immigrants, but only a section of the indigenous population addicted to the cult of fire-worship, it is true, as he says, that there is no expression in the Vedas of a longing, lingering remembrance of a foreign homeland, such as one might expect to find in the literature of an immigrant race. This is all the more remarkable as an intense attachment to the land they lived in is manifest in all their compositions. A Sanskrit couplet in which the names of the seven great rivers of India, the Ganges, the Jumna, the Godavari, the Saraswati, the Nerbudda, the Indus and the Cauvery, are strung together in pious praise, is recited daily by millions of Hindus at their daily devotions, and helps to keep them in mind of the sanctity of the Indian Continent in Hindu eyes. If the ancient Hindus were immigrants, they not only took exceptional care to blot out all memories of the land from which they came from their own minds, but they also strove by every means in their power to bind the reverence and love of their posterity to India as the land *par excellence* of religion and morality, so much so that the name Hindu, in the orthodox acceptance of the term, is not applicable to anyone who is not born in India. If the ancestors of the Hindus were foreigners in India, they must have set themselves, as a matter of deliberate policy, to intertwine the deepest affections and the highest aspirations of their race with the land in which they had settled, to the entire exclusion of the land whence they had come.

Evolution of Hinduism.—Following from the theory that the ancestors of the Hindus were immigrants from Central Asia, is the explanation generally given of the varieties of religious beliefs and social practices to be found within the pale of Hinduism. Hinduism, it is the common idea, was originally a pure and simple creed which has had to compromise with the Animism of the population, amongst whom it spread, by accepting several of its godlings and superstitions. The greatest obstacle in the way of this explanation is that there is no evidence whatsoever of any organised missionary activity among the Hindus at any time. The immense distances and the absence of means of communication, would of themselves have made such activity difficult. Moreover, a compromise implies selection and rejection and the existence of some agency entrusted with the duty of selection. As a fact, however, we find that Hinduism has exercised very little selection, and that it covers practically all the beliefs and customs which prevail amongst the tribes who are included within its pale. Such a state of things is more consonant with the view that the purer forms of Hinduism are highly evolved stages of the cruder forms which are still observed by the less educated and prosperous sections of the community. This view, namely, that the higher forms of Hinduism are evolved from lower ones, rather than that the latter are corruptions of the former, gains support from what is now generally accepted as being the true explanation of the origin of certain social customs. Twenty years ago, it was generally held that the custom of child marriages, for instance, was of sacerdotal origin and was most largely prevalent amongst the higher castes from whom it spread to the lower. Recently, however, it has been proved that child marriages are prevalent far more largely and in a far grosser form amongst the lowest castes than amongst the higher castes, and that amongst the latter, it is a survival from the times when the caste system was less rigid and intermarriages, that is to say, the taking of wives by the higher castes from the lower, were common. It may be added that the two most characteristic beliefs of Hinduism, namely, that in the transmigration of souls and in the law of *Karma* or retribution, are held with, if anything, more tenacity by the lower than by the higher castes.

Scope of Hinduism.—From this point of view, the varying beliefs and customs which go under the name of Hinduism not only offer no difficulties, but furnish the right clue to the understanding of this unique socio-religious system. They explain why the term "religion" as applied to Hinduism does not adequately express its scope and method. Hinduism has no settled creeds which are obligatory on every Hindu. It enforces no fixed and uniform moral standards on the innumerable sects and castes which bear its name. It extends its suffrages to monogamous, polygamous and even polyandrous unions between the sexes and, in the case of the so-called *devadasis*, countenances a life of open irregularity. An Indian newspaper recently instituted an interesting discussion on the question "Who is a Hindu." An eminent Hindu lawyer, who subsequently rose to be a judge of one of the Indian High Courts, laid down that a Hindu was one to whom the Indian Courts would apply the Hindu law. The learned lawyer, however, forgot that there are Mahomedan castes which follow the Hindu law in regard to the inheritance of and succession to property.

And yet, though Hinduism refuses to conform to almost every one of the ideas which we usually associate with the term "religion," it is impossible to deny that it occupies a unique and highly important place amongst the religious systems of the world. The reason why it does not fit into our definition of religion is that it represents a fundamentally different line of evolution in the history of religious

OCCUPATIONS OF THE INDIAN PEOPLES—*contd.*

V.—*Trade*—contd	
Trade in building materials	73,810
Trade in means of transport	331,900
Trade in fuel	519,296
Trade in articles of luxury and those pertaining to letters and the arts and sciences.	45,868
Trade of other sorts	2,048,570
C.—PUBLIC ADMINISTRATIONS AND LIBERAL ARTS	9,846,059
VI.—Public Force	2,181,597
Army	757,383
Navy	571
Air force	1,033
Police	1,422,610
VII.—Public Administration	2,643,882
VIII.—Professions and Liberal Arts	5,020,571
Religion	2,457,614
Law	326,510
Medicine	659,583
Instruction	805,228
Letters and arts and sciences	761,636
D.—MISCELLANEOUS	19,402,084
IX.—Persons living principally on their Income	479,835
X.—Domestic Service	4,570,151
XI.—Insufficiently described Occupations	11,098,566
XII.—Unproductive	3,253,512
Inmates of jails, asylums and hospitals	145,467
Beggars, vagrants and prostitutes	3,020,060
Other unclassified non-productive industries	87,385

DISTRIBUTION OF THE POPULATION.

	India.	British Provinces.	Native States.
1	2	3	4
Area in square miles	1,805,332	1,094,300	711,032
Number of Towns and Villages	687,981	500,088	187,893
(*a*) Towns	2,316	1,561	755
(*b*) Villages	685,665	498,527	187,138
Number of Occupied Houses	65,198,389	50,441,636	14,756,753
(*a*) In Towns	6,765,014	5,046,820	1,718,194
(*b*) In Villages	58,433,375	45,394,816	13,038,559
Total Population	318,942,480	247,003,293	71,939,187
(*a*) In Towns	32,475,276	25,044,368	7,430,908
(*b*) In Villages	286,467,204	221,958,925	64,508,279
Males	163,095,554	126,872,116	37,123,138
(*a*) In Towns	17,845,248	13,971,136	3,874,112
(*b*) In Villages	146,150,306	112,900,980	33,249,326
Females	154,946,926	120,131,177	34,815,749
(*a*) In Towns	14,630,028	11,073,232	3,556,796
(*b*) In Villages	140,316,898	109,057,945	31,258,953

thought. In other races the line of evolution was from polytheism to monotheism, but in India it was from polytheism to the higher pantheism. Contrasting the development of the Judaic idea of God with that of the Hindus, Dr. Harold Haffding observes "With the Hindus there was no God who claimed sole sway; they went back to the power which makes all gods what they are, to the inner aspirations and needs which find vent for themselves in prayer and sacrifice. Following an extremely remarkable line of thought that which drives men to worship gods was itself regarded as the true divine power. Brahma meant originally the magical, creative word of prayer, but it afterwards came to denote the principle of existence itself, so that we have a transition from the idea of motion towards to that of its goal, from prayer to the object addressed in prayer." The Indian philosopher saw the whole universe transfused and overspread with Deity. He perceived how evil was being perpetually transformed to good in the cosmic process spreading out before the poet and the philosopher, endless and timeless, to whom the evil and the good seemed but different stages in a great common process of which the secret was known only to the Supreme Being. No European writer has caught the innermost essence of the Hindu philosopher's idea of the Supreme, so faithfully, and expressed it so felicitously as Sir Edwin Arnold in his "Light of Asia".

> Before beginning, and without an end,
> As space eternal and as surety sure,
> Is fixed a Power divine which moves to good,
> Only its laws endure.
> It is not marred nor stayed in any use,
> All liketh it; the sweet white milk it brings
> To mothers' breasts, it brings the white drops too,
> Wherewith the young snake stings.
> It slayeth and it saveth, nowise moved
> Except unto the working out of doom;
> Its threads are Love and Life; Death and Pain
> The shuttles of its loom.
> It maketh and unmaketh, mending all;
> What it hath wrought is better than had been;
> Slow grows the splendid pattern that it plans
> Its wistful hands between.

The ethical values of Hinduism are not different from those of other great religions. Like them it attaches little importance to the qualities which make for wordly success, and most importance to self-sacrifice, humility and kindliness to all. Only its methods differ. On the whole, however, the Hindu socio-religious scheme, owing to its tendency to make the individual human being a passive instrument in the hands of a Higher Power instead of an active co-operator with it, has favoured stability at the expense of progress.

Hindu sects.—Hinduism is made up of many sects and cults. It is usual to speak of Hinduism as it was before Buddhism, as a single creed, but this is because the literature that has come down to us is the literature of the sect that came to supersede all others. But even in it, we can, by reading between the lines, discover the existence of rival sects. Even the Vedas themselves are the literature probably of one of several sects which happened to be gifted with a talent for letters. The rapid multiplication of sects, however, was undoubtedly encouraged by the introduction of idol worship in imitation of the practice of decadent Buddhism. Hindu religious philosophers recognised three ways of salvation, namely, the way of knowledge, the way of faith and the way of service. Every sect of Hinduism recognises the value of all these three ways, but it differs as to the relative importance to be attached to each. The sect of the great philosopher, Sankaracharya, who maintained that the Supreme Being was the only Reality and that all the phenomenal universe was Maya or illusion, and that salvation came from the realisation of this fact, did not discard faith and service altogether, but only gave these a subordinate position in his scheme of religion. Ramanuja, Madhva and Vallabhacharya who followed him and, in more or less degree, refuted his doctrine of the non-reality of the phenomenal universe, laid more stress on faith and service than on knowledge, but they did not discard the path of knowledge altogether. It should be mentioned here that it has been the great misfortune of Hinduism that the path of service has come to mean the path not of altruistic service to mankind but the path of service conceived in a ceremonial sense to priests, religious recluses and mendicants and to idols. It is the great aim of the modern religious reform movements such as the Arya Samaj and the Brahma Samaj to rescue the path of service from this spurious interpretation and to make altruistic social service an integral part of religion. The question of sect, however, does not play a very important part in Hinduism. Except in Southern and to a much smaller extent, in Western India, the great mass of the Hindus are not sectaries. In Southern India, the Vaishnavas and Madhvas will, on no account, worship Shiva or visit a temple dedicated to him. The Lingayaths are a Shiva sect found in the Karnatak districts of the Bombay and Madras Presidencies, and in Mysore, and they have an invincible repugnance to the worship of Vishnu. But these are exceptional instances. But so far as the bulk of the Hindus are concerned, they resort to the nearest shrine whether it be dedicated to Shiva or Vishnu. The attitude of Hinduism to other religions is that they are each of them the most suitable path to salvation for the people who are born in them—that they are all several roads which lead to Heaven. For this reason Hinduism has never been a proselytising religion. This has proved a disadvantage to it face to face with such religions as Mahomedanism and Christianity which not only admit converts, but are actively engaged in seeking them. The proportion of Hindus to the total population has steadily diminished during the last forty years, partly owing to conversions to other religions particularly from amongst the lower classes. Conversions from among members of the higher and literate classes have practically ceased.

Hinduism.—The Hindus number 217,586,892 or 69·4 per cent of the total population of

India. Buddhists and Jains together number 11,969,635. Thus 229,556,527 or about 73 per cent. of the Indian people depend for their spiritual sustenance on Hinduism and its offshoots.

The Buddhist population is mostly Burmese, Buddhism having ceased a thousand years ago to count as a leading religion in the land of its birth. Several reasons are usually given to account for the hostility of Hinduism to Buddhism, such as that Buddha denied the authority of the Vedas and the existence of God and of the human soul. Jainism did all this, and yet Jains to-day occupy a recognised position in the Hindu social system. The real reason for the Hindu hostility to Buddhism was that it influenced and was in its turn influenced by in the later years of its prevalence in India, the alien Mongolian consciousness. Hinduism has always been extremely tolerant of indigenous heresies, but it is jealous of outside influence. Indian Buddhism, too, had become extremely corrupt and superstitious long before Hinduism re-established itself as the religion pre-eminently of the Indian people.

Other Indigenous Religions.—Buddhism and Jainism were originally only sects of Hinduism. Jainism even now is not so sharply divided from the latter religion as Buddhism is. Jains are everywhere a recognised section of Hindu Society, and in some parts of the country there has been an increasing tendency on their part to return themselves at the Census as Hindus. The outstanding feature of Jainism is the extreme sanctity in which all forms of life are held. The Jains are generally bankers and traders. Their number at the last Census was 1,248,182, the apparent decline being due to the tendency noted above for Jains to return themselves as Hindus. Buddhism is professed but by few persons in India. The Buddhist population of the Indian Empire is mainly Burmese. Their number is 10,721,453. The founders of Buddhism and Jainism are believed to have been contemporaries, whose date is assigned somewhere in the 5th Century B.C. Sikhism, which is the next important indigenous religion, had its origin many centuries later. The founder of Sikhism, Guru Nanak, flourished in the latter half of the 15th Century of the Christian era. Nanak's teaching amounted to nothing more than pure Theism. He taught that there is only one true God, he condemned idolatry, proclaimed the futility of pilgrimages and rites and ceremonies, and declared that the path to salvation lies through good deeds combined with devotion to the Supreme Being. He preached the brotherhood of men. Sikhism continued to exist as a pacific cult till about the end of the seventeenth century, when the persecutions of Aurangzeb had the effect of converting it into a militant creed. This momentous change was accomplished under the direction of Guru Govind, the tenth and last of the Gurus: "I shall send a sparrow," he once exclaimed and "lo! the imperial falcons will fly before it." On his death-bed, he exhorted his followers to regard the Granth, the sacred book of the Sikhs, as their Guru, to look upon it as the person of the living Guru. After his death, Sikhism passed through a period of deepest gloom, but it soon recovered and in 1758 the Sikhs entered Lahore in triumph. The teachings of Guru Nanak have profoundly affected Hindu thought and life in the Punjab, though the number of persons professing the Sikh religion is only 3,014,466 according to the 1911 Census. This represents an increase of over 40 per cent. since 1901. Two other religious movements, offshoots of Hinduism, remain to be mentioned, namely, the Brahmo-Samaj and the Arya-Samaj. Both of them are less than one hundred years old. The founder of the former was Raja Ram Mohan Roy, and of the latter, Swami Dayanand Saraswati. The Brahmo-Samaj does not believe in an infallible scripture, while the Arya-Samaj accepts the Vedas as Divinely revealed. Both the movements are opposed to idolatry and favour social reform. The Brahmo movement, appealing as it does to the cultured intellect, has not been making as much progress as the Arya-Samaj. The number of persons professing each of these creeds is 5,504 and 243,445 respectively. The stronghold of the Arya-Samaj is the Punjab, that of the Brahmo-Samaj, Bengal.

Non-Indian Religions.

Mahomedanism.—Of non-Indian religions, that is, of religions which had their origin outside India the religion which has the largest number of followers in this country is Mahomedanism. One hundred years before the Mussulmans obtained a foothold in Sind by right of conquest, they were settled in Cochin as traders and missionaries. The author of Cochin Tribes and Castes refers to a tradition that in the 7th Century, a Mahomedan merchant named Malak Medina, accompanied by some priests, had settled in or near Mangalore. The Kollam era of Malabar dates, according to popular tradition, from the departure of Cheruman Perumal, the last of the Perumal Kings, to Arabia, on his conversion to Islam. The date of the commencement of the era is the 25th August 825 A.D. For about twelve Centuries, Islam has existed in India side by side with Hinduism. During that period it has been greatly influenced by Hindu ideas and institutions. Moreover, the Indian converts to Mahomedanism have to a large extent retained the customs and beliefs of Hinduism. The writer of the article on religions of India in the new edition of the *Imperial Gazetteer* observes of Islam in India: "If it has gained some converts from Hinduism it has borrowed from it many of those practices which distinguish it from the original faith of Arabia. By degrees the fervid enthusiasm of the early raiders was softened down; the two religions learned to live side by side; and if the Mahomedan of the later days could never conceal his contempt for the faith of his 'pagan' neighbours, he came to understand that it could not be destroyed by persecution. From the Hindus Islam derived much of its demonology, the belief in witchcraft, and the veneration of departed Pirs or Saints. The village Musulman of the present day employs the Hindu astrologer to fix a lucky day for a marriage, or will pray to the village god to grant a son to his wife. This is the more natural, because conversion to Islam, whenever it does occur, is largely from the lower castes." Mahomedanism has

two main and several minor sects. The major sects are the Shiah and the Sunni. The great majority of Indian Mussulmans are of the latter sect. The Punjab and Sind in the North-West and East Bengal in the North-East are the strongholds of Islam in India. The Mussulman population of India, according to the Census of 1911, is 66,647,299. Of this number no less than 24 millions are in Bengal, about 12 millions in the Punjab, and about 5 millions in the United Provinces. Amongst Native States, Kashmere has the largest Mussulman population, about 2½ millions.

Christianity.—Indian Christianity has an even longer history than Indian Mahomedanism. According to the tradition prevailing among the Syrian Christians in Malabar, the introduction of Christianity and the establishment of the Original Church in Malabar in the year 52 A.D. are ascribed to the Apostle St. Thomas, who landed at Cranganore or Musiris, converted many Brahmins and others, ordained two Presbyters, and also founded seven churches, six in Travancore and Cochin, and the seventh in South Malabar (Cochin Castes and Tribes, Vol. II, Chapter XVI, p. 435). The history of Roman Catholicism in India dates from the beginning of the sixteenth Century. The first Protestant mission was established two centuries later by the Lutherans who started their work in Tranquebar in South India under Danish protection. The Christian population, according to the last Census, numbers 3,876,203. Nearly 2½ millions are inhabitants of the Madras Presidency and the Native States connected with it. Bihar and Bombay have each over 200,000 Christians.

Zoroastrianism.—This religion was brought or brought back to India in 717 A.D. by Parsis who, fleeing from persecution at the hands of the Mussulman conquerors of their native land, arrived at the little port of Sanjan, sixty miles north of Bombay in that year. According to the Indian antiquarian scholar, the late Rajendralal Mitra, the ancestors of the Hindus and Parsis dwelt together in the Punjab, when a religious schism led to the latter retracing their steps to Persia. This theory derives probability from the names of the beneficent and malefic deities referred to in the Hindu and Parsi sacred books: "What is most striking in the relations of the two faiths, is," writes Mr. Crooke in his article on the Religions of India in the *Imperial Gazetteer*: "that in the Avesta the evil spirits are known as Daeva (modern Persian Div), a term which the Indo-Aryans applied, in the form Deva, to the spirits of light. By a similar inversion, Asura, the name of the gods in the Rig Veda, suffered degradation and at a latter date was applied to evil spirits; but in Iran, Ahura was consistently applied in the higher sense to the deity, especially as Ahura Mazda, the wise, to the Supreme God." The Parsis have two sects. The principal difference between them appears to be that the holy days of the one precede those of the other by about a month. The number of Parsis, according to the last Census, is 100,096. The majority of the Parsis live in Bombay.

Jews.—The Beni-Israel at Kolaba, in Bombay, and the Jews at Cochin are descendants of ancient Colonies. The Kolaba Colony dates back to the sixth century, and the Cochin colony to the second century A.D. Both Jewish colonies recognize a white and black section, the latter being those who have more completely coalesced with the native population. The Jews numbered 20,980 at the Census of 1911.

Animists.—Since the Census of 1891, an attempt has been made to enumerate the "Animists" separately from the Hindus. 10,295,168 persons are classed as Animists, according to the last Census. The difference between Animism and Anthropomorphism has been stated by Professor Westermark, to be that, while the animist worships inanimate objects as gods, Anthropomorphism consists in the worship of such objects as representatives and reflection of the Deity. As a subtle distinction of this kind is not within the grasp of the average enumerator, the category of Animists in the Census Schedules is largely conjectural. Mr. Crooke in the *Imperial Gazetteer* observes "Such a classification is of no practical value, simply because it ignores the fact that the fundamental religion of the majority of the people—Hindu, Buddhist, or even Mussulman is mainly Animistic. The peasant may nominally worship the greater gods; but where trouble comes in the shape of disease, drought, or famine, it is from the older gods that he seeks relief."

SOCIAL INSTITUTIONS.

Uniformity of Indian Social Life.—Though India is a land of many religions and though each religious community has, as a rule, lived apart from the other communities for centuries, still there is a considerable uniformity in the arrangements and institutions of their social life. The social system of the Hindus is the type to which all other communities domiciled in the country have hitherto tended to conform. To a large extent, this uniformity of social arrangements is clearly due to the fact that, amongst the Mahomedans and Indian Christians, for instance, the converts from Hinduism continued to retain their old ideas in regard to social conduct. To a smaller extent, the motive which influenced them to conform to Hindu social ideal has been the convenience thereby caused in business intercourse with their Hindu neighbours. Thus, we find, there is scarcely any community in India which has not been more or less infected by the caste spirit. The Jews, the Parsis, the Christians, and even the Mahomedans have been influenced by it. Other Hindu social institutions and customs which have exerted a similar influence are the joint family system, the custom of child marriages, and of enforced widowhood, and the feeling that contact with persons engaged in certain occupations is polluting. In view of this general similarity of the social institutions of the several Indian communities, a description of the Hindu social system which is the great prototype of them all, will give a general idea of the social life of the Indian population as a whole. It should, however, be mentioned here that, in recent years, as the result of a growing communal consciousness, efforts have been

made by many of the Indian communities to discard whatever is in disaccord with the original simplicity of their respective faiths. But this movement has as yet touched no more than the highly educated fringe, and even among the latter, there are thoughtful men who distrust "revivals" as substitutes for reform.

Caste.—The most conspicuous social institution of India is caste. Caste is based on birth. The effect of caste is to divide society into a number of vertical sections, and not as in modern countries, into horizontal sections. The economic and cultural differences among the members of each caste are great. The millionaire and the pauper, the scholar and the illiterate of one caste, form a social unit. The rich man of one caste must seek a husband for his daughter among the poor of his caste, if he cannot find one of a corresponding position in life. He can on no account think of marrying her to a young man of another caste, though as regards culture and social position, he may be a most desirable match. Thus, each caste is, within itself, a democracy in which the poor and the lowly have always the upper hand over the rich and the high-placed. In this way, the system of caste has, in the past, served as a substitute for State relief of the poor by means of special laws and institutions. To some extent, this is the case even now, but the economic pressure of these days, and the influence of Western education, are profoundly modifying the conception of caste. The growth of the English-educated class on the one hand, and of the modern industrial and commercial class of Indians on the other, with common aspirations and interests, is a factor calculated to undermine the importance of caste. Although for purely social purposes, it will, no doubt, linger for many years longer, it is bound ultimately to collapse before the intellectual and economic influences which are moulding modern India. The question how caste originated has been discussed by several learned Orientalists, but the latest and most authoritative opinion is that its rise and growth were due to several causes, the principal of them being differences of race and occupation. The four original castes of the Hindus have multiplied to nearly two thousand, owing to the fissiparous tendencies of Hindu social life. Some large castes consist of many thousands of families, while others, notably in Gujarat, comprise scarcely a hundred houses. Among Indian Mahomedans, there are several communities which are virtually castes, though they are not so rigidly closed as Hindu castes. Indian Christian converts, in some parts of the country, insist on maintaining the distinctions of their original castes, and in a recent case, one caste of Indian Christians contested, in a Court of Law, a ruling of their Bishop disallowing the exclusive use of a part of their church to members of that caste. The Parsis are practically a caste in themselves. The observations regarding caste apply more or less to the institution of the joint family of which really the former is an extension. This institution is rapidly breaking-up, though the rigidity of the Hindu law of succession operates wholly in its favour.

The Social Reform Movement.—The social reform movement among the Hindus to which reference is made in the foregoing paragraph, had its origin in efforts made by the Government of India, with the co-operation and support of enlightened Hindus, in the early part of the last century to put down the practice of *sati*, that is, burning the widow along with her dead husband. This cruel practice, which prevailed particularly among the high caste Hindus in Bengal, was eventually suppressed by legislation. But the discussions which ensued in connection with *sati* question led to the exposure of the hard lot of Hindu widows as a class. Remarriage was prohibited and as child marriages were common, several young girls were condemned to lead a life of celibacy on the death of their husbands. This led to immorality, and infanticide by young widows, who were anxious to hide their shame, was not infrequent. Led by the Pandit Ishwar Chandra Vidyasagara, a very learned Sanskrit scholar, a movement began which had for its object the removal of the ban on the remarriage of Hindu widows. The Pandit was able to prove from the Hindu religious books that the remarriage of widows had the sanction of antiquity. But it was necessary, in order to establish the validity of the remarriage of Hindu widows beyond doubt, to have a law passed by the Legislative Council of the Governor-General of India. The Pandit and his followers memorialised Government. There was strong opposition from the orthodox masses, but the Government of the day were convinced that justice was on the side of the reformers, and the Hindu Widow Remarriage Act was passed. The controversy on the question of the remarriage of widows led to other consequences. It was felt that the age at which girls were married was absurdly low, and that child marriages were at the root of many social evils. It was also realised that the general illiteracy of Indian women was the greatest obstacle in the way of reforming social customs, and that education of women should be the first plank in the social reform platform. The earliest social reformers in India were the Brahmo Samajists who discarded idolatry and caste. Other reformers since then have endeavoured to propagate ideas of social reform entirely on a secular basis. The Indian National Social Conference is their principal organisation, and it is supported by Provincial and District Conferences and Associations. Social reform ideas have made considerable headway during the last twenty-five years. Widow marriages are of weekly occurrence in some provinces. The restrictions of caste as to inter-dining and sea-voyage have lost much of their force. The age at which girls are married is steadily, if slowly, rising. The education of girls is making rapid progress. An increasing number of them go to high Schools and Colleges every year. But the most significant testimony to the spread of social reform ideas in the country is the remarkable diminution in the volume and weight of the opposition to them. The number of journals devoted to the social reform cause is increasing, and some of the newspapers which had made themselves conspicuous by their virulent opposition to social reform twenty years ago, now recognise its utility and importance,

SEX.

In India as a whole the proportion of females per thousand males rose steadily from 954 in 1881 to 963 in 1901. It has now fallen again to exactly the same figure as in 1881. The important aspect of these figures is the great contrast they show between India and Europe, where the number of females per thousand males varies from 1,093 in Portugal, and 1,068 in England and Wales, to 1,013 in Belgium, and 1,003 in Ireland. In drawing attention to this disparity the Chief Census Officer argued that the relatively high mortality amongst females was sufficient to account for the difference stated. Then in summarising the causes of this relatively higher mortality he said: "In Europe, boys and girls are equally well cared for. Consequently, as boys are constitutionally more delicate than girls, by the time adolescence is reached, a higher death-rate has already obliterated the excess of males and produced a numerical equality between the two sexes. Later on in life, the mortality amongst males remains relatively high, owing to the risks to which they are exposed in their daily avocations; hard work, exposure in all weathers and accidents of various kinds combine to make their mean duration of life less than that of women, who are for the most part engaged in domestic duties or occupations of a lighter nature. Hence the proportion of females steadily rises. In India, the conditions are altogether different. Sons are earnestly longed for, while daughters are not wanted. This feeling exists everywhere, but it varies greatly in intensity. It is strongest amongst communities such as the higher Rajput clans, where large sums have to be paid to obtain a husband of suitable status and the cost of the marriage ceremony is excessive and those like the Pathans who despise women and hold in derision the father of daughters. Sometimes the prejudice against daughters is so strong that abortion is resorted to when the midwife predicts the birth of a girl. Formerly, female infants were frequently killed as soon as they were born, and even now they are very commonly neglected to a greater or less extent. The advantage which nature gives to girls is thus neutralised by the treatment accorded to them by their parents. To make matters worse, they are given in marriage at a very early age, and cohabitation begins long before they are physically fit for is. To the evils of early child-bearing must be added unskilful midwifery; and the combined result is an excessive mortality amongst young mothers. In India almost every woman has to face these dangers. Lastly, amongst the lower classes, who form the bulk of the population, the women often have to work as hard as, and sometimes harder than, the men, and they are thus less favourably situated in respect of their occupations than their sisters in Europe." It is but fair to say that this conclusion has been challenged by many Indian writers, who attribute far greater importance than the Chief Census Officer to the omission of females at the enumeration.

MARRIAGE.

Although recognised in some backward parts, polyandry is now rare in India. With orthodox Hindus marriage is a religious sacrament which cannot be revoked. The Mahomedans allow a man to divorce his wife without any special reason, but he then becomes liable to pay her dower. The permission is seldom acted upon. The Buddhists of Burma regard marriage merely as a civil contract, and either side can annul it. The Hindu law places no restriction on the number of wives a man may have; but most castes object to their members having more than one wife, except for special reasons. A Mahomedan may have four wives, but he also in practice is generally monogamous.

Marriage Statistics.—In the population of ages and religions, about half the males and one-third of the females are unmarried; 46 per cent of the males and 48 of the females are married, and 5 and 17 per cent. respectively are widowed. A reference to the age statistics shows that the great majority of the unmarried of both sexes are very young children, three-quarters of the bachelors being under 15 years of age, while a somewhat larger proportion of the spinsters are under 10; only one bachelor in 24 is over 30, and only one spinster in 14 is over 15. At the higher ages practically no one is left unmarried, except persons suffering from some infirmity or disfigurement, beggars, prostitutes, concubines, religious devotees and mendicants and a few members of certain hypergamous groups who have been unable to effect alliances of the kind which alone are permitted to them by the rules of their community. It is the persons of the above classes who contribute the 4 per cent. of the males over 40, and the 1 per cent. of the females over 30 who are not, and never have been, married.

Marriage Universal.—This universality of marriage constitutes one of the most striking differences between the social practices of India and those of Western Europe. It has often been explained on the ground that, with the Hindus, marriage is a religious necessity. Every man must marry in order to beget a son who will perform his funeral rites and rescue his soul from hell. In the case of a girl it is incumbent on the parents to give her in marriage before she reaches the age of puberty. Failure to do so is punished with social ostracism in this world and hell fire in the next. But it is not only with the Hindus that marriage is practically universal; it is almost equally so with the Mahomedans, Animists and Buddhists.

Early Marriage.—Another striking feature of the Indian statistics as compared with those of Western Europe is the early age at which marriage takes place. According to M. Sundbarg's table showing the average distribution by age and civil condition of the people of Western Europe according to the censuses taken about the year 1880, of the population below the age of 20, only one male in 2,147 is married and one female in 142. In India, on the other hand, 10 per cent. of the male, and 27 per cent. of the female, population below that age are married. The number of males below the age of 5 who are married is small, but of those aged 5 to 10, 4 per cent. are married, and of those aged 10 to

15, 13 per cent. At '15-20' the proportion rises to 32, and '20-30' to 69 per cent. Of the females under 5, one in 72 is married, of those between 5 and 10, one in ten, between 10 and 15, more than two in five, and between 15 and 20, four in five. In the whole of India there are 2½ million wives under 10, and 9 million under 15 years of age. The Hindu law books inculcate marriage at a very early age, while many of the aboriginal tribes do not give their girls in wedlock until after they have attained puberty.

Widowhood.—It is only when we come to a consideration of the widowed that we find a state of things peculiarly Indian and one that seems to be derived from the prescriptions of the Hindu law-givers. The proportion of widowers (5 per cent. of the total male population) does not differ greatly from that in other countries, but that of the widows is extraordinarily large, being no less than 17 per cent. of the total number of females, against only 9 per cent. in Western Europe. When we consider their distribution by age, the difference becomes more still striking, for while in western Europe only 7 per cent. of the widows are less than 40 years old, in India 28 per cent are below this age, and 1·3 per cent. (the actual number exceeds a third of a million) are under 15, an age at which in Europe no one is even married.

The large number of widows in India is due partly to the early age at which girls are given in marriage, and partly to the disparity which often exists between the ages of husband and wife, but most of all to the prejudice against the re-marriage of widows. Many castes, especially the higher ones, forbid it altogether, and even where it is not absolutely prohibited, it is often unpopular. Although widow marriage is permitted by their religion, and the Prophet himself married a widow, the Mahomedans of India share the prejudice to some extent. How the re-marriage of widows first came to be objected to, it is impossible to say, but it seems highly probable that the interdiction originated amongst the Aryan Hindus, that it was confined at first to the higher castes, and that it has spread from them downwards.

Infant Marriage.—It is difficult to draw from the statistics any definite conclusion as to whether infant marriage is becoming more or less common, but so far as they go, they point to a slight diminution of the practice. The figures for 1901 were abnormal owing to the famines of 1897 and 1900, and it is safer to take the year 1891 as the basis of comparison. There are now 18 Hindu girls per mille who are married at the age of '0-5' as compared with only 16 at that time, but at the age '5-10' the proportion has fallen from 146 to 132, and at '10-15' from 542 to 488. Amongst Mahomedans the proportion at the first mentioned age-period has fallen from 7 to 5, at the second from 83 to 65 and at the third from 474 to 393.

The practice has been denounced by many social reformers, since Mr. Malabari opened the campaign a quarter of a century ago; and the Social Conference which holds its meetings annually in connection with the National Congress has made the abolition of child marriage one of the leading planks in its platform. It is, as we have seen, strongly discouraged by the Brahmos in Bengal and the Aryas in Northern India. The more enlightened members of the higher castes who do not allow widows to re-marry are beginning to realise how wrong it is to expose their daughters to the risk of life-long widowhood, and a feeling against infant marriage is thus springing up amongst them.

In two Native States action has been taken. In Mysore an Act has been passed forbidding the marriage of girls under eight altogether, and that of girls under fourteen, with men over fifty years of age. The object of the latter provision is to prevent those unequal marriages of elderly widowers with very young girls which are popularly believed to be so disastrous to the health of the latter, and which in any case must result in a large proportion of them leading a long life of enforced widowhood. The Gaekwar of Baroda, the pioneer of so much advanced legislation, has gone further. He passed for his State in 1904, in the face of a good deal of popular opposition, an "Infant Marriage Prevention Act", which forbids absolutely the marriage of all girls below the age of nine and allows that of girls below the age of twelve and of boys below the age of sixteen, only if the parents first obtain the consent of a tribunal consisting of the local Sub-Judge and three assessors of the petitioner's caste. Consent is not supposed to be given except on special grounds, which are specified in the Act.

Widow re-marriage.—The prohibition of widow marriage is a badge of respectability. Castes do not allow it rank higher on that account in social estimation. There is a strong tendency amongst the lower Hindu castes to prohibit, or at least, to discountenance, the marriage of widows. At the other end of the social structure there is a movement in the opposite direction. Many social reformers have inveighed against the condemnation of virgin widows to perpetual widowhood, and have pointed out that the custom is a modern innovation which was unknown in Vedic times. In many provinces recently there have been cases in which such widows have been given in marriage a second time, not only amongst Brahmos and Aryas, who naturally lead the way, but also amongst orthodox Hindus. A number of such marriages have taken place amongst the Bhatias of the Bombay Presidency. It is said that in the United Provinces considerably more than a hundred widows have been re-married in the last ten years. The actual results no doubt are small so far, but the first step has been taken and the most violent of the opposition has perhaps been overcome.

EDUCATION.

The general education policy of the Government of India, and its results, are discussed in a special article on Education (*q. v.*) But we may conveniently here indicate some of the education tendencies revealed in the census returns. Of the total population of India, only 59 persons per mille are literate in the sense of being able to write a letter to a friend and to read his reply. The number who can decipher the pages of a printed book with more or less difficulty is no doubt much larger. Throughout India there are many Hindus who though unable to write can

drone out at least the more familiar parts of the Mahabharata or Ramayana to their neighbours, who feel that it is meritorious to listen to the recital of the sacred texts, even though they, and possibly the reader also, may not always fully understand the meaning. Similarly there are many Mahomedans, especially in Northern India, who can read the Koran, though they cannot write a word. Of this minor form of literacy the census takes no count. The number of persons who are literate in the sense in which the term was used at the present census is divided very unequally between the two sexes; of the total male population, 106 per mille are able to read and write, and of the female only 10. In other words there is only one literate female to every eleven males. If we leave out of account children under 15 years of age, the number of literate males per mille is 149, and that of literate females 13.

Education by Provinces.—Thanks to the free instruction imparted in the monasteries and the absence of the pardah system which hampers the education of females in other parts of India, Burma easily holds the first place in respect of literacy. In the whole population 222 persons per mille are literate and the proportion rises to 314 amongst persons over 15 years of age. In every thousand persons of each sex, 376 males and 61 females are able to read and write. Of the other main British provinces, Bengal and Madras come next with 77 and 75 literate persons per mille respectively. Bombay follows closely on their heels. Then after a long interval come Assam, Bihar and Orissa and the Punjab. At the bottom of the list are the United Provinces and the Central Provinces and Berar, with 34 and 33 literate persons per mille respectively. Differences similar to those noticed above sometimes have their counterpart within provincial boundaries. Thus in Bihar and Orissa, the Orissa natural division has 64 literate persons per mille and the Chota Nagpur plateau only 28. In the Central Provinces and Berar, the proportion ranges from only 6 per mille in the Chota Nagpur States to 54 in the Nerbudda Valley.

Native States.—Education is more widely diffused in British provinces than in the Native States, which, taken as a whole, have only 79 males and 8 females per mille who are literate, as compared with 113 and 11 in British territory. The three Native States of Cochin, Travancore and Baroda, however, take rank above all British provinces except Burma, while in respect of female education Cochin divides with Burma the honours of first place. The Kashmir State where only 21 persons per mille can read and write, is in this respect the most backward part of India.

By Religion.—Of the different religious communities excluding the Brahmos and Aryas whose numbers are insignificant, the Parsis easily bear the palm in respect of education. Of their total number 711 per mille are literate, and the proportion rises to 831, if persons under 15 years of age are left out of account. Of the males nearly four-fifths are literate, and of the females nearly two-thirds. Amongst those over 15 years of age only 8 per cent. of the males and 26 per cent. of the females are unable to read and write. The Jains, who are mostly traders, come next, but they have only two literate persons to every five amongst the Parsis. Half the males are able to read and write, but only 4 per cent. of the females. It is noticeable, however, that whereas the proportion of literate males is only slightly greater than it was at the commencement of the decade, that of literate females has doubled. The Buddhists follow closely on the Jains, with one person in four able to read and write. Here also we see the phenomenon of a practically unchanged proportion of literate males (40 per cent.) coupled with a large increase in that of literate females, which is now 6 per cent. compared with 4 per cent. in 1901. The Christians (22 per cent. literate) are almost on a par with the Buddhists, but in their case the inequality between the position of the two sexes is much smaller, the proportion of literate females being nearly half that of males. In order to ascertain how far the high position of Christians is due to the inclusion of Europeans and Anglo-Indians, the figures for Indian Christians have been worked out separately. The result is somewhat surprising; for although the Indian converts to Christianity are recruited mainly from the aboriginal tribes and the lowest Hindu castes, who are almost wholly illiterate, they have, in proportion to their numbers, three times as many literate persons as the Hindus and more than four times as many as the Mahomedans. One Indian Christian in six is able to read and write; for males the proportion is one in four; and for females one in ten. The influence of Christianity on education is strikingly illustrated by the figures for the province of Bihar and Orissa, where the proportion of Indian Christians who are literate is 76 per mille, compared with only 5 per mille amongst their animistic congeners. It has to be remembered, moreover, that many of the Indian Christians had already passed the school-going age at the time of their conversion; the proportion who are able to read and write must be far higher amongst those who were brought up as Christians.

The Sikhs come next in order of merit, with one literate person in every fifteen; for males the ratio is one in ten and for females one in seventy. Here again, while the proportion for males shows only a slight improvement, that for females has doubled during the decade. The Hindus have almost as large a proportion of literate males per mille (101) as the Sikhs, but fewer literate females (8). The Mahomedans with only 69 and 4 per mille respectively, stand at the bottom of the list, except for the Animistic tribes of whom only 11 males and 1 female in a thousand of each sex are able to read and write. The low position of the Mahomedans is due largely to the fact that they are found chiefly in the north-west of India, where all classes are backward in respect of education, and in Eastern Bengal where they consist mainly of local converts from a depressed class. In the United Provinces, Madras and the Central Provinces and Berar, they stand above or on an equality with the Hindus and the same is the case in Bombay excluding Sind. In Sind the Mahomedan population is exceptionally illiterate, but in the rest of the Presidency it consists largely of traders, and education is much more widely diffused amongst them than amongst Hindus. The figures for Hindus again are a general average for all castes, high and low. It will be seen further on that some of the higher Hindu castes

are better educated than the Buddhists while others are even less so than the Animists.

Increase of Literacy.—The total number of literate persons has risen during the decade from 15.7 to 18.6 millions or by 18 per cent. The number of literate males has increased by 15 and that of literate females by 61 per cent. The proportion who are literate per thousand males has risen from 98 to 106 and the corresponding proportion for females from 7 to 10. If persons under 15 years of age be excluded, the proportions are 138 and 149 for male and 8 and 13 for females. The great improvement in the proportion of literate females is most encouraging. It is true that too much stress should not be laid on this when the actual number is still so small, but, on the other hand, it must be remembered that the rate of increase was equally great in the previous decade, so that it has now been continuous for twenty years. The total number of females over 15 years of age who can read and write is now a million and a quarter compared with less than half a million twenty years ago.

Progress.—Before leaving these statistics of schools and scholars we may glance briefly at the progress which they show is being made. The total number of scholars in all kinds of educational institutions in 1891 was only 3.7 millions. In 1901 it had risen to 4.4, and in 1911 to 6.3 millions. 17.7 per cent. of the population of school-going age were at school in 1912 as compared with 14.8 per cent. in 1907. Between 1891 and 1911 the number of students in secondary schools and Arts Colleges has doubled, and the number in primary schools has increased by 67 per cent., the proportion ranging from 39 per cent. in Bombay to 204 per cent. in the United Provinces. Excluding Madras, where a school final examination has recently taken the place of the Matriculation, or Entrance examination of the University, the number of persons passing that examination has risen from 4,079 in 1891 to 10,512 in 1911. Including Madras the number who passed the Intermediate examination in Arts or Science has risen during the same period from 2,055 to 5,141, and that of those who obtained a degree in Arts, Science, Medicine or Law from 1,437 to 5,373. The general conclusion appears to be that, while the general rate of progress is far greater than would appear from a comparison of the census returns of 1901 and 1911, it is most marked in respect of secondary education.

There was a continuous fall, both in the number and the proportion of persons afflicted from 1881 to 1901; and this has now been followed by a move in the other direction. Though the proportion is smaller the number of the insane and the deaf-mutes is now about the same as it was thirty years ago. The number of lepers and blind however is less by about a sixth than it then was.

Infirmities.

The total number of persons suffering from each infirmity at each of the last four censuses is shown in the following table:—

Infirmity.	Number afflicted			
	1911	1901	1891	1881
Insane	81,006 **26**	66,205 **23**	74,279 **27**	81,132 **35**
Deaf-mutes	199,891 **64**	153,168 **52**	196,861 **75**	197,215 **86**
Blind	443,653 **142**	354,104 **121**	458,868 **167**	526,748 **229**
Lepers	109,094 **35**	97,340 **33**	126,244 **46**	134,968 **57**
Total	833,644 **267**	670,817 **229**	856,252 **315**	937,063 **407**

NOTE.—The figures in heavier type represent the proportion per 100,000 of the population.

Insanity.—In respect of the prevalence of insanity, India compares very favourably with European countries. According to the latest returns, the proportion of persons thus afflicted in England and Wales is 364 per hundred thousand of the population, or fourteen times the proportion in India. This may be due partly to the fact that the English statistics include the weak-minded as well as those who are actively insane, and to the greater completeness of the return in a country where the majority of the mentally afflicted are confined in asylums; but the main reason no doubt is to be found in the comparatively tranquil life of the native of India. It is well known that insanity increases with the spread of civilisation, owing to the greater wear and tear of nerve tissues involved in the struggle for existence.

The total number of insane persons exceeds by 9 per cent. that returned in 1891, but their proportion per hundred thousand of the population has fallen from 27 to 26. The decline is fairly general, the chief exceptions being the United Provinces, the North-West Frontier Province and four Native States in the peninsular area. In the United Provinces the number of the insane per hundred thousand of the population has risen from 12 to 18. No satisfactory explanation of this large increase is forthcoming.

Deaf-Mutes.—By deaf-mutism is meant the congenital want of the sense of hearing which, in the absence of special schools, such as are only

just beginning to appear in India, necessarily prevents the sufferer from learning to talk. Clear instructions were given to the enumerators to enter only persons who were congenitally afflicted. Some few, perhaps, may have been included in the return who had lost the power of speech or hearing after birth, but the total number of such mistakes is now very small. In India as a whole 74 males and 53 females per hundred thousand are deaf and dumb from birth. These proportions are much the same as those obtaining in European countries.

Blindness.—In India as a whole fourteen persons in every ten thousand of the population are blind, as compared with from eight to nine in most European countries and in the United States of America. It is a matter of common observation that blindness is ordinarily far more common in tropical countries than in those with a temperate climate. It is, however, less common in India than in parts of Eastern Europe; in Russia, for instance, nineteen persons in every ten thousand are blind.

Lepers.—In India as a whole 51 males and 18 females per hundred thousand persons of each sex are lepers. Of the different provinces, Assam suffers most, then Burma, and then in order Bihar and Orissa, the Central Provinces and Berar, Madras, Bengal, Bombay, the United Provinces, the Punjab and the North-West Frontier Province. In the two last-mentioned provinces there are only 17 male and 8 female lepers per hundred thousand of each sex. The occurrence of leprosy is very local and its prevalence varies enormously within provincial boundaries.

The number of lepers has fallen since 1891 from 126 to 109 thousand, a drop of more than 13 per cent. When it is remembered that the number of persons suffering from the other three infirmities taken together has remained almost stationary, it may be concluded that the decrease in the reported number of lepers is genuine and indicates a real diminution in the prevalence of the disease. It is possible that this is partly the result of the improved material condition of the lower castes, amongst whom leprosy is most common, and of a higher standard of cleanliness. The greater efforts which have been made in recent years to house the lepers in asylums may also have helped to prevent the disease from spreading. The total number of asylums in India is now 73, and they contain some five thousand inmates, or about 4.7 per cent. of the total number of lepers. This may not seem much, but it has to be remembered that the movement is still in its infancy and that progress has been very rapid in recent years. Complete statistics for 1901 are not readily available, but it is known that in the two provinces of Bengal and Bihar and Orissa, the number of lepers in asylums was then only about half what it is now. The greater part of the credit for the provision of asylums for these unfortunate persons belongs to the Mission for Lepers in India and the East, which receives liberal help from Government. Its latest report shows that there are 3,537 lepers in the forty asylums maintained by the Society.

The belief is growing that leprosy is communicated from one human being to another by some insect, and two South African doctors have recently published papers implicating the bed bug (*acanthia lectularia*). If this theory be correct it is obvious that the segregation of lepers in asylums must reduce the number of foci of the disease, and to that extent prevent it from spreading. It is worthy of note that in many of the districts where the disease was most prevalent in 1891, there has since been a remarkable improvement. Chamba which in 1891 had 34 lepers in every ten thousand of its population, now has only 15; in Birbhum the corresponding proportion has fallen from 35 to 16, in Bankura from 36 to 23, in Simla 29 to 18, in Dehra Dun from 20 to 11, in Garhwal from 17 to 10, in Burdwan from 22 to 14 and in North Arakan from 28 to 20.

OCCUPATIONS.

Nowhere are the many points of difference in the local conditions of India, as compared with those of western countries, more marked than in respect of the functional distribution of the people. In England, according to the returns for 1901, of every hundred actual workers, 58 are engaged in industrial pursuits, 14 in domestic service, 13 in trade and only 8 in agriculture, whereas in India 71 per cent. are engaged in pasture and agriculture and only 29 per cent. in all other occupations combined. The preparation and supply of material substances afford a means of livelihood to 19 per cent. of the population (actual workers) of whom 12 per cent. are employed in industries, 2 in transport and 5 in trade. The extraction of minerals supports only 2 persons per mille; the civil and military services support 14, the professions and liberal arts 15, and domestic service 18 persons per mille. The difference is due to the extraordinary expansion of trade and industry which has taken place in Western Europe during the last century in consequence of the discovery of the steam engine, and to the great improvement in means of transport and the use of mechanical power in factories of all kinds which have resulted therefrom. In Germany, sixty years ago, the agricultural population was very little less than it is at the present time in India. There are, as we shall see further on, indications that in the latter country also great changes are impending; and it is not unlikely that, as time goes on, the functional distribution of the people will become less dissimilar from that now existing in Europe.

The village.—Until the recent introduction of western commodities, such as machine-made cloth, kerosine oil, umbrellas and the like, each village was provided with a complete equipment of artisans and menials, and was thus almost wholly self-supporting and independent. Its chamars skinned the dead cattle, cured their hides, and made the villagers' sandals and thongs. Local carpenters made their ploughs, local blacksmiths their shares, local potters their utensils for cooking and carrying water, and local weavers their cotton clothing. Each village had its own oil-pressers, its own washermen, and its own barbers and scavengers. Where this system was fully developed, the duties and remuneration of each group of artisans were fixed by custom and the caste rules strictly prohibited a man from entering into competition with another of the same caste. The barber, the washerman, the blacksmith, etc.

all had their own definite circle within which they worked, and they received a regular yearly payment for their services, which often took the form of a prescriptive share of the harvest, apportioned to them when the crop had been reaped and brought to the threshing floor.

Village sufficiency declining.—Even in India proper the village is no longer the self-contained industrial unit which it formerly was, and many disintegrating influences are at work to break down the solidarity of village life. The rising spirit of individualism, which is the result of modern education and western influences, is impelling the classes who perform the humbler functions in the economy of village life to aspire to higher and more dignified pursuits. There is also a tendency to replace the prescriptive yearly remuneration by payment for actual work done. In many parts for instance, the village Chamar is no longer allowed the hides of dead cattle as his perquisite, but receives instead a payment for removing the cattle and for skinning them; and the hides are then sold to a dealer by the owner of the animal. Improved means of communication have greatly stimulated migration and the consequent disruption of the village community, and by facilitating and lowering the cost of transport of commodities, have created a tendency for industries to become localised. The extensive importation of cheap European piecegoods and utensils, and the establishment in India itself of numerous factories of the western type, have more or less destroyed many village industries. The high prices of agricultural produce have also led many village artisans to abandon their hereditary craft in favour of agriculture. The extent to which this disintegration of the old village organisation is proceeding varies considerably in different parts. The change is most noticeable in the more advanced provinces, whereas in comparatively backward tracts, like Central India and Rajputana, the old organisation remains almost intact.

Agriculture.—India is pre-eminently an agricultural country. Of its total population 72 per cent. are engaged in pasture and agriculture, *viz.*, 69 per cent. in ordinary cultivation and 3 per cent. in market gardening, the growing of special products, forestry and the raising of farm stock and small animals. The 217 million persons supported by ordinary cultivation comprise nearly 8 million landlords, 167 million cultivators of their own or rented land, over 41 million farm servants and field labourers and less than a million estate agents and managers and their employes.

On the average, in the whole of India, every hundred cultivators employ 25 labourers, but the number varies in the main provinces from 2 in Assam, 10 in the Punjab, 12 in Bengal and 16 in the United Provinces to 27 in Burma, 33 in Bihar and Orissa, 40 in Madras, 41 in Bombay and 59 in the Central Provinces and Berar. These local variations appear to be independent alike of the fertility of the soil and of the density of population. The conclusion seems to be that the differences are due to social, rather than economic, conditions, and that those provinces have most field labourers which contain the largest proportion of the depressed castes who are hereditary agrestic serfs.

Of the two million persons supported by the growing of special products rather more than half were returned in tea, coffee, cinchona, indigo, etc., plantations and the remainder in fruit, vegetable, betel, vine, arecanut, etc., growers. Of those in the former group, nearly nine-tenths were enumerated in the tea-gardens of Assam (675,000) and Bengal (248,000) and most of the remainder in the coffee, tea, rubber and other plantations of Southern India.

Of the 16 persons per mille who were classed under Raising of farm stock, nearly four-fifths were herdsmen, shepherds, and goatherds, rather more than one-seventh were cattle and buffalo-breeders, and keepers and one-eleventh sheep, goat and pig breeders.

Fishing and Hunting.—In the whole of India about 2 million persons, or 6 per mille subsist by fishing and hunting. Of these, all but a small fraction are fishermen. About half the total number are found in the two provinces of Bengal (644,000) and Madras (313,000). The number who live by this occupation is exceptionally small in the United Provinces (38,000) and Punjab (10,000). The Punjab Superintendent says that, owing to the destruction of immature fish and fry and the obstruction of the free passage of fish to their spawning grounds, the five thousand odd miles of large rivers and major canals in his Province probably produce less food than an equal volume of water in any other part of the world. The sea fisheries of India, though now known to be very valuable, are at present but little exploited.

Mines.—In the whole of India only 530,000 persons or 17 in every ten thousand are supported by the extraction of minerals. Coal mines and petroleum wells account for about half the total number (277,000). The coal fields of Bihar and Orissa support 127,000 persons and those of Bengal 115,000. In the Manbhum district, which contains the Jherria, and part of the Raniganj coal field, 111,000 persons or 7 per cent. of the inhabitants are supported by work in the collieries. Though the Raniganj coal field was discovered as far back as 1774 many years elapsed before much use was made of the discovery. In 1840 the total quantity of coal sent to Calcutta was only 36,000 tons. It rose to 220,000 tons in 1858 and to six million tons in 1901. Since then the growth has been very rapid. The output in 1911 from the coal mines of Bengal and Bihar and Orissa exceeded eleven million tons. In the same year the total yield for all India was twelve million tons. Of the latter quantity nearly one million tons were exported, and four million were used by the railways. The total output however is still trivial compared with that of the United Kingdom, which amounted in 1911 to 272 million tons. Most of the persons employed in the mines of Bengal and Bihar and Orissa are aboriginal or quasi-aboriginal; about half are Bauris and Santals, and many of the remainder belong to the Bhuiya, Chamar or Mochi, Kora, Rajwar, Dosadh and Musahar castes. The great majority are recruited locally. The coal mines of Hyderabad, Assam, the Central Provinces and Berar, and the Punjab support between them only about 27,000 persons.

Metals.—Of the 98,000 persons supported by mining for metals, more than half were returned

in the Mysore State, and of these the great majority were employed in the gold mines of Kolar, where for some years past the value of the gold produced has been about £2,000,000 per annum. The mines in the Central Provinces and Berar, which support 21,000 persons, are principally for the extraction of manganese. The mining of this ore was greatly fostered by the Japanese War, which caused Russia to discontinue her exports of it for the time. There has since been a period of depression, which seems now to have come to an end. Manganese is extracted elsewhere also, *e.g.*, in Mysore and Madras. In Burma tin and lead are extracted as well as silver and wolfram in small quantities. Iron ore is worked in various places, but chiefly in Mayurbhanj which supplies the raw material for Messrs. Tata and Company's ironworks at Sakchi.

Of the 75,000 persons supported by work in quarries and mines for non-metallic minerals, other than coal and salt, two-fifths were enumerated in Bombay, where the quarrying of stone and limestone is an important business chiefly in the neighbourhood of Bombay city. In Bihar and Orissa and Madras mica mining is of some importance.

The extraction of salt and saltpetre support 78,000 persons. Nearly a third of the total number are found in Bihar and Orissa where the Nuniyas are still largely employed in digging out and refining saltpetre. This industry is carried on also in the Punjab. Rock salt is mined in the same province and in Rajputana.

The total number of persons employed in the extraction of minerals has risen during the decade from 235 to 517 thousand. The most noticeable increase is in Coal mines and petroleum wells which embrace nearly three times as many persons as in 1901. The bulk of the increase has occurred in Bengal and Bihar and Orissa, but it is to be noted that Hyderabad and the Central Provinces and Berar which now contribute about 12,000 persons to this group gave practically none ten years previously. Miners for metals are 2½ times as numerous as they were in 1901.

Industries.—Of the 35·3 million persons dependent on industrial occupations, nearly one-fourth, or 2·6 per cent. of the total population, are supported by textile industries. Of these, the most important, from a numerical point of view, are industries connected with cotton. The number of persons supported by cotton spinning, sizing and weaving is close on 6 millions, and another half million are employed in ginning, cleaning and pressing the raw material. The proportion of the population supported by cotton spinning, sizing and weaving is 37 per mille in the Punjab, 29 in Bombay and Rajputana, 27 in Madras, 22 in the Central Provinces and Berars and 18 in the United Provinces. In Burma, Bihar and Orissa, Bengal and Assam it is much smaller, ranging only from 8 to 11 per mille. Nearly two-fifths of a million persons are supported by rope, twine and string making, and more than a third of a million by jute spinning, pressing and weaving. Other important textile industries are wool spinning and weaving, silk spinning and weaving, and dyeing and printing, etc., each of which supports from a quarter to a third of a million persons. It is clear therefore that so far as India is concerned, in spite of the growing number of cotton mills in the Bombay Presidency and elsewhere, the hand industry still, to a great extent, hold its own. Only 13,000 persons are employed in silk spinning and weaving factories, 7,000 in woollen factories including those for the making of carpets and even smaller numbers in other factories of this class. Some of these textile industries are very local. Those connected with jute are practically confined to Bengal, in which province nine-tenths of the persons supported by them were enumerated. More than half the persons dependent on rope, twine and string making and on working in 'other fibres' chiefly coir, and palmyra fibre were enumerated in Madras and its Native States and a quarter of those supported by wool industries in Hyderabad. Half the silk spinners and weavers are found in two provinces, Bengal and Madras. The dyeing, bleaching and printing of textiles and lace, crape and similar industries are almost unknown in Assam, Bengal, Burma and the Central Provinces and Berar.

Growth of Industry.—As compared with 1901 there has been a decrease of 6·1 per cent. in the number of persons supported by textile industries. This is due mainly to the almost complete extinction of cotton spinning by hand. Weaving by hand has also suffered severely from the competition of goods made by machinery both in Europe and in this country. There has been a large increase in the number of Indian cotton mills, but as the output per head in factories is far greater than that from hand-looms, the addition of a given number of factory hands involves the displacement of a far larger number of hand workers.

Hides.—As compared with 1901, a large decline in the number returned as general workers in hides is partly compensated for by an increase in shoe, boot and sandal makers. In the two heads taken together there has been a drop of about 6 per cent. During the same period the number of hide dealers has more than doubled. Owing to the growing demand for hides in Europe and America and the resulting high prices, the export trade in hides has been greatly stimulated. The local cobbler, on the other hand, having to pay more for his raw material and feeling the increasing competition of machine-made goods has been tempted to abandon his hereditary craft for some other means of livelihood, such as agriculture or work in factories of various kinds.

Woodworkers.—Wood cutting and working and basket making support 2·5 and 1·3 million persons, respectively, or 3·8 million in all. The number of factories devoted to these industries is still inconsiderable. Saw mills and timber yards each employ some 12,000 persons and carpentry works about 5,000. There is only one cane factory with 46 employes.

Metal workers.—The workers in metals are only about half as numerous as those in wood and cane. About three-quarters of the persons in this order are general workers in iron, and one-seventh are workers in brass, copper and bell-metal.

The total number of persons dependent on metal industries shows a decline of 6·6 per cent. as compared with 1901.

Earthenware.—The manufacture of glass, bricks and earthenware supports in all 2·2 milli-

on persons. Seven-eights of these are the ordinary village potters who make the various earthenware utensils for cooking and storing water which are required by the poorer classes, as well as tiles, rings for wells and the like. In most parts of India the potter, like the carpenter, oil-presses, blacksmith and cobbler, is found in practically every village.

Chemicals.—In a country like India, whose economic development is still backward, it is not to be expected that a large number of persons should be engaged in industries connected with chemical products. The total number returned as supported by these industries exceeds a million but it shrinks to less than 100,000 if we exclude manufacture and refining of vegetable and mineral oils. The 1·1 million persons included in this group are almost entirely village artisans who extract oil from mustard, linseed, etc., grown by their fellow villagers.

Food Industries.—Of the 3·7 million persons supported by food industries the great majority follow occupations of a very primitive type. Rice pounders and huskers and flour grinders number 1·6 million, grain parchers, etc., 0·6 million, and toddy drawers about the same. There are 352,000 butchers, 281,000 sweetmeat makers, etc., and 97,000 bakers and biscuit makers. The other five heads of the scheme contain between them only 227,000 persons. The principal factories in connection with food industries are flour and rice mills, which employ 42,000 persons, sugar factories 8,000, opium, ganja and tobacco factories 7,000 and breweries 5,000.

Dress.—In all 7·8 million persons are supported by industries of dress and the toilet. Of these 1·3 millions are grouped under the head tailors, milliners, dressmakers, etc., and 2·1 million under each of the heads (*a*) shoe, boot and sandal makers, (*b*) washermen, cleaners and dyers, and (*c*) barbers, hair-dressers and wig-makers.

Transport.—Transport supports about five million persons, or 16 per mille of the population, *viz.*, transport by water one million, transport by road 2·8 million, transport by rail one million, and the post, telegraph and telephone services 0·2 million. Transport by water, about three-fifths are owners of country boats and their boatmen; nearly one-sixth are employed on inland steamers and ocean-going vessels of all kinds, one-sixth are engaged in the construction and maintenance of canals, and one-twentieth in the management and upkeep of harbours. Transport by road includes one million carters and cart-owners, more than half a million porters and messengers and considerably less than that number of owners and drivers of pack animals. Palki owners and bearers number 202,000 and persons engaged on road construction and maintenance 563,000.

Trade.—The number of persons dependent on trade for their livelihood is 17·8 millions, or 6 per cent. of the population. Of these, more than half are supported by trade in food stuffs, including 2·9 million grocers and sellers of vegetable oil, salt and other condiments, who are for the most part the petty village shop-keepers, commonly known as **salt** and oil sellers; 2·2 million grain and pulse dealers; 1·6 million betel leaf, vegetables and fruit sellers, and nearly a million fish vendors. Trade in textiles is the next most important item, supporting 4 per mille of the population. In connection with these figures, it is necessary to draw attention to the great difference which exists between the economic conditions of India and those of Europe. In Europe the seller is almost invariably a middleman, whereas in India he is usually the maker of the article, and is thus classified under the industrial and not the commercial head.

Professions.—The public administration and the liberal arts support 10·9 million persons or 35 per mille, namely, public force 2·4 million, public administration 2·7 million, the professions and liberal arts 5·3 million, and persons of independent means about half a million. The head Public force includes the Army (0·7 million), the Navy (less than 5,000) and the Police (1·6 million). India has practically no navy and her army is exceptionally small, as compared with those of European countries. The number of persons actually employed in it is only 384,000 or 1 per mille of the population, as compared with 4 per mille in England and 10 in Germany. The figures for Police include village watchmen and their families. The real number in this group is greater than that shown in the census tables; many of these village officials have other means of subsistence, and the latter were sometimes shown as their principal occupation. Under the head Public administration are classed only those persons who are directly engaged in the Executive and Judicial administration and their establishments, whether employed directly under Government or under a municipality or other local body. Employees of Government and local bodies who have a specific occupation of their own, such as doctors, printers, school-masters, land surveyors, etc., are shown under the special heads provided for these occupations. Of the 5·3 million persons supported by the professions and liberal arts, Religion accounts for rather more than half, Letters and the arts and sciences for more than a sixth, Instruction and Medicine for one-eighth, and Law for one-eighteenth. The main head Religion contains 1·6 million priests, ministers, etc., 0·7 million religious mendicants, 0·4 million pilgrim conductors, circumcisers and persons engaged in temples, burial or burning ground service, and 0·06 million catechists and other persons in church and mission service. Of Law, more than half are lawyers, law agents and mukhtiars and the remainder lawyers' clerks and petition writers. More than two-thirds of the persons under the Medical head are medical practitioners of various kinds, including dentists: the remainder are midwives, vaccinators, compounders, nurses, etc. The real number of persons who act as midwives must exceed considerably that shown in the return. This service is usually performed by the wife of the village scavenger or other person of low caste; and she must often have been returned under her husband's occupation. Nearly three-fourths of the persons classed under Letters and the arts and sciences are found in Music composers and masters, players on musical instruments, singers, actors and dancers. The bulk of these are village drummers, whose services are invariably requisitioned on the occasion of marriages and religious festivals.

Factories.—There are in the whole of India 7,113 factories employing 2·1 million persons or 7 per mille of the population. Of these pe-

sons, 810,000, or two-fifths of the total number are employed in the growing of special products, 558,000 in textile industries, 224,000 in mines, 1,25,000 in transport, 74,000 in food industries, 71,000 in metal industries, 49,000 in glass and earthenware industries, the same number in industries connected with chemical products and 45,000 in industries of luxury. Of the special products, tea (703,000 employees) is by far the most important. The number of tea gardens is not much more than double that of coffee plantations, but twelve times as many persons are employed on them. The coffee plantations are four times as numerous as indigo concerns and labourers. Of the labour- per cent. are returned by Assam and 27 per cent. by Bengal. Madras, Mysore and Coorg contain between them practically all the coffee plantations, and Bihar and Orissa all the indigo factories. Of the persons working in mines, 143,000, or 64 per cent. are found in collieries, eight-ninths of them being in the two provinces of Bihar and Orissa and Bengal. The number of persons engaged in gold mines is about one-fifth of the number in the coal mines: nine-tenths of them were returned from Mysore. Of the 558,000 workers in textile industries, cotton mills contribute 308,000 and jute, hemp, etc., 222,000. About two-thirds of the persons employed in cotton mills are found in the Bombay Presidency, from 8 to 9 per cent. in the Central Provinces and Berar and Madras, and about half this proportion in the united Provinces and Bengal. Jute mills are a monopoly of Bengal. Of the industries connected with transport, railway workshops are by far the most important and afford employment to 99,000 persons, or 79 per cent. of the total number of persons engaged in these industries: about one-fourth of them are found in Bengal and one-sixth in Bombay. Of the factories connected with food industries, the most prominent are rice and flour mills. These employ 42,000 persons, of whom nearly three-fourths are engaged in the rice mills of Rangoon and other places in Burma.

Indians and Europeans.—The proportion of Indians to Europeans varies considerably in different classes of factories. The great majority of the larger concerns are financed by European capital, and in such cases management or direction is generally European, and the Indians shown under this head are engaged for the most part on supervision and clerical work. In Assam where 549 tea gardens are owned by Europeans and 60 by Indians, there are 536 European and 73 Indian managers. In the coffee plantations of Madras and Mysore the same principle is apparent. The jute mills of Bengal are financed by European capital and the managers are all Europeans; while in Bombay where Indians own 110 of the cotton spinning and weaving mills, and share 25 with Europeans, and the latter own exclusively only 12, all but 43 of the managers are Indians. Sometimes the proportion of Europeans employed in supervision, etc., varies with the character of the work. In the gold mines where the planning and control of the deep underground workings require a high degree of skill, Europeans outnumber Indians in the ratio of nearly 4 to 1, whereas in the collieries Indians are twelve times as numerous as Europeans.

Anglo-Indians.—Anglo-Indian is used at the census as the designation of the mixed race, descended usually from European fathers and Indian mothers, which was formerly known as Eurasian. The total number of persons returned under this head, excluding Feringis, is now 100,451 or 15 per cent. more than in 1901. Anglo-Indians are most numerous in Madras (26,000) and Bengal (20,000). In the United Provinces, Bombay and Burma the number ranges from 8 to 11 thousand, and in Bihar and Orissa, the Central Provinces and Berar and the Punjab, it is about 3,500. In the States and Agencies Anglo-Indians aggregate only 14,000, more than half being found in Mysore and Hyderabad. The increase in their number as compared with 1901 may be due partly to some Anglo-Indians having returned themselves under their new designation who would have claimed to be Europeans if Eurasian had been the only alternative, and it is also perhaps due in part to a growing tendency amongst certain classes of Indian Christians to pass themselves off as Anglo-Indians. The Punjab Superintendent accounts in this way for the greater part of the increase of 42 per cent. in the number returned as Anglo-Indians in his province. The proportional increase is also large in the United Provinces, Bombay, Burma, the Central Provinces and Berar and the Cochin State. Although Madras still has the largest number of Anglo-Indians, the total is slightly less now than it was twenty years ago. Possibly this is because more careful enumeration has reduced the number of Indian Christians who thus returned themselves. The number of Anglo-Indians in Burma is remarkably large in view of the comparatively short time that has elapsed since it became a British possession and the strength of its European population. In this community there are 984 females per thousand males, or slightly more than the corresponding proportions in the general population of India. More than half of the persons returned as Anglo-Indians are Roman Catholics, and one-third are Anglicans; the number of Presbyterians, Baptists, and Methodists ranges from 2 to 2½ per cent.

THE CENSUS OF 1921.

The Census of India was taken on the night of March 18th. The total population of India as thus ascertained is 319,075,132, *viz.*, British Territory 247,138,396 and Indian States 71,936,736, giving an increase of 3,205,218 in British Territory and 713,518 in Indian States. these figures are provisional, but the experience of previous censuses shows that the difference between the population according to the provisional totals and that as finally ascertained does not amount to more than about 1 in 2,500 persons and the figures are therefore sufficiently accurate for practical purposes.

The proportional variations at each of the last two censuses are given below :—

Variations per cent. since 1901.

——	1891 to 1901.	1901 to 1911.	1911 to 1921.
India	+1·5	+6·5	+1·2
Provinces ..	+3·9	+5·4	+1·3
States	−6·6	+10·3	+1·0

These ratios differ slightly from those in the statements appended, as allowance has been made in the former for the inclusion of new areas. The areas now dealt with for the first time have an estimated population of 86,145 persons.

Unfavourable Features :—The agricultural conditions of the early and middle years of the decade were not unfavourable to the growth of the population. There was some local scarcity but no widespread famine, while the birth rate and survival rate both stood high in 1913 but declined slightly in the subsequent four years. The war, which gave a notable stimulus to the agriculture, industry and trade of the country, had little direct effect on the population figures. The influenza epidemic of 1918 dominates all other direct influences on the movement of the population during the decade. The epidemic left no part of India unvisited. The death rate was nearly double that of the previous year and the direct loss of life due to the ravages of the disease during a few months in 1918 alone is put at about 7 millions in British India, while the indirect effects are shown in the heavy fall in the birth rate in 1919, the births being less than the deaths in both 1918 and 1919. Apart from the influenza epidemic, the later years of the decade were generally unhealthy. Plague which had been virulent in 1915 in the Northern and Western portions of the country again took a heavy toll in 1917 and 1918. The general failure of the rains of 1918 caused widespread distress over a large part of the country and the mortality from cholera in 1918-19 was exceptionally high. In the last year of the decade a large part of the country had again to face a serious failure of the monsoon. Further analysis of the conditions affecting the movement of the population must be postponed till the Census figures are available in their final form ; but the figures given in the statements show the extent to which the normal growth of the population has, in the greater part of the country, been set back by the terrible visitation of 1918 and the subsequent unhealthy season.

POPULATION OF PROVINCES AND STATES AND VARIATION SINCE 1891.

The population returned at previous Censuses has been corrected, as far as possible, in order to allow for subsequent inter-provincial transfers.

The population of Benares State (total 357,838, males 177,869, females 179,969), which was included under the head " British territory " in 1911, has now been included under the head " Indian States." Delhi and Gwalior, which in 1911 were classed under the Punjab and Central India Agency respectively, are now shown separately. The figures for the Madras States include those of Cochin and Travancore, the figures of these States being also shown separately.

The political control of Aden, which is still technically a part of the Bombay Presidency, is with the British Government, but as its general administration is still directly under the Government of Bombay, Aden has been shown for the purpose of the Census as part of the Bombay Presidency.

The population of the French Settlements in India which is not included in this table is according to the Provisional Totals 269,579 (Males 133,251, Females 136,328).

Province, State or Agency.	Population, 1921.			Variation, 1911—21. Increase (+). Decrease (—).	
	Total.	Males.	Females.	Actual.	Per cent.
1	2	3	4	5	6
INDIA.	319,075,132	164,056,191	155,018,941	+3,918,736	+1·2
Provinces.	247,138,396	126,941,215	120,197,181	+3,205,218	+1·3
1. Ajmer-Merwara ..	495,899	269,867	226,032	—5,496	—1·1
2. Andamans and Nicobars	26,833	20,393	6,440	+374	+1·4
3. Assam	7,598,861	3,955,665	3,643,196	+884,562	+13·2
4. Baluchistan ..	421,679	255,566	166,113	+7,267	+1·8
(*Districts and Administered Territories.*)					
5. Bengal	46,653,177	24,130,621	22,522,556	+1,170,572	+2·6
6. Bihar and Orissa ..	33,998,778	16,767,112	17,231,666	—490,766	—1·4
Bihar	23,378,758	11,585,798	11,792,960	—373,671	—1·6
Orissa	4,968,406	2,354,855	2,613,551	—163,347	—3·2
Chota-Nagpur ..	5,651,614	2,826,459	2,825,155	+46,252	+·8
7. Bombay (Presidency)	19,338,586	10,164,934	9,173,652	—357,680	—1·8
Bombay	16,005,170	8,291,890	7,713,280	—131,496	—·8
Sind	3,278,493	1,836,166	1,442,327	—234,942	—6·7
Aden	54,923	36,878	18,045	+8,758	+19·0
8. Burma	13,205,564	6,750,781	6,454,783	+1,090,347	+9·0
9. Central Provinces and Berar	13,908,514	6,948,985	6,959,529	7,644	— 1
Central Provinces.	10,827,302	5,379,741	5,447,561	—31,694	—·3
Berar	3,081,212	1,569,244	1,511,968	+24,050	+·8
10. Coorg	164,459	89,851	74,608	—10,517	—6·0
11. Delhi	486,741	280,709	206,032	+73,294	+17·7
12. Madras	42,322,270	20,884,233	21,438,037	+ 916,866	+2·2
13. North-West Frontier Province.	2,247,696	1,226,791	1,020,905	+50,763	+2·3
(*Districts and Administered Territories.*)					
14. Punjab	20,678,393	11,300,955	9,377,438	+1,099,820	+5·6
15. United Provinces of Agra and Oudh ..	45,590,946	23,894,752	21,696,194	— 1,216,544	—2·6
Agra	33,420,638	17,593,757	15,826,881	—828,848	—2·4
Oudh	12,170,308	6,300,995	5,869,313	—387,696	—3·1
States and Agencies	71,936,736	37,114,976	34,821,760	+713,518	+1·0
16. Assam State (Manipur)	383,672	187,951	195,721	+37,450	+10·8
17. Baluchistan States .	378,999	205,988	173,011	—41,292	—9·8
18. Baroda State ..	2,121,875	1,098,054	1,023,821	+89,077	+4·4
19. Bengal State ..	896,173	476,644	419,529	+73,608	+8·9

Province, State or Agency.	Population, 1921.			Variation, 1911—21. Increase (+). Decrease (—).	
	Total.	Males.	Females.	Actual.	Per cent.
1	2	3	4	5	6
20. Bihar and Orissa States	3,965,431	1,947,668	2,017,763	+20,222	+·5
21. Bombay States ..	7,412,341	3,771,186	3,641,155	+24,290	+·3
22. Central India Agency	6,004,581	3,072,769	2,931,812	—135,414	—2·2
23. Central Provinces States	2,068,482	1,029,507	1,038,975	—48,670	—2·3
24. Gwalior State ..	3,175,822	1,686,176	1,489,646	—41,163	—1·3
25. Hyderabad State ..	12,453,627	6,331,984	6,121,643	—921,049	—6·9
26. Kashmir State ..	3,322,030	1,757,902	1,564,128	+163,904	+5·2
27. Madras States ..	5,460,029	2,745,715	2,714,314	+648,188	+13·5
Cochin States.	979,019	483,834	495,185	+60,909	+6·6
Travancore State.	4,005,849	2,032,306	1,973,543	+576,874	+16·8
28. Mysore State ..	5,976,660	3,045,999	2,930,661	+170,467	+2·9
29. North-West Frontier Province .. (*Agencies and Tribal Areas.*)	2,828,055	1,520,672	1,307,383	+1,205,961	+74·3
30. Punjab States ..	4,415,401	2,425,191	1,990,210	+202,607	+4·8
31. Rajputana Agency .	9,857,012	5,189,765	4,667,247	—673,420	—6·4
32. Sikkim State ..	81,722	41,502	40,220	—6,198	—7·0
33. United Provinces States	1,134,824	580,303	554,521	—55,050	—4·6

POPULATION OF PRINCIPAL TOWNS.

In the towns noted below, where plague was prevalent at the time of the Census of 1911, many of the inhabitants were absent from their homes and the population shown in this table is far less than it would otherwise have been. The population of these towns for 1911 according to the returns of a fresh Census taken after the epidemic had subsided is noted below :—

Province.	Town.	Persons.	Males.	Females.
Bihar and Orissa	Gaya	70,423	38,717	31,706
Central Provinces	Nagpur	134,008	70,441	63,567
United Provinces	Cawnpore	195,498	115,243	80,255
Central India	Indore	68,733	37,910	30,823
Gwalior	Lashkar	72,409	39,945	32,464

Town.	Population, 1921.	Variation, 1911-21. Increase (+). Decrease (—).		Remarks.
	Total.	Actual.	Per cent.	
1	2	3	4	5
AJMER-MERWARA.				
Ajmer	114,196	+27,974	+32·4	
BALUCHISTAN.				
Quetta	48,933	+15,011	+44·3	
BENGAL.				
Calcutta with Suburbs and Howrah. ..	1,263,292	+40,979	+3·4	
Calcutta Proper	903,173	+7,106	+·8	
Howrah	192,758	+13,752	+7·7	
Manicktola	66,750	+12,983	+24·1	
Cossipore-Chitpur	56,549	+8,371	+17·4	
Garden Reach	44,062	—1,233	—2·7	
Dacca	117,304	+8,753	+8·1	
BIHAR AND ORISSA.				
Patna	120,109	—16,044	—11·8	
Bhagalpur	68,833	—5,516	—7·4	
Gaya	67,759	+17,838	+35·7	
BOMBAY.				
Bombay	1,172,953	+103,508	+19·8	
Ahmedabad	274,202	+41,425	+17·8	
Poona	176,671	+17,271	+10·8	
Karachi	215,781	+63,878	+42·1	
Surat	118,299	+3,431	+3·0	
BURMA.				
Rangoon	339,527	+46,211	+15·8	
Mandalay	147,429	+9,130	+6·6	
CENTRAL PROVINCES AND BERAR.				
Nagpur	149,522	+48,107	+47·4	
Jubbulpore	108,973	+8,322	+8·3	
DELHI.				
Delhi	303,148	+70,311	+30·2	
MADRAS.				
Madras	522 951	+4,201	+·8	
Madura	138,894	+3,779	+2·8	
Trichinopoly	119,521	—3,991	—3·2	
Calicut	81,995	+3,578	+4·6	
Salem	52,270	—6,936	—11·7	
N.-W. F. PROVINCE.				
Peshawar	93,884	—4,051	—4·1	
PUNJAB.				
Lahore	279.558	+50,871	+22·2	
Amritsar	160,409	+7,653	+5·0	
Multan	86 251	—12,992	—13·1	
Rawalpindi	97,983	+11,500	+13·3	
Ambala	76,497	—3,634	—4·5	

City.	Population, 1921.	Variation, 1911-21. Increase (+). Decrease (—).		Remarks.
	Total.	Actual.	Per cent.	
1	2	3	4	5
UNITED PROVINCES OF AGRA AND OUDH.				
Lucknow	243,555	—8,561	—3·4	
Benares	199,993	—3,811	—1·9	
Agra	185,946	+197	+·3	
Cawnpore	213,044	+34,487	+19·3	
Allahabad	155,970	—15,727	—9·2	
Bareilly	127,939	—1,523	—1·2	
Meerut	122,567	+5,936	+5·1	
Moradabad	82,713	+1,595	+2·0	
Rampur	73,200	—1,116	—1·5	
BARODA.				
Baroda	94,742	—4,603	—4·6	
CENTRAL INDIA AGENCY.				
Bhopal	5,054	—11,150	—19·8	
Indore	92,993	+48,046	+106·9	
GWALIOR.				
Lashkar	76,849	+20,662	+36·8	
HYDERABAD.				
Hyderabad	404,225	—97,421	—19·4	
KASHMIR.				
Srinagar	141,631	+11,430	+8·8	
MYSORE.				
Bangalore (including Civil and Military Station)	238,111	+48,626	+25·7	
Mysore	83,032	+12,626	+17·7	
RAJPUTANA AGENCY.				
Jaipur	121,196	—16,902	—12·3	
Jodhpur	73,480	+14,218	+24·0	
Bikaner	69,448	+13,622	+24·4	
Alwar	44,782	+3,477	+8·4	

Education.

Indian education is unintelligible except through its history. Seen thus, it affords the spectacle of a growth which, while to one it will appear as a blunder based on an initial error easily avoided, to another it stands out as a symbol of sincerity and honest endeavour on the part of a far-sighted race of rulers whose aim has been to guide a people alien in sentiments and prejudices into the channels of thought and attitude best calculated to fit them for the needs of modern life and western ideals. There is to-day no subject in the whole area of administrative activity in India which presents greater complexities and differences of opinion than education. The Indian, stung to the quick by the illiteracy around him, demands a very rapid expansion of educational facilities, with perhaps an insufficient regard for the formulation of a policy to regulate such an expansion; the official, overweighted by his responsibility for the maintenance of law and order, is sometimes apt to look with misgiving upon the activities of private enterprise in the field of education and, in his efforts to improve the quality, to disregard the quantity of training to be provided in the schools and colleges: and the teacher, harassed by annoying restrictions on his freedom and disheartened by his poverty is disinclined for changes lest they make his lot even more intolerable than before.

The Introduction of Western Learning

In the early days of its dominion in India, the East India Company had little inclination for the doubtful experiment of introducing western learning into India. Warren Hastings, the dominating figure of the time, was a genuine admirer of the laws and literature of the East. His policy was to enable the ancient learning to revive and flourish under the protection of a stable government, and to interfere as little as possible with the habits and customs of the people. Even the Act of 1813 which set apart a lakh of rupees for the introduction and promotion of a knowledge of the sciences was interpreted as a scheme for the encouragement of Sanskrit and Arabic. In the following year the Court of Directors instructed the Governor-General to leave the Hindus "to the practice of usage, long established among them, of giving instruction in their own homes, and to encourage them in the exercise and cultivation of their talents by the stimulus of honorary marks of distinction and in some cases by grants of pecuniary assistance."

It was from sources other than Government that the **desire for western knowledge** arose in India. In 1816, David Hare, an English watchmaker in Calcutta, joined hands with the enlightened Brahmin, Mohan Roy, to institute the Hindu College for the promotion of western secular learning. The new institution was distrusted both by Christian missionaries and by orthodox Hindus, but its influence grew apace. Fifteen years later, the Committee of Public Instruction in Bengal reported that a taste for English had been widely disseminated and that independent schools, conducted by young men reared in the Hindu College, were springing up in every direction. In Bombay, the Elphinstone Institution was founded in memory of the great ruler who left India in 1827. A still more remarkable innovation was made in 1835 by the establishment of the Calcutta Medical College, whose object was to teach " the principles and practice of medical science in strict accordance with the mode adopted in Europe." Many pronounced the failure of the undertaking to be inevitable; for, under the Hindu custom the higher castes were forbidden to touch the dead. This obstacle was surmounted by Madusudan Gupta who, with a few courageous pupils, began the dissection of a human body. From that time onward Indians of the highest castes have devoted themselves with enthusiasm and with success to the study of medicine in all its branches.

Another impetus to the introduction of western learning was the devotion of **Christian missionaries.** The humanitarian spirit, which had been kindled in England by Wesley, Burke and Wilberforce, influenced action also in India. Carey, Marshman and Ward opened the first missionary College at Serampore in 1818; and twelve years later, Alexander Duff reversed the whole trend of missionary policy in India by his insistence on teaching rather than on preaching, and by the foundation of his school and College in Calcutta. In Madras, the missionaries had been still earlier in the field; for as early as in 1787 a small group of missionary schools were being directed by Mr. Schwarz. The Madras Christian College was opened in 1837. In Bombay, the Wilson School (afterwards College) was founded in 1834.

Lord W. Bentinck's minute of 1835 (based upon Macaulay's famous minute) marks the somewhat tardy acceptance by Government of the new policy. Government then determined, while observing a neutrality in religious matters to devote its available funds to the maintenance of secondary schools and colleges of western learning to be taught through the medium of English. But this decision did not entail that Oriental learning should be neglected: still less that the development of the vernaculars should be discouraged. Other changes powerfully contributed to the success of the new system. The freedom of the press was established in 1835: English was substituted for Persian as the language of the Courts in 1837 and in 1844 Sir Henry Hardinge ordained that preference in Government appointments should be given to those who had received a western education. In the following decade the new learning took firm root in India: and, though the Muhammadans still held aloof, the demand for English schools outstripped the means of Government for providing them.

Statement of Educational Progress in INDIA.

	1916-17. ‡	1917-18	1918-19.	1919-20.	1920-21.	1921-22
Area in square miles	1,034,716	1,088,807	1,088,807	1,088,800	1,078,861	1,091,229
Population .. .. { Male	124,747,805	124,747,811	124,747,805	124,747,805	125,493,811	126,902,120
Population .. .. { Female	119,273,295	119,273,295	119,273,295	119,272,295	119,340,805	120,195,531
Total Population ..	244,021,100	244,021,106	244,021,100	244,020,100	244,834,616	247,097,651
Public Institutions for Males.						
Number of arts colleges	122	126	134	138	148	152
Number of high schools*	1,584	1,659	1,803	1,910	1,986	2,040
Number of primary schools	124,081	128,480	129,803	133,585	136,884	137,437
Male Scholars in Public Institutions.						
In arts colleges	46,293	49,527	49,815	51,458	47,017	44,670
In high schools *	547,313	563,731	584,270	597,969	566,668	558,212
In primary schools	4,782,605	5,855,571	4,821,611	4,956,988	5,117,219	5,111,901
Percentage of male scholars in public institutions to male population.	4·8	4·9	4·9	5·1	5·1	5·0
Public Institutions for Females.						
Number of arts colleges	12	12	12	12	12	15
Number of high schools*	166	177	183	203	198	208
Number of primary schools	18,122	19,395	20,468	21,759	22,461	22,635
Female Scholars in Public Institutions.						
In arts colleges	842	914	915	1,024	1,153	1,263
In high schools*	24,948	27,222	29,980	34,06	33,915	36,698
In primary schools	1,036,125	1,077,170	1,119,871	1,176,533	1,210,754	1,198,550
Percentage of female scholars in public institutions to female population.	·97	·99	1·04	1·10	1·13	1·12
TOTAL SCHOLARS in public institutions { Male ..	6,050,840	6,119,423	6,098,129	6,306,128	6,427,966	6,401,434
TOTAL SCHOLARS in public institutions { Female	1,156,468	1,192,319	1,240,534	1,306,711	1,347,027	1,340,842
Total ..	7,207,308	7,311,742	7,338,663	7,612,839	7,774,993	7,742,276
TOTAL SCHOLARS (both male and female) in all institutions	7,851,946	7,948,068	7,936,577	8,206,225	8,377,027	8,381,401
Percentage of total scholars to population. { Male ..	5·3	5·36	5·31	5·47	5·55	5·49
Percentage of total scholars to population. { Female.	1·0	1·06	1·10	1·15	1·18	1·18
Total ..	3·2	3·26	3·25	3·36	3·42	3·39
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues	3,91,63	4,90,92	5,43,26	6,31,62	7,72,86	9,02,30
From local funds	1,73,78	1,16,49	1,27,22	1,53,96	1,66,12	1,68,26
From municipal funds	49,39	40,61	46,78	59,05	67,78	79,05
Total Expenditure from public funds	6,14,80	6,48,02	7,17,26	8,44,63	10,06,76	11,49,61
From fees	3,18,71	3,33,50	3,51,66	3,68,81	3,78,43	3,80,09
From other sources	1,95,42	2,00,57	2,26,71	2,75,53	2,92,14	3,07,83
GRAND TOTAL OF EXPENDITURE ..	11,28,83	11,82,09	12,98,63	14,88,97	16,77,33	18,37,35

* High schools include vernacular high schools also, in some provinces.

† The statistics of Indian States have been excluded from the Tables for 1914–15 and succeeding years.

‡ The figures for 1916-17 include for the first time, statistics relating to *Ajmer-Merwara, Baluchistan* and *Bangalore.*

GROWTH AND ORGANISATION OF ENGLISH EDUCATION.

An epoch in Indian educational history is marked by Sir Charles Wood's despatch in 1854. Perhaps its most notable feature was the emphasis which it laid on the importance of primary education. The old idea that the education imparted to the higher classes of society would filter down to the lower classes was discarded. The new policy was boldly "to combat the ignorance of the people which may be considered the greatest curse of the country." For this purpose Departments of Public Instructions were created on lines which do not differ very materially from the Departments of the present day. The despatch also broke away from the practice followed since 1835 whereby most of the available public funds had been expended upon a few Government schools and colleges, and instituted a policy of grants-in-aid to private institutions. "Such a system as this, placed in all its degrees under efficient inspection, beginning from the humblest elementary institution and ending with the university test of a liberal education would impart life and energy to education in India, and lead to a gradual but steady extension of its benefits to all classes of people." Another feature of the despatch was an outline of a university system which resulted in the foundation of the Universities of Calcutta, Madras and Bombay three years later. The affiliating type of university then became the pivot of the Indian education system. It has undoubtedly been of value in several ways. It enabled Government to select recruits for its service on an impartial basis; it did much, through the agency of its Colleges to develop backward places; it accelerated the conversion of Indians to a zeal for western education; and it cost little at a time when money was scarce. On the other hand, the new universities were not corporations of scholars, but corporations of administrators; they did not deal directly with the training of men, but with the examination of candidates; they were not concerned with learning, except in so far as learning can be tested by examination. The colleges were fettered by examination requirements and by uniform courses; their teachers were denied that freedom which teachers should enjoy; and their students were encouraged not to value training for its own sake but as a means for obtaining marketable qualifications. In certain important respects the recommendations in the despatch were not followed. The Directors did not intend that university tests, as such, should become the sole tests qualifying for public posts; they also recommended the institution of civil service examinations. They did not desire the universities to be deprived of all teaching functions; they recommended the establishment of university chairs for advanced study. They were aware of the dangers of a too literary course of instruction; they hoped that the system of education would rouse the people of India to develop "the vast resources of their country ....and gradually, but certainly, confer upon them all the advantages which accompany the healthy increase of wealth and commerce. The encouragement of the grant-in-aid system was advocated to an even greater extent by the Education Commission of 1882, which favoured the policy of withdrawing higher education from the control of Government within certain limits and of stimulating private effort. In theory the decision was correct, but in practice it was irretrievably wrong. In its fatal desire to save money, Government deliberately accepted the mistaken belief that schools and colleges could be maintained on the low fees which the Indian parent could be expected to pay. And, in the course of time, an unworkable system of dual control grew up, whereby the Universities with no funds at their disposal were entrusted with the duty of granting recognition to schools and the Departments of Public Instruction were encouraged to cast a blind eye on the private institutions and to be content with the development of a few favoured Government institutions. There can be little wonder that, under such a system of neglect and short-sightedness, evils crept in which are now being removed gradually by the establishment of independent Boards of Intermediate Education charged with the administration of the high school and intermediate stages of education.

The Reforms of 1902-4.

In 1902, the Universities Commission was appointed by Lord Curzon's Government, and its investigation was followed by the Universities Act of 1904. The main object of the Act was to tighten up control, on the part of Government over the universities, and on the part of the universities over the schools and colleges. The Chancellors of the Universities were empowered to nominate 80 *per cent.* of the ordinary members of the Senates and to approve the election of the remainder: the Government retained the power of cancelling any appointment, and all university resolutions and proposals for the affiliation or disaffiliation of colleges were to be subject to Government sanction. The universities were given the responsibility of granting recognition to schools and of inspecting all schools and colleges, the inspection of schools being ordinarily conducted by the officers of the Department of Public Instruction. Permission was also given to the universities to undertake direct teaching functions and to make appointments, subject to Government sanction, for these objects: but their scope was in practice limited to post-graduate work and research. The territorial limits of each university were defined, so that universities were precluded from any connexion with institutions lying outside those boundaries. Neither the Commission nor the Government discussed the fundamental problems of university organisation, but dealt only with the immediate difficulties of the Indian system. They did not inquire whether the affiliating system could be replaced by any other mode of organisation, nor whether all schools might be placed under some public authority which would be representative of the universities and of the departments. They assumed the permanent validity of the existing system, in its main features, and set themselves only to improve and to strengthen it.

Recent Developments.

Since the passing of the Universities Act of 1904, there has been a considerable expansion of the educational system. The two tables given below afford useful comparisons with previous years and serve to illustrate the growth and expansion of education in India.

(*a*) STUDENTS.

Year.	In Public Institutions.			In All Institutions (Public & Private).		
	Males.	Girls.	Total.	Males.	Girls.	Total.
1891-92	3,041,510	307,400	3,348,910	3,517,778	339,043	3,856,821
1896-97	3,428,376	360,006	3,788,382	3,954,712	402,158	4,356,870
1901-02	3,493,325	393,168	3,886,493	4,077,430	444,470	4,521,900
1906-07	4,164,832	579,648	4,744,480	4,743,604	645,028	5,388,632
1911-12	5,253,065	875,660	6,128,725	5,828,182	952,539	6,780,721
1915-16	5,871,184	1,112,024	6,983,208	6,431,215	1,186,281	7,617,496
1916-17	6,050,840	1,156,468	7,207,308	6,621,527	1,230,419	7,851,946
1917-18	6,119,423	1,192,309	7,311,742	6,683,879	1,264,189	7,948,068
1918-19	6,098,129	1,240,534	7,338,663	6,623,149	1,313,428	7,936,577
1919-20	6,306,128	1,306,711	7,612,839	6,829,204	1,377,021	8,206,225
1920-21	6,427,966	1,347,027	7,774,993	6,964,048	1,412,979	8,377,027
1921-22	6,401,434	1,340,842	7,742,275	6,962,979	1,418,422	8,381,401

(*b*) EXPENDITURE.

Year.	Direct Expenditure.		Direct and Indirect.	
	Public Funds.	Total.	Public Funds.	Total.
	Rs.	Rs.	Rs.	Rs.
1891-92	1,07,55,368	2,40,93,149	1,56,18,184	3,05,19,632
1896-97	1,19,35,647	2,77,38,737	1,67,65,650	3,52,44,900
1901-02	1,26,28,586	3,06,37,633	1,77,03,968	4,01,21,462
1906-07	1,88,31,204	3,88,67,352	2,96,34,574	5,59,03,673
1911-12	2,57,57,212	5,39,41,277	4,05,23,072	7,85,92,605
1915-16	3,96,61,135	7,47,43,004	6,21,68,904	11,08,29,249
1916-17	4,18,12,109	7,92,86,819	6,14,80,471	11,28,83,068
1917-18	4,41,73,343	8,36,68,551	6,46,01,690	11,82,09,137
1918-19	5,02,71,231	9,18,40,130	7,17,26,292	12,98,63,073
1919-20	5,91,69,207	10,34,29,768	8,44,63,472	14,88,9 ,930
1920-21	7,01,58,995	11,69,15,680	10,06,76,871	16,77,33,113
1921-22	8,19,60,603	13,03,56,458	11,49,61,178	18,37,52,969

In 1921-22 the total expenditure on education amounted to Rs. 18,37,52,969, of which Rs. 11,49,61,178 came from public funds. In spite of this marked advance, there is much lee-way to make up, as in the last census report the literate population of India was only 72 per thousand (males 122 and females 18 per thousand).

The following table provides an interesting and valuable comment on the state of education in India. Although the statistical returns show more than 8 millions of pupils at school it will be seen that over 76 per cent. of these are in the lower primary stage; and it may be safely deducted that over 50 per cent. of those at school never become literate. Of course the total number of pupils at school is not a safe criterion of the state of education, and a sounder standard of comparison would be that number multiplied by the average period spent at schools

CLASSIFICATION OF PUPILS BY AGES AND STAGES OF INSTRUCTION.

Ages.	SCHOOLS FOR GENERAL EDUCATION.											Ages.
	Infants.		I.	II.	III.	IV.	V.	VI.	VII.	VIII.		
	A.	B.										
1	2	3	4	5	6	7	8	9	10	11	1	
Below 5	128,385	20,498	32,226	61	11	..	..	..	..	..	..	Below 5
5 to 6	354,263	269,377	124,716	4,443	306	5	6	..	..	..	..	5 to 6
6 to 7	431,209	380,025	221,890	33,690	4,442	217	27	..	..	..	1	6 to 7
7 to 8	312,055	377,747	274,991	97,137	23,029	2,647	218	1	..	..	..	7 to 8
8 to 9	179,104	282,840	294,759	158,585	62,940	16,216	1,280	120	4			8 to 9
9 to 10	99,068	164,760	231,126	18,458	101,859	40,831	8,858	639	76	6		9 to 10
10 to 11	53,422	100,607	159,260	161,769	118,686	63,728	23,510	4,583	736	30		10 to 11
11 to 12	26,920	54,508	97,066	118,716	111,018	76,065	42,614	17,100	3,735	361		11 to 12
12 to 13	12,115	28,463	55,898	75,532	87,414	67,476	50,140	27,379	13,814	3,227		12 to 13
13 to 14	5,879	14,814	28,366	42,612	56,343	50,555	44,658	31,354	21,264	10,531		13 to 14
14 to 15	3,042	8,351	13,806	20,585	32,362	30,219	32,526	28,332	23,228	16,801		14 to 15
15 to 16	2,121	5,382	9,978	9,600	16,971	16,419	20,832	21,378	20,296	16,221		15 to 16
16 to 17	1,621	4,233	8,890	4,832	7,995	7,727	10,509	13,736	14,807	13,605		16 to 17
17 to 18	1,596	3,288	6,671	2,386	3,969	3,222	5,207	7,582	8,543	8,272		17 to 18
18 to 19	1,256	3,058	2,902	1,494	1,562	1,287	2,013	3,566	4,361	4,651		18 to 19
19 to 20	1,176	2,593	2,108	1,233	742	559	765	1,577	1,834	1,995		19 to 20
Over 20	2,822	6,163	3,883	2,300	1,025	502	449	773	1,107	983		Over 20
All Ages	1,616,065	1,726,662	1,555,915	923,693	635,604	376,675	245,612	158,129	113,799	76,684		All Ages.

CLASSIFICATION OF PUPILS BY AGES AND STAGES OF INSTRUCTION.

Ages.	SCHOOLS FOR GENERAL EDUCATION.			ARTS COLLEGES.								Ages.
	IX.	X.	Total.	1st. year.	2nd. year.	3rd. year.	4th. year.	5th. year.	6th year or Post Graduate Class.	Total.	GRAND TOTAL.	
1	12	13	14	15	16	17	18	19	20	21	22	1
Below 5 ..	..	..	181,181	..	..	..	..	..	..	..	181,181	Below 5
5 to 6 ..	..	..	753,186	..	..	..	..	..	..	..	753,186	5 to 6
6 to 7 ..	..	..	1,071,500	..	..	..	..	..	..	..	1,071,500	6 to 7
7 to 8 ..	..	..	1,089,826	..	..	..	..	..	..	..	1,089,826	7 to 8
8 to 9 ..	..	..	995,857	..	..	..	..	..	..	..	995,857	8 to 9
9 to 10 ..	..	..	838,675	..	..	..	..	..	..	..	838,675	9 to 10
10 to 11 ..	2	..	688,343	..	..	..	..	..	..	..	688,343	10 to 11
11 to 12 ..	18	..	547,121	..	..	..	..	..	..	..	547,121	11 to 12
12 to 13 ..	173	10	421,671	..	..	..	..	..	..	..	421,671	12 to 13
13 to 14 ..	1,925	159	308,960	..	..	..	..	..	..	..	308,960	13 to 14
14 to 15 ..	8,559	1,791	219,602	..	..	..	..	..	..	..	219,602	14 to 15
15 to 16 ..	13,464	8,047	157,719	118	11	..	..	..	..	129	157,848	15 to 16
16 to 17 ..	13,259	13,606	109,830	1,846	234	2	..	..	..	2,082	111,912	16 to 17
17 to 18 ..	10,488	12,979	69,605	4,093	1,571	71	5	..	..	5,740	75,343	17 to 18
18 to 19 ..	6,632	10,585	42,667	2,585	3,547	904	125	..	..	8,161	50,828	18 to 19
19 to 20 ..	3,478	7,248	25,313	2,756	3,229	2,061	1,118	9	1	9,174	34,487	19 to 20
Over 20 ..	2,077	6,372	28,656	2,558	4,991	4,141	6,361	719	413	19,183	47,839	Over 20
All Ages ..	60,075	60,797	7,549,710	14,956	13,583	7,179	7,609	728	414	44,469	7,594,179	All Ages

The following figures give the percentage to the population of scholars in British India as a whole and in the Governor's Provinces:—

	Per cent.		Per cent.
British India	3·39	Punjab	3·03
Madras	4·3	Burma	4·26
Bombay	5·0	Bihar & Orissa	2·38
Bengal	4·05	Central Provinces and Berar	2·39
United Provinces	2·27	Assam	2·84

Non-Co-operation.—It is impossible to say how many students were actually withdrawn from schools and colleges in consequence of the attack launched on the educational system of the country as an integral part of the non-co-operation campaign, since a variety of other factors, chief among which was the high cost of living, also affected attendance in the years following the war. The statements below give some indication of the losses:—

Year.	Arts Colleges.		Secondary Schools.						Primary Schools.	
							Total.			
	Institutions.	Scholars.	High Schools.	Scholars.	Middle Schools.	Scholars.	Institutions.	Scholars.	Institutions.	Scholars.
1919-20..	150	52,482	2,113	632,032	6,595	649,778	8,708	1,281,810	155,344	6,133,521
1920-21..	160	48,170	2,184	600,583	6,739	653,942	8,923	1,254,525	159,345	6,327,973
1921-22..	167	45,033	2,248	594,910	6,739	644,614	8,987	1,239,524	160,072	6,310,451

Province.	National Schools and Colleges in 1921-22.		Approximate effect of "Non-Co-operation" on certain recognised institutions up to March 1921.			Remarks.
	Institutions.	Scholars.	Scholars.	Withdrawn from institutions.	Returned.	
Madras	92*	5,072*	1,71,111	820	‡	
Bombay	189	17,100	42,416	2,350	239	
Bengal	190	14,819	1,03,107	11,157	No information.	
United Provinces ..	137*	8,476*	49,171	2,626	789	
Punjab	69	8,046	1,11,078	1,309	481	
Burma	92	16,218	36,875	13,031	747	
Bihar and Orissa ..	442	17,330	23,100	1,826	‡	
Central Provinces ..	86*	6,338*	71,759	1,824	454	
Assam	38	1,908	12,186†	1,139	356	
North-West Frontier Province	4*	120*	41,342	*Nil.*	..	
Minor Administrations ..	10	1,255	45,508	571	70	

*Opened till 31st July 1921.

†There was a general tendency to return.

‡Till January 1921.

Statement of Educational Progress in MADRAS.

	1916-17.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
Area in square miles	No change.	No change.	No change.	No change.	No change.	142,260
Population { Male						20,870,749
Population { Female						21,448,236
Total Population						42,318,985
Public Institutions for Males.						
Number of arts colleges	38	38	42	44	47	47
Number of high schools	188	196	215	227	265	292
Number of primary schools	28,881	29,862	29,952	31,002	32,495	33,635
Male Scholars in Public Institutions.						
In arts colleges	7,726	8,000	8,021	8,206	7,538	8,081
In high schools	103,035	107,546	111,053	115,956	122,245	124,382
In primary schools	1,071,636	1,092,619	1,081,861	1,101,186	1,153,946	1,189,500
Percentage of male scholars in public institutions to male population.	6·0	6·1	6·1	6·3	6·5	6·6
Public Institutions for Females.						
Number of arts colleges	3	3	3	3	3	4
Number of high schools	36	37	41	47	48	51
Number of primary schools	1,692	1,860	2,057	2,376	2,411	2,640
Female Scholars in Public Institutions.						
In arts colleges	184	210	228	270	302	384
In high schools	6,558	6,769	7,224	8,687	9,101	10,320
In primary schools	293,185	309,155	319,133	332,940	340,175	347,285
Percentage of female scholars in public institutions to female population.	1·4	1·4	1·6	1·7	1·7	1·7
TOTAL SCHOLARS in public institutions { Male	1,229,914	1,256,364	1,249,312	1,276,528	1,333,878	1,378,159
TOTAL SCHOLARS in public institutions { Female	307,125	323,380	333,775	349,241	358,402	367,359
Total	1,537,039	1,579,744	1,583,087	1,625,769	1,692,280	1,745,518
TOTAL SCHOLARS (both male and female) in all institutions.	1,661,012	1,696,539	1,692,951	1,730,040	1,799,850	1,837,022
Percentage of total scholars to population. { Males	6·5	6·6	6·6	6·7	7·0	7·0
Percentage of total scholars to population. { Females	1·5	1·6	1·7	1·8	1·8	1·8
Total	4·0	4·1	4·1	4·2	4·3	4·3
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues	76,93	(c) 96,11	1,11,13	19,62	1,41,71	1,58,26
From local funds	29,06	16,44	16,43	22,30	29·60	28,50
From municipal funds	6,76	4.06	4,69	4,25	7,22	7,18
Total expenditure from public funds	1,12,75	1,16,61	(d) 1,32,25	(e) 1,45,81	(f) 1,78,53	1,93,94
From fees	58,28	59,57	61,15	64,43	71,10	73,16
From other sources	45,85	50.27	54,62	56,45	69,46	72,88
GRAND TOTAL OF EXPENDITURE	2,16,88	2.26.45	2,48,02	2,66,69	3,19,09	3,39,98

(c) Includes Rs. 22,00,149 and Rs. 5,48,383 contributed to District Boards and Municipalities, respectively.
(d) Provincial subsidies to District Boards and Municipalities were Rs. 29,63,553 and Rs. 6,32,209 respectively.
(e) " " " " " Rs 33,39,703 and Rs. 6,53,466 "
(f) " " " " " Rs. 34,61,324 and Rs. 4,31,880 "

Primary Education.—The primary schools are mainly under the direction of the local boards and municipalities. In 1911, the late Mr. G. K. Gokhale pleaded in the Imperial Legislative Council for a modified system of compulsory primary education, but Government was unable to accept the proposal mainly for financial reasons. In recent years, seven provincial legislatures have passed Primary Education Acts authorising the introduction of compulsory education by local option. Bombay led the way in this matter by a private Bill which was passed into law in February 1918. The other private Bills which followed were those of Bihar and Orissa passed in February 1919, of Bengal passed in May 1919 and of the United Provinces, passed in June 1923. Of the Government measures, the Punjab Act was passed in April 1919, the Central Provinces Act in May 1919 and the Madras Act in October 1920. The City of Bombay Primary Education Act of 1920 extends generally the provisions of the 1918 Act to the Bombay Corporation also enabling it to introduce free compulsory education ward by ward. Not content with this, the Bombay legislature passed a new Act in 1923 to provide for compulsory elementary education and to make better provision for the management and control of primary education in the Bombay Presidency. The Bombay and the United Provinces Acts apply only to municipalities, the Bengal Primary Education Act applies, in the first instance, to municipalities, but is capable of extension to rural areas. Boys only are included within the scope of the Punjab, Bihar and Orissa and Bengal Acts, while the Central Provinces Act is capable of extension to girls, and the remaining Acts are applicable to both sexes. All the Acts are drafted on very similar lines. If a local body at a special meeting convened for the purpose decides by a two-thirds majority in favour of the introduction of compulsion in any part of the area under its control, it may then submit to Government, for approval, a scheme to give effect to its decision. The scheme must be within the means of the local body to carry out with reasonable financial assistance from Government. Ordinarily the age limits of compulsion are from six to ten years though provision is made for prolonging the period. Provision is also made in all the Acts for the exemption of particular classes and communities and for special exemption from attendance in cases of bodily infirmity. Walking distance to a school is generally defined as one mile from the child's home. The employment of children, who should be at school, is strictly forbidden and a small fine is imposed for non-compliance with an attendance order. The Acts generally provide that, subject to the sanction of the local Government, education where compulsory shall be free. Such in brief are the ordinary provisions of the various provincial Education Acts. Local bodies have not however shewn as yet any great alacrity in availing themselves of the opportunity afforded them by these Acts. The poverty of local bodies is usually the cause assigned to their diffidence to introduce compulsory education to any appreciable extent.

On the 31st March 1922, there were 1,69,057 primary schools in British India containing 7,549,924 scholars. (The latter figure does not include 604,874 scholars reading in the primary classes of secondary schools). The total direct expenditure on primary schools, during the year 1921-22, amounted to Rs. 50,99,08,107.

Secondary and High School Education.—The policy of Government is to maintain a small number of high schools (roughly one for each revenue district) which are to be regarded as models for private enterprise, and to aid private institutions. In 1911-12 there were 1,219 high schools for boys in India and in 1921-22 the number had risen to 2,248, the number of scholars in the former year being 390,881, and in the latter year 594,910. Some attempts have been made to give a greater bias towards a more practical form of instruction in these schools. The Commission of 1882 suggested that there should be two sides in secondary schools, "one leading to the entrance examination of the universities, the other of a more practical character, intended to fit youths for commercial and other non-literary pursuits." Some years later, what were called B and C classes were started in some schools in Bengal, but, as they did not lead to a university course, they have not been successful. In more recent years, the Government of India have advocated the institution of a school *final* examination in which the more practical subjects may be included. Efforts have also been made to improve the conduct of the matriculation and to emphasise the importance of oral tests and of school records. In Madras, this examination, which was placed under the direction of a Board representative of the University and of Government, proved somewhat cumbrous and certain modifications were made. In the United Provinces, only the better schools were privileged to prepare for the School Final Examination so that better result were achieved. In the Punjab and in Bombay, the school leaving examination is conducted by Boards. But the main difficulty has not yet been touched. The University which recognises the schools has no money wherewith to improve them: and the Department of Public Instruction, which allots the Government grants, has no responsibility for the recognition of schools, and no connexion whatever with the private unaided schools. This dual authority and this division of responsibility have had unhappy effects. The standard of the schools also is very low so that the matriculates are often unable to benefit by the college courses. In some provinces the standard of the schools has been raised by withdrawing from the University the Intermediate classes and by placing them in a number of the better schools in the State.

There are schools for Europeans and Eurasians which are placed under the control of special inspectors for European Schools. The education of the domiciled community has proved to be a perplexing problem, and in 1912 a conference was summoned at Simla to consider the matter. The difficulty is that European Schools are very remote from the general system of education in India.

Medium of instruction in public schools—The position of English as a foreign language and as a medium of instruction in public schools was discussed by a representative con-

Statement of Educational Progress in BOMBAY.

	1916–17.	1917–18.	1918–19	1919–20	1920–21.	1921–22.
Area in square miles	123,065	No change.	No change.	No change.	123,665	124,627
Population { Male	No change.				10,170,985	10,183,020
Population { Female					9,177,753	9,175,351
Total Population					19,348,738	19,358,371
Public Institutions for Males.						
Number of arts colleges	8	9	10	10	11	10
Number of high schools	122	126	133	140	144	143
Number of primary schools	9,645	9,951	10,647	11,252	11,513	11,170
Male Scholars in Public Institutions.						
In arts colleges	4,763	4,630	4,985	5,057	4,853	4,650
In high schools	40,154	41,884	46,075	49,189	46,478	47,366
In primary schools	528,294	522,962	557,669	602,157	639,577	637,423
Percentage of male scholars in public institutions to male population.	5·9	5·9	6·3	6·7	7·1	7·0
Public Institutions for Females.						
Number of arts colleges	..	..	..	..	..	..
Number of high schools	32	35	39	44	43	46
Number of primary schools	1,110	1,191	1,321	1,642	1,505	1,452
Female Scholars in Public Institutions.						
In arts colleges	125	128	134	140	168	179
In high schools	4,826	5,347	6,350	7,361	7,472	8,179
In primary schools	124,324	127,868	144,135	157,965	167,459	161,085
Percentage of female scholars in public institutions to female population.	1·4	1·5	1·7	1·8	2·0	1·9
TOTAL SCHOLARS in public institutions { Male	604,701	602,405	641,743	691,582	724,399	721,798
TOTAL SCHOLARS in public institutions { Female	134,684	138,899	155,663	170,301	180,601	175,079
Total	739,385	741,304	797,406	861,883	905,000	896,877
TOTAL SCHOLARS (both male and female) in all institutions.	780,504	781,674	834,003	892,875	949,827	958,392
Percentage of total scholars to Population. { Males	6·2	7·2	6·5	7·0	7·5	7·6
Percentage of total scholars to Population. { Females	1·5	1·6	1·8	1·9	2·1	2·0
Percentage of total scholars to Population. { Total	3·9	4·0	4·2	4·5	4·9	5·0
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues	75,51	* 79,19	† 1,04,70	‡ 1,25,71	(*a*) 1,49,10	(*b*) 1,59,88
From local funds	8,87	8,52	8,83	10,03	13,63	11,52
From municipal funds	13,49	14,62	17,65	26,92	27,17	34,35
Total Expenditure from public funds	97,87	1,02,33	1,31,18	1,67,66	1,89,90	2,15,75
From fees	33,54	25,89	36,54	38,64	38,23	43,29
From other sources	24,48	26,15	27,46	33,60	35,30	36,99
GRAND TOTAL OF EXPENDITURE	1,55,89	1,64,37	1,95,18	2,34,90	2,63,43	2,96,03

* Includes Rs. 12,671 from Imperial Funds. † Includes Rs. 19,471 from Imperial Funds. ‡ Includes Rs. 16,847 from Imperial Funds.
(*a*) Includes Rs. 27,399 from Imperial Funds. (*b*) Includes Rs. 20,692 from Imperial Funds.

ference which met at Simla in 1917 under the Chairmanship of Sir Sankaran Nair, the then Education Member. Although it was generally conceded that the teaching of school subjects through a medium which was imperfectly understood led to cramming and memorising of text-books, the use of English medium was defended by some on the ground that it improved the knowledge of English. The result of the conference was therefore inconclusive. Some local authorities have since then approved of schemes providing for the recognition of local vernaculars as media of instruction and examination in certain subjects.

Boy scout Movement.—A happy development in recent years has been the spread of the boy scout movement in public schools

Medical Inspection.—In some provinces, arrangements have been made for a medical inspection of scholars.

Intermediate Colleges.—One important part of the Calcutta University Commission's recommendations has been accepted by the Government of the United Provinces and the Government of India and incorporated in the Acts establishing the Lucknow, Dacca and Aligarh Muslim Universities, and reconstituting that of Allahabad, namely, the separation of the intermediate classes from the sphere of university work and of the two top classes of high schools from the rest of the school classes. The separated classes have been combined together and the control over them has been transferred from the University to a Board of Secondary and Intermediate Education. Such a Board was constituted for the Dacca University area by a notification of the Government of Bengal in 1921. It contains twenty-two members of whom seven are elected by the University. The United Provinces Board was constituted by an Act passed in the same year. It consists of some forty members of whom approximately one-quarter represent the Universities in the Province. The Intermediate Examination Board of the Aligarh Muslim University was brought into existence by an Ordinance framed in 1922. It is composed of eight members.

Professional and Technical Education.—There are eight Medical Colleges (in addition to a number of medical schools) with 4,065 students; fourteen Law Colleges with 5,234 students; and six Agriculture Colleges containing 658 scholars. A research institute in agriculture was started by Lord Curzon at Pusa in Bihar, which has done valuable work. Conferences have been held at Pusa, Simla and Poona, with the object of providing a suitable training in agriculture. There are twenty training colleges for secondary teachers in various parts of India with 1,247 scholars and normal schools for the training of vernacular teachers. In 1917, the Government of India made a recurring grant of 30 lakhs for the improvement of training facilities and for increased pay to teachers. There are five colleges for commercial instruction with 421 students. The most important among them is the Sydenham College of Commerce in Bombay. Industrial institutions are dotted about India, some maintained by Government, others by municipalities or local boards, and others by private bodies. One of the most important is the Victoria Jubilee Technical Institute in Bombay. The tendency in recent years has been to place these institutions under the control of the Departments of Industries. In this connexion should be mentioned the Indian Institute of Science at Bangalore, the product of generous donations by the Tata family. A committee has recently enquired into its working and the Committee's recommendations are under consideration. In addition to a number of engineering schools, there are Engineering Colleges at Roorkee, Sibpur, Poona, Madras, and Benares each of which except that at Roorkee, is affiliated to a university. They had 1,443 scholars on their rolls on the 31st March 1922. The Government of Bihar and Orissa have decided to open a new Engineering College, while arrangements are also being made to provide for engineering instruction at the Rangoon University. There are schools of art in the larger towns, where not only architecture and the fine arts are studied, but also practical crafts like pottery and iron work. There is also a school of forestry at Dehra Dun. Many inquiries have been made in the matter of technical education, by Colonel (now Major General Sir E. H. Dev.) Atkinson, and Mr. Dawson, by the Public Works Committee and by the Industrial Commission, but as yet little progress has been made. A Technical Institute has been started at Cawnpore and a Mining School at Dhanbad is projected. There are three colleges for veterinary training containing 408 students.

Universities.

There are fifteen universities in India, namely :—

No.	University.	Dates of Acts.	Territorial jurisdiction.
1	CALCUTTA	1857, 1904, 1905 & 1921.	Bengal and Assam and certain adjacent Indian States.
2	MADRAS	1857, 1904, 1905 and 1923.	The Presidency of Madras and Coorg and certain Indian States.
3	BOMBAY	1857, 1904 & 1905 ..	The Presidency of Bombay and certain Indian States (Baroda, &c).
4	PUNJAB	1882, 1904 & 1905 ..	The Punjab, the North West Frontier Province, Baluchistan and adjacent Indian States (Kashmir, Patiala, &c.).

UNIVERSITIES—*concld.*

No.	University.	Dates of Acts.	Territorial Jurisdiction.
5	ALLAHABAD	1887 1904, 1905 and 1921.	The United Provinces, Ajmere, Merwara and adjacent States.
6	BENARES HINDU ..	Oct. 1915	Benares District.
7	MYSORE	July 1916	Mysore State.
8	PATNA	Sept. 1917 and 1923..	Bihar & Orissa and adjacent Indian States.
9	OSMANIA	1918	Hyderabad.
10	DACCA	April 1920	Radius of 5 miles.
11	ALIGARH MUSLIM ..	Sept. 1920	Radius of 10 miles.
12	RANGOON	Oct. 1920	Rangoon and its neighbourhood except for institutions for the provision of courses in Mining, Agriculture or Foresty, which can be associated with the University irrespective of their situation in Burma and Berar.
13	LUCKNOW	Nov. 1920	Local
14	DELHI	March 1922	Delhi.
15	NAGPUR	June 1923	The Central Provinces.

The foregoing statement mentions the universities incorporated by law for the time being in force. The first University in India, that of Calcutta, was founded in 1857. Between 1857 and 1887 four new Universities, at Bombay, Madras, Lahore and Allahabad were added. These five universities were all of the affiliating type. They consisted of groups of colleges, situated sometimes several hundred miles apart, and bound together by a legally constituted central organisation, which determined the qualifications for admission, prescribed the courses of study, conducted the examinations and exercised a mild form of control over the affiliated colleges. There was nothing under the system to limit the number of institutions affiliated to a University; and for thirty years, *i.e.*, from 1887 to 1917, the growing demand for university education was met, not by the creation of new universities, but by enlarging the size of the constituent colleges and by increasing their number. By 1917 this inflation had been carried on so far that the composition of the original five universities stood as follows:—

University.	Colleges.	Scholars.
Calcutta	58	28,618
Bombay	17	8,001
Madras	53	10,216
Punjab	24	6,558
Allahabad	33	7,807

It had become obvious that further expansion on the same lines was no longer possible without a serious loss of efficiency and the Govt. of India had recognised in their resolution of 1913 the necessity of creating new local teaching and residential universities in addition to the existing affiliating universities. The development of this policy was accelerated by the strength of communal feeling and the growth of local and provincial patriotism, leading to the establishment of a number of teaching universities. The new type of universities has since been strongly advocated by the Calcutta University Commission which has offered constructive proposal as to the lines to be followed in university reform. A detailed account of the old and new Universities is given below.

The Universities of Calcutta, Bombay and the Punjab.—These three Universities alone still retain their old form, as measures for their reorganisation are still under consideration. On the 27th March 1921 an amending Act was passed by which the Governor-General ceased to be the Chancellor of the Calcutta University and now the head of the provincial government is the Chancellor of each of the older universities. The Vice-Chancellor is nominated by the Government concerned. The executive body is the Syndicate which is now organised so as to include a larger enducationist element. Over this body the Vice-Chancellor presides, all other members being elected by the Faculties, except the Director of Public Instruction who is a member *ex-officio*. The secretarial work is under the direction of the Registrar. The legislative body is the Senate which consists of from 75 to 100 members, 80 per cent. of whom are nominated by the Chancellor, the rest being elected by the Senate, or by its Faculties, or by the body of registered graduates. The Senate is divided into Faculties, which are in most cases those of arts, science, law, medicine, and engineering. There is an oriental faculty in the Punjab University alone. There are also Boards of studies, whose duties are to recommend text-books or books which represent the standard of knowledge required in the various examinations. The newer universities differ considerably from the older universities in constitution.

Apart from the general tightening up of university control over its colleges, the chief feature of university development since the passing of the Act of 1904 has been participation by the universities in post-graduate teaching and research. In Madras a small number

of university professors have been appointed: in the Punjab the services of a certain number of temporary professors from overseas have been engaged. In Bombay a certain number of college professors and others have delivered lectures to post-graduate students under the auspices of the University. But the most notable advance has been made in Calcutta, owing to the energy of Sir Asutosh Mookerjee and to the liberality of Sir Tarak Nath Palit and of Sir Rash Behari Gosh. In 1916, a committee was appointed to investigate the matter. In accordance with its report, new regulations have been passed by the Senate, whereby all post-graduate teaching and research in arts and science in Calcutta is now conducted directly by the University, though many of the college teachers have been invited to take part in the work. Post-graduate councils in arts and science have also been constituted, which comprise all the teachers engaged in the work and a very small number of additional numbers appointed by the Senate.

The University of Madras.—This is one of the older universities. It has recently been reconstituted. The reconstituted University while functioning as teaching and residential University in so far as the city of Madras is concerned, continues to exercise its jurisdiction over its mofussil colleges which remain affiliated to it. The administration of the University is in the hands of a Senate which has been so constituted as to include both those who are educationists and those who are connected with the actual business and commercial life. A large elective element has been introduced in its composition. Government control over the details of administration has been decentralised. The affairs of the University are managed by the Senate through a body called the Syndicate, while the Academic Council, another new body, has charge of the academic matters. The affiliated colleges have been entrusted to the care of a new organisation called the Council of Affiliated Colleges. In accordance with the recommendations of the Calcutta University Commission, the Intermediate Examination Certificate has been made the admission test to the courses of the University. The Governor-General of India has been associated with the University as its Visitor with certain emergency powers. The Governor of Madras continues as Chancellor. The Vice-Chancellor is a elected whole-time officer.

The University of Allahabad.—This is another old Univeristy which has undergone reorganisation. In 1921 an Act was passed with a view to establishing a unitary, teaching and residential University at Allahabad while enabling the University to continue to exercise due control over the quality and character of the teaching given in its name by colleges affiliated to the University at Allahabad. The Governor-General is *Visitor*, and the Governor of the United Provinces *Chancellor*. The *Vice-Chancellor* is a whole-time officer. There is a *Court*, an *Executive Council*, an *Academic Council*, a *Committee of Reference* dealing with expenditure only, a *Council of Associated Colleges*, &c.

The Mysore University was constituted under Regulation V of 1916, for the better encouragement and organisation of education in the State. His Highness the Maharaja is the Chancellor. The University is very similar in its constitution to the older Indian universities, having a Senate of not less than fifty and not more than sixty members; but, unlike the older universities, it gives seats on the Senate to the university professors *ex-officio*. It departs from existing practice by centralising university instruction in Mysore and Bangalore, and by conducting the work of the first year of the old colleges course in a few specially selected high schools.

The Patna University.—Much thought has also been given to the evolution of a new type of university which will run abreast of the old. Patna university, which was constituted in 1917 is in most of its features a university of the old type, but certain innovations have been made. The Chancellor, who is the Governor of the province, may annul any proceeding of the University which is not in conformity with the Act and the Regulations. In the Senate the application of the elective principle has been extended, by increasing both the proportion of the elected Fellows and the categories of electing bodies; and the Senate includes representatives of the teaching staff and of the graduate teachers of recognised schools. Further, all colleges are given statutory representation on the Senate in the persons of their principals. The Syndicate is the ultimate authority in academic matters, subject to the proviso that any six of its members have the power to refer such matters to the Senate for review. The Vice-Chancellor is a paid officer and is appointed by the local Government. In addition to other duties, he has the power to inspect all colleges of the University. The colleges affiliated to the University are of two kinds; colleges of the University whose buildings are situated within a specified area, and external colleges, whose buildings are situated in one of the four following towns: Muzuffarpur, Bhagalpur, Cuttack and Hazaribagh.

The Osmania University, Hyderabad.—The Osmania University was established under a Charter promulgated with a *Firman* of His Exalted Highness the Nizam, dated the 22nd September 1918. The fundamental principle underlying the working of the University is that Urdu forms the medium of education, although a knowledge of English as a language is compulsory in the case of all students. There is a Bureau of Translation attached to the University which produces text books required for college classes. The constitution of the University consists of a Council, a Senate, a Syndicate, Faculties and Boards of Studies. There is a Chancellor and a Vice-Chancellor, both *ex-officio* officers. The executive government of the University including general supervision and control over colleges is vested in the Council which is the highest authority and which performs the function assigned to Government in the case of British Indian Universities. The University possesses at present only one constituent college, *viz.*, the Osmania University College, which was opened in 1919. The Osmania University has been recognised by the Government of India as a University incorporated by law for the time being in force, that is to say, its examination and degrees have been accorded the status of the corresponding examinations

Statement of Educational Progress in BENGAL.

	1916–17.	1917–18.	1918–19.	1919–30.	1920–21.	1921–22.
Area in square miles	No change.	No change.	No change.	No change.	No change.	76,843
Population { Male						24,151,222
Population { Female						22,544,314
Total Population	..	..	..	..	..	46,695,536
Public Institutions for Males.						
Number of arts colleges	30	31	33	33	33	33
Number of high schools	707	741	822	878	883	887
Number of primary schools	32,595	34,079	34,278	34,864	35,703	35,621
Male Scholars in Public Institutions.						
In arts colleges	18,333	20,313	20,614	21,379	19,572	16,738
In high schools	220,859	227,057	235,633	236,479	210,179	193,751
In primary schools	1,099,651	1,120,582	1,086,897	1,097,609	1,127,111	1,112,812
Percentage of male scholars in public institutions to male population.	6·7	6·8	6·6	6·7	6·6	6·2
Public Institutions for Females.						
Number of arts colleges	3	3	3	3	3	3
Number of high schools	26	26	25	25	25	25
Number of primary schools	9,371	10,032	10,647	11,376	12,069	12,162
Female Scholars in Public Institutions.						
In arts colleges	145	166	166	178	216	204
In high schools	3,665	4,070	4,161	4,372	4,376	4,582
In primary schools	275,240	288,734	297,304	312,205	329,754	323,094
Percentage of female scholars in public institutions to female population.	1·3	1·4	1·4	1·5	1·6	1·5
TOTAL SCHOLARS in public institutions { Male	1,565,712	1,588,956	1,550,109	1,558,086	1,543,466	1,496,439
TOTAL SCHOLARS in public institutions { Female	289,800	303,995	312,217	328,513	315,044	338,578
TOTAL SCHOLARS in public institutions Total	1,855,512	1,892,951	1,862,326	1,886,599	1,888,510	1,835,017
TOTAL SCHOLARS (both male and female) in all institutions.	1,918,432	1,965,273	1,931,535	1,953,909	1,945,145	1,890,454
Percentage of total scholars to population. { Male	6·0	7·1	6·9	6·9	6·8	6·4
Percentage of total scholars to population. { Female	1·4	1·4	1·5	1·5	1·6	1·5
Percentage of total scholars to population. Total	4·2	4·3	4·2	4·3	4·3	4·0
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues	66,66	82,47	86,27	1,00,05	1,08,79	1,35,45
From local funds	22,26	12,50	13,36	13,39	14,09	14,11
From municipal funds	2,07	1,87	1,95	2,06	2,26	2,43
Total Expenditure from public funds	90,99	96,84	1,01,58	1,15,50	1,25,14	1,51,99
From fees	1,09,40	1,13,96	1,26,65	1,31,59	1,34,85	1,28,34
From other sources	42,73	44,14	49,35	54,84	49,23	53,54
GRAND TOTAL OF EXPENDITURE	2,43,12	2,54,94	2,77,58	3,01,53	3,09,22	3,33,87

and degrees of a University established by law in British India.

The Hindu University, Benares.—The creation of the Hindu University, Benares, forms a landmark in the history of the Indian university system. The university is not designed to meet the needs of one province alone, but to draw students from all parts of India.

It has no monopoly, no privilege. Its energies are not diffused by the necessity of supervising distant colleges nor is its vitality impaired by the embarrassment of administrative duties other than those of organising its own teaching. It is therefore the first Indian university which is primarily a seat of learning and not an administrative organisation. Its constitution is therefore very different from those of the other Indian universities. A dividing line is made between administrative matters, entrusted to a large body called the Court, with an executive committee called the Council, and academic matters, entrusted primarily to a Senate, with an executive body called the Syndicate. The Court which is the supreme governing body besides its administrative powers, has the right to review the acts of the Senate, except where the Senate has acted in accordance with the Act, statutes and regulations. With a solitary exception it is composed entirely of Hindus. The senate has the entire charge of the organisation of instruction in the University and the colleges, the courses of study, and the examination and discipline of students, and the conferment of ordinary and honorary degrees. This university can recognise schools all over India.

The University of Dacca.—With the modification of the Partition of Bengal in 1911, Dacca ceased to be the capital of the separate province of Eastern Bengal and Assam. Shortly afterwards, the Government of India decided to establish a university of Dacca and the Government of Bengal appointed a committee to frame a scheme for the new University. The committee was instructed that the University should be of the teaching and residential and not of the federal type, and that it should be a self-contained organism unconnected with any colleges outside the limits of the city of Dacca. The committee which was presided over by the late Mr. R. (afterwards Sir Robert) Nathan presented its report later in the year. The report is of great value and in it certain new principles are enunciated. Great emphasis was attached to physical training and education and also to the tutorial guidance of the students. The University was to be very largely a State institution, and practically all its teachers and those of its colleges were to be Government servants. Though the colleges were to be separate units, each with its separate staff and buildings, they were to be linked together and with the University by a close form of co-operation. The executive body, to be called the Council, was to have very considerable powers, subject to the sanction of Government. The Council, which was to be a large and representative body, was to be the legislative authority, subject to the control of Government, and in other respects an advisory authority. The total cost of the full scheme was estimated at 53 lakhs, but deducting certain sums which were available from other sources the net cost was put down at nearly 40 lakhs, exclusive of recurring charges. These were expected to involve a net total of about 6¼ lakhs annually. Before the scheme thus elaborated (which had received the Secretary of State's sanction) could be taken in hand, the war broke out. The Act constituting the University was passed in April 1920 and Mr P. J. Hartog, C.I.E., was appointed the first Vice-Chancellor.

The Aligarh Muslim University.—It was the aim of Sir Syed Ahmed Khan years ago to place the benefits of a liberal education within the reach of the Muhammadan community; and in 1875 a school was opened which three years later was converted into the Muhammdan Anglo-Oriental College, Aligarh. The movement in favour of transforming this college into a teaching and residential university started, as early as the end of the last century. In 1911, during the visit of His Majesty the King-Emperor to India, His Highness the Aga Khan made an appeal which resulted in the collection of large subscriptions. A draft constitution was drawn up and a consultative committee was formed. But tthe draft constitution was not approved by the Secretary of State, and on the question of the right of affiliating colleges outside Aligarh in particular, there was a sharp difference of opinion. Government laid down, as in the case of the proposed Hindu University, that the new university should not have the power of affiliating Moslem institutions in other parts of India.

On October 15th, 1915, a meeting of the Moslem University association was held at Aligarh, under the presidency of the Raja of Mahmudabad, when it was proposed that the meeting recommends the Moslem University Foundation Committee the acceptance of the Moslem University on the lines of the Hindu University. It was evident at the meeting that a large number of Indian Moslems were not prepared to accept a constitution for their university similar to that of the Hindu University.

In April, 1917, at a meeting of the Foundation Committee the following resolution was passed:—

"That this meeting of the Moslem University Foundation Committee hereby resolves with reference to the letter of the Government of India, Education Department, dated Delhi, 17th February 1917, D. O. No. 66, that the Committee is prepared to accept the best University on the lines of the Hindu University. It further authorises the Regulation Committee appointed at its Lucknow meeting, with the President and Honorary Secretary of the Moslem University Association as its *ex-officio* members, to take necessary steps in consultation with the Hon. the Education Member for the introduction of the Moslem University Bill in the Imperial Legislative Council."

The bill referred to above was ultimately introduced into the Council and was passed in September 1920. The Act came into force on December 1st, 1920, and the Hon'ble Raja Sir Muhammad Ali Muhammad Khan, K.C.S.I., K.C.I.E., Khan Bahadur, of Mahmudabad, was appointed the first Vice-Chancellor of the University.

Statement of Educational Progress in BIHAR and ORISSA.

	1916-17.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
Area in square miles		83,282			83,282	83,282
Population .. { Male ..	No change	No change.	No change.	No change.	16,763,859	16,763, 66
Population .. { Female ..					17,238,330	17,238,323
TOTAL POPULATION ..					34,002,189	34,0 2,189
Public Institutions for Males.						
Number of arts colleges ..	7	7	7	8	9	9
Number of high schools ..	100	106	114	120	118	119
Number of primary schools ..	22,164	23,268	23,052	23,120	22,591	22,448
Male Scholars in Public Institutions.						
In arts colleges	2,575	2,811	2,914	2,591	2,263	2,063
In high schools	34,733	35,200	35,917	33,061	25,265	24,642
In primary schools	574,520	606,421	589,419	608,339	599,720	586,010
Percentage of male scholars in public institutions to male population	4·1	4·1	4·0	4·1	4·0	3·9
Public Institutions for Females.						
Number of arts colleges ..	....	....	....	....	1	1
Number of high schools ..	3	3	4	4	4	4
Number of primary schools ..	2,249	2,559	2,600	2,673	2,649	2,508
Female Scholars in Public Institutions.						
In arts colleges	....	....	....	....	6	12
In high schools	331	343	722	675	685	650
In primary schools	97,813	105,294	105,837	110,107	107,026	101,578
Percentage of female scholars in public institutions to female population	·62	·62	·62	·65	·64	·61
TOTAL SCHOLARS in { Males ..	688,190	696,510	679,614	697,276	674,084	657,506
public institutions. { Females.	109,281	108,702	109,482	113,755	110,776	105,771
TOTAL ..	797,471	805,212	789,096	811,031	784,860	763,277
TOTAL SCHOLARS (both male & female) in all institutions ..	845,025	852,324	827,140	846,502	828,019	810,382
Percentage of total scholars to population .. .. { Males ..	4·3	4·4	4·2	4·3	4·3	4·2
{ Females.	·63	·63	·63	·66	·65	·62
TOTAL ..	2·4	2·47	2·4	2·4	2·4	2·4
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues ..	29,58	28,81	31,12	38,16	50,75	49,19
From local funds	15,73	15,49	(*a*) 17,97	(*c*) 19,38	(*e*) 21,00	(*g*) 22,65
From municipal funds	1,73	1,46	(*b*) 1,67	(*d*) 1,63	(*f*) 1,65	(*h*) 1,75
TOTAL Expenditure from public funds	47,04	45,76	50,76	59,17	73,40	73,59
From fees	22,37	23,04	24,33	25,28	24,10	22,33
From other sources	12,11	12,10	13,92	15,11	16,61	19,24
GRAND TOTAL OF EXPENDITURE	61,52	80,90	89,01	99,56	1,14,11	1,15,16

(*a*) Includes Rs. 11,54,625 from Provincial revenues.
(*b*) Includes Rs. 1,00,829 from Provincial revenues.
(*c*) Includes Rs. 12,41,158 and (*d*) includes Rs. 84,335 from Provincial revenues.
(*e*) Includes Rs. 12,17,043 and (*f*) includes Rs. 87,086 from Provincial revenues.
(*g*) Includes Rs. 12,35,496 and (*h*) includes Rs. 1,03,811 from Provincial revenues.

The University of Rangoon.—Plans for a university in Burma have been under consideration for some years. After his arrival in Burma the then Lieutenant-Governor Sir Harcourt Butler thought that, on general grounds and with some reference to the needs of the province, the Rangoon University might usefully be of a more practical type than any yet attempted in India with courses in arts and science, pure and applied, technology, medicine, engineering, agriculture, law, forestry, veterinary, science and training, commerce and architecture. It might perhaps combine with university instruction practical studies at the Chief Court, the Pasteur Institute and the hospitals; and also at the Museum which the local Government was committed to build as soon as funds were available. It is possible in Burma to a greater extent than in any of the older and more advanced provinces in India to concentrate the intellectual energies of the province in one immediate neighbourhood and to develop a really many-sided university. An Act to establish a teaching and residential college at Rangoon was passed on the 24th October 1920. The University authorities are the Chancellor, Vice-Chancellor, the Council (with an executive committee) and the Senate. The Council is the supreme administrative body while the Senate is an academic body with entire control of studies, examination and discipline. The Governor-General, as Visitor, has the right to cause inspection to be made.

The Lucknow University.—The foundation of this University may primarily be ascribed to the patriotism of the people of Oudh. It is a unitary teaching and residential University incorporated by an Act passed in 1920. The University authorities are (1) the Court, with powers of making statutes, (2) the Executive Council, which administers the property of the University and appoints examiners, (3) the Academic Council, which controls the teaching and advises the Executive Council on all academic matters, (4) a Committee of Reference (a Sub-Committee of the Court) deals with items of new expenditure only. The Governor-General, as Visitor, has the same power as in the case of the Rangoon University and other new, or reorganised, universities.

The Delhi University.—The Delhi University was created by an Act passed in 1922. The University depends for its existence mainly on the generosity of the Government of India who occupy the position of a local Government in relation to it. It is a unitary teaching and residential University, designed on the model recommended by the Calcutta University Commission for the Dacca University, possessing at present three constituent colleges. The Act provides for two schemes—a provincial and a permanent one. Under the provisional scheme, which is in force at present, the constituent colleges remain with their hostels, etc., in their existing buildings. They also retain intermediate classes. But there have been instituted, so far as possible and desirable, common classes for graduate teaching. The matriculation examination of an Indian University, or an equivalent examination, is the admission test to the University courses. The permanent scheme contemplates that the existing colleges in Delhi City would become intermediate institutions and that degree classes would be conducted in new buildings to be built in Imperial Delhi. There would be halls and hostels where students would receive tutorial instruction. The Intermediate Examination of an Indian University or an equivalent examination, would become the admission test to the University. The Governor-General is the *ex-officio* Chancellor. There is a Pro-Chancellor, a Vice-Chancellor and a Rector. The principal governing bodies of the University are a Court, an Executive Council and an Academic Council.

The Nagpur University.—This University was created by an Act passed in 1923. Its constitution follows the recommendations of the Calcutta University Commission and the provisions in other University Acts in so far as they are applicable to local conditions. In particular the recommendations of the Calcutta University Commission have been adopted in the matter of the appointment of the Chancellor and the Vice-Chancellor, and of their powers and duties, the composition and functions of the Court, the Executive and Academic Councils, and the relations of the University with Government. The University Act provides in the first instance for a University of an examining and affiliating type in which the existence of the colleges is preserved as the unit of instruction both in the University centre of Nagpur and in other places which contain colleges admitted to the privileges of the University. The Act is so framed as to permit of a gradual development of the University into a managing and teaching body which may supplement, or entirely replace collegiate by University instruction either by taking over the management of existing colleges or by instituting and maintaining its own colleges.

Education of Indian Women and Girls.—The statement below shows the progress of women's education during the quinquennium ending the 31st March 1922:—

	Year	Arts Colleges.	High Schools.	Middle Schools.	Primary Schools.	Special Schools and Colleges.	Total.
Institutions for Girls.	1916-17	8	81	446	18,077	512	19,124
	1921-22	12	120	548	22,579	258	23,517
	Increase or decrease.	+ 4	+ 39	+102	+4,502	—254	+ 4,393
Female Scholars in Girls' and Boys' Schools.	1916-17	493	15,571	69,837	1,033,574	16,535	1,136,010
	1921-22	881	26,239	85,247	1,195,967	10,880	1,319,214
	Increase or decrease	+388	+10,668	+15,410	+162,393	— 5,655	+183,204

N. B.—The statistics of European schools and scholars are *not* included in this table.

Statement of Educational Progress in the UNITED PROVINCES.

	1916–17.	1917–18.	1918–19.	1919–20.	1920–21.	1921–22.
Area in square miles	No change.	No change.	No change.	No change.	106,497	No change.
Population .. Male					23,787,745	
Population .. Female					21,588,042	
Total Population ..					45,375,787	
Public Institutions for Males.						
Number of arts colleges	15	15	15	16	17	21
Number of high schools	143	151	155	164	178	184
Number of primary schools	10,540	10,862	11,507	13,602	15,099	15,496
Male Scholars in Public Institutions.						
In arts colleges	5,130	5,379	4,993	5,728	5,415	5,449
In high schools	44,976	46,374	45,190	45,536	45,850	46,359
In primary schools	633,869	650,829	661,904	730,049	772,841	754,851
Percentage of male scholars in public institutions to male population.	3·0	3·1	3·2	3·5	3·7	3·7
Public Institutions for Females.						
Number of arts colleges	4	4	4	4	3	5
Number of high schools	23	25	24	27	26	26
Number of primary schools	1,089	1,120	1,146	1,228	1,269	1,344
Female Scholars in Public Institutions.						
In arts colleges	52	55	53	59	52	73
In high schools	2,340	2,716	2,704	2,993	2,938	2,879
In primary schools	51,944	55,720	63,558	71,510	75,515	78,089
Percentage of female scholars in public institutions to female population.	·28	·30	·34	·38	·42	·43
TOTAL SCHOLARS in public institutions. Male ..	742,134	764,391	772,226	845,958	890,785	871,750
TOTAL SCHOLARS in public institutions. Female.	63,286	67,542	75,821	85,611	90,959	93,309
Total ..	805,420	831,933	848,049	931,569	981,744	965,059
TOTAL SCHOLARS (both male and female) in all institutions.	894,886	918,258	924,679	1,005,600	1,047,761	1,029,565
Percentage of total scholars to population. Male ..	3·4	3·5	3·4	3·7	4·0	3·9
Percentage of total scholars to population. Female ..	·32	·33	·37	·41	·44	·45
Total ..	1·9	2·0	2·0	2·1	2·3	2·3
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues	47,96	56,52	56,90	75,85	1,04,71	1,56,15
From local funds	38,60	32,08	33,38	44,15	36,98	34,82
From municipal funds	5,47	5,24	5,72	6,46	7,23	8,75
Total Expenditure from public funds	92,03	93,84	96,00	1,26,46	1,48,92	1,99,72
From fees	31,14	34,40	36,54	38,36	34,71	35,59
From other sources	24,29	24,65	39,83	63,78	57,96	62,83
GRAND TOTAL OF EXPENDITURE	1,47,46	1,52,89	1,72,37	2,28,60	2,41,59	2,98,14

There is still a leeway to be made good. All the influences which operate against the spread of education amongst the boys are reinforced in the case of women by the *purdah* system and the custom of early marriage.

Arts colleges, medical colleges, and the like admit students of both sexes, and a few girls attend them. The Lady Hardinge Medical College for Women at Delhi gives a full medical course for medical students. The Shreemati Nathibai Damodher Thackersey Indian Women's University was started some eight years ago by Professor Karve. It is a private institution and is doing good pioneer work. So far it has granted only 15 degrees, and there are only 30 ladies prosecuting higher studies at the affiliated institutions; but the number of girls attending its recognised high schools is said to be about 700.

Education in the Army.—The Army in India undertakes the responsibility of the education of certain sections of the community. Its activities are directed into various channels with certain definite objects, which may be summarised as follows:—

(*i*) The education of the soldier, British and Indian, in order to—

(*a*) develop his training faculties;

(*b*) improve him as a subject for military training and as a citizen of the Empire;

(*c*) enhance the prospects of remunerative employment on his return to civil life.

(*ii*) The fulfilment of the obligations of the State to the children of soldiers, serving and ex-service (British and Indian).

(*iii*) The provision, as far as possible, of training for the children of soldiers, who have died in the service of their country.

(*iv*) The creation of a body of Indian gentlemen educated according to English public school traditions, which should provide suitable candidates for admission to the Royal Military College, Sandhurst.

Administration.—The educational services are divided into (*a*) the Indian Educational Service, (*b*) the Provincial Educational Service, (*c*) the Subordinate Educational Service

(*a*) **The Indian Educational Service** which comprises officers performing inspection and tutorial work, is subdivided into two branches—one for men and the other for women. Appointments to both branches are made by the Secretary of State for India in Council. All officers belonging to this service come under the special leave and pension rules.

(*i*) **Indian Educational Service (Men's Branch).**—There is a time-scale of pay rising from Rs. 400 by annual increments of Rs. 50 to Rs. 1,250 a month. There are two selection grades—one for 15 per cent. of the cadre on Rs. 1,250-50-1,500 a month and the other for 5 per cent. on Rs. 1,550-100-1,750 a month. Officers of non-Indian domicile receive overseas pay in addition ranging from Rs. 150 to Rs. 250 a month. The principals of first grade colleges receive duty allowances of Rs. 150 or Rs. 250 a month. Allowances of Rs. 150 a month are also granted to the Assistant Directors of Public Instruction and to other officers holding similar administrative appointments. There is one Director of Public Instruction in each province. The posts of Director are treated as prize posts for the members of the I.E.S. Their pay varies from Rs. 1,500-50-1,750 a month in the North-West Frontier Province to Rs. 2,500-100-3,000 in the Presidencies of Madras, Bombay and Bengal. In some provinces the Directors have been made *ex-officio* Secretary, Deputy Secretary or Under-Secretary, in the local Education Departments.

In selecting candidates for appointment to the I.E.S. (Men's Branch), experience in teaching is regarded as indispensable, and weight is given to the possession of (*a*) a university degree in honours, or equivalent distinction, and (*b*) qualifications in special subjects depending on the nature of the vacancies to be filled.

(*ii*) **Indian Educational Service (Women's Branch).**—The organisation and conditions of service are similar to those in the Men's Branch. The pay is Rs. 400-25-850 a month, with a selection grade of Rs. 900-25-950-50-1,050 a month for 20 per cent. of the cadre. In cases where the provincial cadre is very small, one member of the service is eligible for a selection grade post, irrespective of the percentage maximum. Officers of non-Indian domicile are in addition granted a uniform overseas pay of Rs. 50 a month. The principals of first grade colleges for women and ladies holding such administrative posts as the Deputy Directresses of Public Instruction are eligible for a duty allowance of Rs. 100 a month.

In selecting candidates for appointment to the I.E.S. (Women's Branch), experience in teaching is regarded as indispensable, and weight is given to the possession of (*a*) high academic qualifications, and (*b*) qualifications in special subjects depending on the nature of the vacancies to be filled.

(*b*) **The Provincial Educational Service.**—This service also consists of two branches, one intended for men and the other for women. The service comprises posts more or less similar to those borne on the cadre of the Indian Educational Service, but of secondary importance. Candidates are recruited in India by local Governments. They are invariably graduates of Indian universities and natives of the province concerned.

(*i*) **Provincial Educational Service (Men's Branch).**—The minimum and maximum pay has been fixed at Rs. 250 and Rs. 800 a month respectively, and local Governments have been empowered to settle grading within these limits.

(*ii*) **Provincial Educational Service (Women's Branch).**—The minimum pay is Rs. 200 a month and the maximum pay Rs. 500 a month. As in the case of the Men's Branch local Governments are competent to fix grading within these figures.

(*c*) **The Subordinate Educational Service.**—This service is meant for posts of minor importance. Each province has its own rate of pay. For example, in the Punjab the maximum pay of S.E.S. officers is Rs. 250 a month.

Department of Education, Health and lands of the Government of India—In 1910 a **Department of Education** was established in the Government of India with an office of its own and a Member to represent it in the Executive Council. The first Member was Sir Harcourt Butler. In 1923, the activities of the Department were widened, in the interests of economy, by absorption in it of the Department of Revenue and Agriculture. The enlarged Department has been designated the Department of Education, Health and Lands. Sir B. N. Sarma and Mr. M. S. D. Butler are the present Member and Secretary, respectively. The Department possesses an educational adviser styled Educational Commissioner. The present Educational Commissioner is Mr. J. A. Richey.

Calcutta University Commission.—The Report of the Calcutta University Commission was published in August 1919 and in the following January the Government of India issued a Resolution summarising the main features of the Report and the recommendations of the Commissioners.

The Government of India drew special attention to the following points in the Report:—

(*i*) High schools fail to give that breadth of training which the developments of the country and new avenues of employment demand.

(*ii*) The intermediate section of University education should be recognized as part of school education and should be separated from the University organisation.

(*iii*) The defects of the present system of affiliated colleges may be mitigated by the establishment of a strong central teaching body, the incorporation of unitary universities (as occasion arises), a modification of the administrative machinery which will admit of fuller representation of local interests, and supervision of different classes of institutions by several appropriately constituted bodies.

The Commission gave detailed suggestions for the reorganisation of the Calcuttta University, for the control of secondary and intermediate education in Bengal and for the establishment of a unitary teaching University in Dacca. These measures concerned only Bengal: but it was generally recognised that some of the criticisms made by the Commissioners admit of a wider application. Committees were consequently appointed by the Universities of Madras, Bombay, Patna and the Punjab to consider the findings of the Commission. In the United Provinces two committees were appointed, one to prepare a scheme for a unitary teaching University at Lucknow, the second to consider measures for the reorganisation of the Allahabad University and the creation of a Board to control secondary and intermediate education.

In Bengal the first outcome of the Commission's Report was the passing of the Dacca University Act in the Imperial Legislative Council in March 1920 mentioned in detail elsewhere. A scheme for the reorganisation of the Calcutta university is under consideration.

The Reforms Act.—The Reforms Act of 1919 has altered the conditions of educational administration in India. Education is now a 'transferred' subject in the Governors' provinces and is, in each such Province, under the charge of a Minister. There are, however, some exceptions to this new order of things. The education of Europeans is a 'Provincial reserved' subject, *i.e.*, it is not within the charge of the Minister of Education; and to the Government of India are still reserved matters relating to Universities like Aligarh, Benares and Delhi and all such new universities as may be declared by the Governor-General in Council to be central subjects. The Government of India are also in charge of the Chiefs' Colleges and of all institutions maintained by the Governor-General in Council for the benefit of members of His Majesty's Forces or of other public servants or of the children of such members or servants.

Chiefs' Colleges.—For the education of the sons and relatives of the Chiefs and Princes of India, whose families rule over one-third of the Indian continent, five Chiefs' Colleges are maintained, *viz.*—

(*i*) Mayo College, Ajmer, for Rajputana Chiefs;

(*ii*) Daly College, Indore, for Central India Chiefs;

(*iii*) Aitchison College, Lahore, for Punjab Chiefs;

(*iv*) Rajkumar College, Rajkote, for Kathiawar Chiefs; and

(*v*) Rajkumar College, Raipur, for Central Provinces and Bihar and Orissa Chiefs.

In point of buildings, staffs and organisation these institutions approach English Public Schools. Students are prepared for a diploma examination conducted by the Government of India. The diploma is regarded as equivalent to the matriculation certificate of an Indian University. A further course of University standard called the Higher Diploma is conducted at the Mayo College. The examination for this Diploma is also held by the Government of India. Its standard is roughly equivalent to that of the B.A. diploma of an Indian University.

Indigenous Education.—Of the 8,381,350 scholars being educated in India 639,125 are classed as attending 'private' or 'un-recognised' institutions. Some of these institutions are of importance: The Gurukula near Hardwar and Sir Rabindra Nath Tagore's school at Bolpur have attained some fame, Mr. Gandhi's school at Ahmedabad has attracted attention, and the numerous monastery schools of Burma are well-known. Connected with every big Mosque in northern India there is some educational organisation and the schools attached to the Fathpuri and Golden Mosques at Delhi and the Dar-ul-Ulm, Deoband are noted.

These institutions generally have a religious or 'national' atmosphere and are possibly destined to play an important part in the future of India.

Statement of Educational Progress in the PUNJAB.

	1916–17.	1917–18.	1918–19.	1919–20.	1920–21.	1921–22.
Area in square miles	99,251	No change.	No change.	No change.	89,210	,998
Population .. Male	10,769,704				11,306,265	11,306,265
Population .. Female	8,806,943				9,378,759	9,378,759
Total Population	19,576,647				20,685,024	20,685,024
Public Institutions for males.						
Number of arts colleges	10	11	12	12	16	15
Number of high schools	136	143	157	172	187	203
Number of primary schools	4,918	5,084	5,172	5,162	5,369	5,627
Male Scholars in Public Institutions.						
In arts colleges	4,214	4,593	4,540	4,566	4,266	4,472
In high schools	54,268	55,379	59,261	65,502	71,908	75,872
In primary schools	244,796	242,335	245,786	228,404	238,674	270,153
Percentage of male scholars in public institutions to male population.	·54	3·4	3·5	3·7	3·9	4·3
Public Institutions for Females.						
Number of arts colleges	1	1	1	1	1	1
Number of high schools	17	18	18	20	18	19
Number of primary schools	935	954	951	1,001	1,017	1,048
Female Scholars in Public Institutions.						
In arts colleges	22	28	30	38	33	36
In high schools	2,449	2,586	2,802	3,150	2,441	2,870
In primary schools	43,055	43,254	43,904	45,855	47,212	48,184
Percentage of female scholars in public institutions to female population.	·62	·62	·65	·69	·66	·66
TOTAL SCHOLARS in public institutions Male	366,142	364,516	373,348	403,600	438,593	489,755
TOTAL SCHOLARS in public institutions Female	54,901	55,528	58,280	60,672	62,244	62,867
Total	421,043	420,044	431,628	464,272	500,837	552,622
TOTAL SCHOLARS (both male and female) in all institutions.	476,738	468,839	477,200	517,989	556,989	626,690
Percentage of total scholars to population. Males	3·8	3·7	3·8	4·1	4·3	4·8
Percentage of total scholars to population. Females	·79	·77	·78	·82	·80	·92
Total	2·4	2·4	2·4	2·6	2·7	3·0
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues	31,09	§ 50,13	56,69‖	¶ 64,13	* 85,02	86,78
From local funds	25,40	12,54	13,51	17,28	23,63	25,40
From Municipal Funds	6,43	4,08	5,40	6,94	9,31	9,76
Total Expenditure from public funds	62,92	66,75	75,60	88,35	1,17,96	12,194
From fees	27,36	29,51	29,06	31,19	34,88	39,12
From other sources	1,86,35	18,47	19,36	22,40	31,22	28,56
GRAND TOTAL OF EXPENDITURE	1,08,63	1,14,73	1,24,02	1,41,94	1,84,06	1,89,62

§ Includes Rs. 14,90,389 from Imperial Funds.

¶ Includes Rs. 29,13,966 from Imperial Funds.

‖ Includes Rs. 19,58,072 from Imperial Funds.

* Includes Rs. 31,28,853 from Imperial Funds.

Statement of Educational Progress in BURMA.

	1916–17.	1917–18.	1918–19.	1919–20	1920–21.	1921–22.
Area in square miles	No change.	No change.	No change.	No change.	230,839	233,707
Population .. { Male					6,750,781	6,756,969
{ Female					6,454,783	6,455,223
Total Population ..					13,205,564	13,212,192
Public Institutions for Males.						
Number of arts colleges	2	2	2	2	2	2
Number of high schools *	68	76	85	86	84	80
Number of primary schools	6,788	6,681	6,353	5,602	5,014	4,374
Male Scholars in Public Institutions.						
In arts colleges	645	658	708	733	283	459
In high schools	17,688	18,988	20,401	21,638	15,302	16,774
In primary schools	172,547	166,819	159,994	150,203	139,776	127,193
Percentage of male scholars in public institutions to male population.	4·4	4·3	4·2	4·2	3·6	3·4
Public Institutions for Females.						
Number of arts colleges	..	..	..	..	..	..
Number of high schools	15	18	16	17	16	18
Number of primary schools	937	933	963	824	738	679
Female Scholars in Public Institutions.						
In arts colleges	18	27	39	48	48	56
In high schools	3,633	4,238	4,536	5,079	5,062	5,114
In primary schools	84,182	81,050	79,773	76,107	75,461	73,455
Percentage of female scholars in public institutions to female population.	2·0	2·0	2·0	·9	1·8	1·8
TOTAL SCHOLARS in public institutions. { Male ..	273,192	266,699	260,677	256,879	239,751	228,951
{ Female	120,207	116,613	116,514	115,682	116,329	116,714
Total ..	393,399	383,312	377,191	372,561	356,080	345,665
TOTAL SCHOLARS (both male and female) in all institutions	592,523	584,298	572,908	575,206	557,281	562,625
Percentage of total scholars to population. { Male ..	7·5	7·4	7·3	7·3	6·5	6·5
{ Female ..	2·1	2·0	2·0	2·0	1·9	1·9
Total ..	4·9	4·8	4·7	4·7	4·2	4·3
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues	27,68	39,60	32,08	32,87	41,22	46,29
From local funds	(*a*) 6,17	(*c*) 7,00	10,48	10,82	11,25	15,09
From municipal funds	(*b*) 4,50	(*d*) 2,65	3,56	3,72	4,19	5,23
Total Expenditure from public funds ..	38,35	49,25	46,12	47,41	56,66	66,61
From fees	21,00	21,23	23,56	22,37	22,52	21,44
From other sources	7,44	7,02	7,42	11,59	14,32	13,60
GRAND TOTAL OF EXPENDITURE ..	66,79	77,50	77,10	81,37	93,50	1,01,65

* Include also vernacular high schools.

(*a*) Includes Rs. 40,863, being provincial contribution to District Cess Funds for eductional purposes.

(*b*) Includes Rs. 38,104 being provincial contribution to Municipal Funds for eductional purposes.

(*c*) Includes Rs. 2,376 from provincial Funds.

(*d*) Includes Rs. 34,758, from Provincial Funds.

Statement of Educational Progress in ASSAM.

	1916-17.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
Area in square miles ..	No change.	No change.	No change.	No change.	53,015	53,015
Population .. Male ..					3,955,665	3,961,109
Population .. Female ..					3,643,196	3,645,121
TOTAL POPULATION ..					7,598,861	7,606,230
Public Institutions for Males.						
Number of arts colleges ..	2	2	2	2	2	3
Number of high schools ..	36	36	37	38	39	41
Number of primary schools ..	3,868	3,881	3,924	4,030	4,049	3,957
Male Scholars in Public Institutions.						
In arts colleges	687	810	884	940	816	767
In high schools	13,542	13,559	13,273	13,499	12,578	11,153
In primary schools	157,046	153,853	149,546	154,597	155,460	146,018
Percentage of male scholars in public institutions to male population	5·7	5·6	5·5	5·6	4·9	4·6
Public Institutions for Females.						
Number of arts colleges ..	....	....	....	....	....	..
Number of high schools ..	2	2	2	3		3
Number of primary schools ..	329	331	347	374	358	343
Female Scholars in Public Institutions.						
In arts colleges	1	1	1	....	....	..
In high schools	428	386	459	620	594	576
In primary schools	24,762	23,868	23,052	25,082	24,288	23,184
Percentage of female scholars in public institutions to female population	·85	·82	·81	·88	·79	·74
TOTAL SCHOLARS in public institutions Male ..	197,096	194,548	189,181	195,756	195,514	181,257
TOTAL SCHOLARS in public institutions Female .	27,723	26,921	26,267	28,618	28,009	26,808
TOTAL ..	224,819	221,469	215,448	224,374	223,523	208,065
TOTAL SCHOLARS (both male and female) in all institutions.	233,013	230,085	224,715	233,106	231,591	216,269
Percentage of total scholars to populations. Male ..	5·9	5·8	5·7	5·9	5·1	4·8
Percentage of total scholars to populations. Female .	·83	·86	·86	·92	·79	·77
TOTAL ..	3·5	3·4	3·3	3·5	3·1	2·9
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues ..	9,97	13,82	14,23	16,49	19,19	21,85
From local funds	7,33	3,96	3,99	4,11	4,08	3,86
From municipal funds	33	24	24	26	39	38
TOTAL Expenditure from public funds	17,63	18,02	18,46	20,89	23,66	26,09
From fees	4,65	5,24	5,76	6,20	5,95	5,48
From other sources	3,31	2,56	2,61	3,25	3,10	3,27
GRAND TOTAL OF EXPENDITURE	25,59	25,82	26,83	30,34	32,71	34,84

Statement of Educational Progress in the CENTRAL PROVINCES and BERAR.

	1916–17.	1917–18.	1918–19.	1919–20.	1920–21.	1921–22.
Area in square miles	No change.	99,623	No change.	No change.	No change.	99,623
Population .. Male		No change.				6,951,399
Population .. Female						6,961,361
Total Population						13,912,760
Public Institutions for Males.						
Number of arts colleges	4	4	4	4	4	4
Number of high schools	43	43	44	43	43	43
Number of primary schools	3,698	3,799	3,841	3,867	3,930	3,987
Male Scholars in Public Institutions.						
In arts colleges	1,093	1,126	937	957	744	675
In high schools	4,924	5,211	4,583	3,898	2,879	3,019
In primary schools	253,950	253,135	241,800	240,641	243,028	228,327
Percentage of male scholars in public institutions to male population	4·5	4·5	4·4	4·4	4·5	4·2
Public Institutions for Females.						
Number of arts colleges	....	....	....	....	....	....
Number of high schools	7	7	7	9	8	8
Number of primary schools	316	310	324	326	321	326
Female Scholars in Public Institutions.						
In arts colleges	1	1	1	....	....	2
In high schools	58	69	81	113	96	97
In primary schools	33,516	33,635	33,913	34,435	33,955	32,085
Percentage of female scholars in public institutions to female population.	·53	·54	·55	·56	·57	·55
TOTAL SCHOLARS in public institutions. Males	312,322	313,612	308,796	307,919	309,018	292,291
TOTAL SCHOLARS in public institutions. Females	36,739	37,856	38,951	39,790	39,875	38,390
TOTAL SCHOLARS in public institutions. Total	349,061	351,468	347,747	347,709	348,893	330,681
TOTAL SCHOLARS (both male and female) in all institutions.	351,165	353,444	349,743	349,771	350,685	333,303
Percentage of total scholars to population. Males	4·5	4·6	4·5	4·5	4·5	4·2
Percentage of total scholars to population. Females	·53	·55	·56	·57	·58	·56
Percentage of total scholars to population. Total	2·5	2·5	2·5	2·6	2·5	2·4
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues	15,96	30,24	34,16	39,43	48,89	51,23
From local funds	16,54	6,46	8,02	10,84	10,20	10 32
From municipal funds	5,58	4,59	4,33	4,91	5,17	5,67
Total Expenditure from public funds	38,08	41,29	46.51	55,18	64,26	67,22
From fees	5,73	6,31	6,67	6,43	7,28	6,47
From other sources	5,15	5,24	5,52	6.27	6.37	7,58
GRAND TOTAL OF EXPENDITURE	48.96	52,84	58 70	67.88	77.91	81.27

Statement of Educational Progress in the NORTH-WEST FRONTIER PROVINCE.

	1916–17.	1917–18.	1918–19.	1919–20.	1920–21.	1921–22.
Area in square miles						13,419
Population .. .. { Male	No change.	No change.	No change.	No change.	No change.	1,229,316
Population .. .. { Female						1, 22,026
Total Population						2,251,342
Public Institutions for Males.						
Number of arts college	2	2	2	2	2	3
Number of high schools	17	17	17	18	18	20
Number of primary schools	585	582	618	615	636	625
Male Scholars in Public Institutions						
In arts colleges	177	188	179	200	132	193
In high schools	5,469	5,522	5,672	5,957	6,242	6,762
In primary schools	25,060	24,848	25,392	23,578	25,336	25,989
Percentage of male scholars in public institutions to male population.	3·2	3·2	3·3	3·2	3·5	3·6
Public Institutions for Females.						
Number of arts colleges	..	..	..	..	..	..
Number of high schools	..	..	..	..	..	..
Number of primary schools	42	44	47	49	56	63
Female Scholars in Public Institutions.						
In arts colleges	..	..	..	..	..	..
In high schools	..	..	..	..	..	..
In primary schools	2,521	2,654	3,051	3,185	3,516	3,821
Percentage of female scholars in public institutions to female population.	·32	·32	·36	4	·4	·45
TOTAL SCHOLARS in public institutions. { Male	37,946	37,862	38,988	37,439	41,414	44,748
TOTAL SCHOLARS in public institutions. { Female	3,287	3,363	3,649	3,878	4,356	4,647
Total	41,233	41,225	42,637	41,317	45,770	49,395
TOTAL SCHOLARS (both male and female) in all institutions.	46,285	46,134	48,360	44,615	49,717	53,914
Percentage of total scholars to population. { Males	3·5	3·5	3·7	3·4	3·7	3·9
Percentage of total scholars to population. { Females.	·44	·43	·43	·5	·5	·55
Total	2·1	2·1	2·2	2·0	2·3	2·4
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues	2,89	(*b*) 5,70	(*b*) 6,18	7,93	9,45	11,79
From local funds	(*a*) 2,82	84	63	1,00	84	1,01
From municipal funds	(*a*) 1,99	70	77	83	1,34	1,49
Total Expenditure from public funds	7,70	7,24	7,58	9,76	11,63	14.29
From fees	1,14	1,21	1,12	1,11	1·09	1,17
From other sources	1,47	1,10	1,03	1,55	1,88	1,93
GRAND TOTAL OF EXPENDITURE	10,31	9,55	9,73	12,42	14,60	17,39

(*a*) Includes Rs. 1,25,000 transferred by the Municipal Committee, Peshawar, to Government for the building of the Government Training College, Peshawar.

(*b*) Includes an expenditure of Rs. 50,000 from Imperial Funds.

Statement of Educational Progress in COORG.

	1916–17.	1917–18.	1918–19.	1919–20.	1920–21.	1921–22.
Area in square miles	No change.	No change.	No change.	No change.	No change.	1,582
Population .. Male						89,501
Population .. Female						74 337
TOTAL POPULATION						163,838
Public Institutions for Males.						
Number of arts colleges	....	....	....	....	....	....
Number of high schools	2	2	2	2	2	2
Number of primary schools	92	93	93	93	99	99
Male Scholars in Public Institutions.						
In arts colleges	....	....	....	....	....	....
In high schools	529	605	684	683	654	662
In primary schools	4,919	4,950	4,963	5,047	5,265	5,449
Percentage of male scholars in public institutions to male population.	5·6	5·7	5·8	5·9	6·1	6·9
Public Institutions for Females.						
Number of arts colleges	....	....	....	....	....	....
Number of high schools	....	....	....	....	....	....
Number of primary schools	7	8	9	10	10	10
Female Scholars in Public Institutions.						
In arts colleges	....	....	....	....	....	....
In high schools	....	17	33	32	....	26
In primary schools	2,164	2,164	2,232	2,204	2,226	2,260
Percentage of female scholars in public institutions to female population.	2·9	2·9	3·01	3·0	3·1	3·3
TOTAL SCHOLARS in public institutions. Male	5,478	5,583	5,687	5,773	5,962	6,138
TOTAL SCHOLARS in public institutions. Female	2,267	2,258	2,341	2,357	2,385	2,426
Total	7,745	7,841	8,028	8,130	8,347	8,564
TOTAL SCHOLARS (both male and female) in all institutions.	7,978	7,998	8,194	8,241	8,425	8,715
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues	60	65	71	73	78	94
From local funds	13	13	15	17	18	18
From municipal funds	2	1	1	2	2	3
Total Expenditure from public funds	75	79	87	92	98	1,15
From fees	17	19	20	19	19	19
From other sources	9	10	9	10	9	9
GRAND TOTAL OF EXPENDITURE	1,01	1,08	1,16	1,21	1,26	1,43

Statement of Educational Progress in DELHI.

	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
Area in square miles	No change.	No change.	No change.	No change.	575
Population .. Male					281,047
Population .. Female					206,044
TOTAL POPULATION ..	..	..	..	..	487,091
Public Institutions for Males.					
Number of arts colleges	3	3	3	3	3
Number of high schools	7	7	7	10	10
Number of primary schools	106	120	124	124	132
Male Scholars in Public Institutions.					
In arts colleges	436	485	548	559	581
In high schools	2,028	2,056	1,925	2,564	2,811
In primary schools	6,003	5,796	4,616	4,434	5,439
Percentage of male scholars in public institutions to female population ..	4·3	4·4	4·6	4·9	4·5
Public Institutions for Females.					
Number of arts colleges	..	..	..	..	..
Number of high schools	2	2	2	2	3
Number of primary schools	16	19	22	22	21
Female Scholars in Public Institutions.					
In arts colleges	..	..	..	..	..
In high schools	94	243	246	253	473
In primary schools	664	798	897	1,012	1,012
Percentage of female scholars in public institutions to female population ..	1·01	1·1	1·1	1·2	1·2
TOTAL SCHOLARS in public institutions .. .. Male ..	10,120	10,282	10,638	11,276	12,551
TOTAL SCHOLARS in public institutions .. .. Female .	1,856	2,082	2,007	2,185	2,435
TOTAL ..	11,976	12,364	12,645	13,461	14,986
TOTAL SCHOLARS (both male and female in all institutions)	15,020	15,358	16,774	17,716	19,525
Expenditure (in thousands of rupees).	Rs.	Rs.	Rs.	Rs.	Rs.
From provincial revenues	2,95	404	4,83	5,21	5,79
From local funds	26	15	8	33	40
From Municipal funds	45	23	40	1,02	1,12
TOTAL EXPENDITURE from public funds.	3,66	4,42	5,31	6,56	7,31
From fees	1,28	1,39	1,41	1,43	1,62
From other sources	6,69	2,79	3,64	2,83	3,85
GRAND TOTAL OF EXPENDITURE ..	11,63	8,60	10,37	10,82	12,78

Local Self-Government.

No field of the administration of India is likely to be more profoundly affected by the Reforms of 1919 than local government. This is one of the subjects transferred to Indian ministers, and there are many signs that the power will be freely used for the purpose of experiments in the direction of building up stronger and more vigorous local bodies. On the whole, the progress of local government in India for the past quarter of a century has been disappointing. The greatest successes have been won in the Presidency towns, and particularly by the Municipality of Bombay. The difficulties in the way of progress were manifest. Local government had to be a creation —the devolution of authority from the Government to the local body, and that to a people who for centuries had been accustomed to autocratic administration. Again, the powers entrusted to local bodies were insignificant and the financial support was small. There are however many indications that the dry bones of the mofussil are stirring; inasmuch as this being a transferred subject it is entirely provincial there will be the widest variation between province and province according to the special needs of each. We can indicate here only the broad tendencies, with the expression of opinion that this field will be one of the most important in the growth of nation-building forces in British India.

Throughout the greater part of India, the village constitutes the primary territorial unit of Government organisation, and from the villages are built up the larger administrative entities—tahsils, sub-divisions, and districts.

"The typical Indian village has its central residential site, with an open space for a pond and a cattle stand. Stretching around this nucleus lie the village lands, consisting of a cultivated area and (very often) grounds for grazing and wood-cutting.... The inhabitants of such a village pass their life in the midst of these simple surroundings, welded together in a little community with its own organisation and government, which differ in character in the various types of villages, its body of detailed customary rules and its little staff of functionaries, artisans and traders. It should be noted, however, that in certain portions of India, *e.g.*, in the greater part of Assam, in Eastern Bengal, and on the west coast of the Madras Presidency, the village as here described does not exist, the people living in small collections of houses or in separate homesteads".—(*Gazetteer of India.*)

The villages above described fall under two main classes, *viz.*—

Types of Villages.—"(1) The 'severalty' or raiyatwari village, which is the prevalent form outside Northern India. Here the revenue is assessed on individual cultivators. There is no joint responsibility among the villagers, though some of the non-cultivated lands may be set apart for a common purpose, such as grazing, and waste land may be brought under the plough only with the permission of the Revenue authorities, and on payment of assessment. The village government vests in a hereditary headman, known by an old vernacular name, such as *patel* or *reddi*, who is responsible for law and order, and for the collection of the Government revenue. He represents the primitive headship of the tribe or clan by which the village was originally settled.

"(2) The joint or landlord village, the type prevalent in the United Provinces, the Punjab and the Frontier Province. Here the revenue was formerly assessed on the village as a whole, its incidence being distributed by the body of superior proprietors, and a certain amount of collective responsibility still, as a rule, remains. The village site is owned by the proprietary body, who allow residences to the tenantry, artisans, traders and others. The waste land is allotted to the village, and, if wanted for cultivation, is partitioned among the shareholders. The village government was originally by the *punchayet* or group of heads of superior families. In later times one or more headmen have been added to the organisation to represent the village in its dealings with the local authorities; but the artificial character of this appointment, as compared with that which obtains in a raiyatwari village is evidenced by the title of its holder, which is generally *lambardar*, a vernacular derivative from the English word 'number.' It is this type of village to which the well-known description in Sir H. Maine's *Village Communities* is alone applicable, and here the co-proprietors are in general a local oligarchy with the bulk of the village population as tenants of labourers under them."

Village Autonomy.—The Indian villages formerly possessed a large degree of local autonomy, since the native dynasties and their local representatives did not, as a rule, concern themselves with the individual cultivators, but regarded the village as a whole, or some large landholder as responsible for the payment of the Government revenues, and the maintenance of local order. This autonomy has now disappeared owing to the establishment of local, civil and criminal courts, the present revenue and police organisation, the increase of communications, the growth of individualism, and the operation of the individual *raiyatwari* system, which is extending even in the north of India. Nevertheless, the village remains the first unit of administration; the principal village functionaries—the headman, the accountant, and the village watchman—are largely utilised and paid by Government, and there is still a certain amount of common village feeling and interests.

Punchayets.—For some years there was an active propaganda in favour of reviving the village council-tribunal, or *Punchayet* and the Decentralisation Commission of 1908 made the following special recommendations:—

"While, therefore, we desire the development of a *punchayet* system, and consider that the objections urged thereto are far from insurmountable, we recognise that such a system can only be gradually and tentatively applied, and that it is impossible to suggest any uniform and definite method of procedure. We think that a commencement should be made by giving certain limited powers to *Punchayats* in those villages in which circumstances are most favourable by reason of homogeneity, natural intelligence, and freedom from internal feuds. These powers might be increased gradually as results warrant, and with success here, it will become easier to apply the system in other villages. Such a policy, which must be the work of many years, will require great care and discretion,

much patience, and judicious discrimination between the circumstances of different villages; and there is a considerable consensus of opinion that this new departure should be made under the special guidance of sympathetic officers."

This is, however, still mainly a question of future possibilities, and for present purposes it is unnecessary to refer at greater length to the subject of village self-government. Various measures have been passed, but it is too early to say what life they have. The Punjab Government has introduced a Village Punchayat Bill, which enables Government to establish in a village, or group of villages, a system of councillors to whom certain local matters, including judicial power, both civil and criminal of a minor character may be assigned. In Bihar a Village Administration Bill has been introduced for the administration of village affairs by villagers themselves, including minor civil and criminal cases. Other Governments are taking steps in the same direction.

Municipalities.—The Presidency towns had some form of Municipal administration, first under Royal Charters and later under statute, from comparatively early times, but outside of them there was practically no attempt at municipal legislation before 1842. An Act passed in that year for Bengal, which was practically inoperative, was followed in 1850 by an Act applying to the whole of India. Under this Act and subsequent Provincial Acts a large number of municipalities was formed in all provinces. The Acts provided for the appointment of commissioners to manage municipal affairs, and authorised the levy of various taxes, but in most Provinces the commissioners were all nominated, and from the point of view of self-government, these Acts did not proceed far. It was not until after 1870 that much progress was made. Lord Mayo's Government, in their Resolution of that year introducing the system of provincial finance, referred to the necessity of taking further steps to bring local interest and supervision to bear on the management of funds devoted to education, sanitation, medical charity, and local public works. New Municipal Acts were passed for the various Provinces between 1871 and 1874, which, among other things, extended the elective principle, but only in the Central Provinces was popular representation generally and successfully introduced. In 1881-2 Lord Ripon's Government issued orders which had the effect of greatly extending the principle of local self-government. Acts were passed in 1883-4 that greatly altered the constitution, powers, and functions of municipal bodies, a wide extension being given to the elective system, while independence and responsibility were conferred on the committees of many towns by permitting them to elect a private citizen as chairman. Arrangements were made also to increase municipal resources and financial responsibility, some items of provincial revenue suited to and capable of development under local management being transferred, with a proportionate amount of provincial expenditure, for local objects. The general principles thus laid down have continued to govern the administration of municipalities down to the present day.

The Present Position.—There are some 739 Municipalities in British India, with something under 18 million people resident within their limits. Of these municipalities roughly 546 have a population of less than 20,000 persons and the remainder a population of 20,000 and over. As compared with the total population of particular provinces, the population resident within municipal limits is largest in Bombay, where it amounts to 17 per cent., and is smallest in Assam where it amounts to only 2 per cent. In other provinces it varies from 3 to 9 per cent. of the total population. Turning to the composition of the Municipalities, considerably more than half of the total members are elected. Ex-officio members are roughly 12 per cent., and nominated 30 per cent. Elected members are almost everywhere in a majority. Taking all municipalities together, the non-officials outnumber the officials by nearly five to one. The functions of municipalities are classed under the heads of Public Safety, Health, Convenience and Instruction. For the discharge of these responsibilities, there is a muncipal income of £ 11·4 millions, nearly two-thirds of which is derived from taxation and the remainder from municipal property, contributions from provincial revenues and miscellaneous sources. Generally speaking, the income of municipalities is small, the four cities of Calcutta, Bombay, Madras and Rangoon together providing nearly 38 per cent. of the total. The average income of all municipalities other than the four mentioned above is nearly £ 10,000. The total expenditure of municipalities excluding that debited to the head "extraordinary and debt" amounted in 1919-20 to £11·3 millions. The heaviest items of this expenditure come under the heads of "Conservancy" and "Public Works" which amount to 17 per cent. and 14 per cent. respectively, "Water-supply" comes to 9 per cent., "Drainage" roughly to 6 per cent. and "Education" to no more than 8·1 per cent. In some localities the expenditure on education is considerably in excess of the average. In the Bombay Presidency, excluding Bombay City, for example, the expenditure on education amounts to more than 18 per cent. of the total funds, while in the Central Provinces and Berar it is over 15 per cent.

District Boards.—The duties and functions assigned to the municipalities in urban areas are in rural areas as entrusted to district and local Boards. In almost every district of British India save in the province of Assam, there is a board subordinate to which are two or more sub-district boards; while in Bengal, Madras and Bihar and Orissa, there are also Union Committees. Throughout India at large there are some 200 district boards with 532 sub-district boards subordinate to them. There are also more than 1022 Union Committees. This machinery has jurisdiction over a population which was some 213 millions in 1919-20. Leaving aside the Union Committees the members of the Boards numbered nearly 13,000 in 1919-20, of whom 57 per cent. were elected. The tendency has been throughout India to increase the elected members of the district boards at the expense of the nominated and the official members. The Boards are practically manned by Indians, who constitute 95 per cent. of the whole membership. Only 17 per cent of the total members of all boards are officials of any kind. The total income of the Boards in 1919-20—the latest figures available amounted to £ 9·3 millions, the average income of

each district board together with its subordinate boards being £52,000. The most important item of revenue is provincial rates, which represent a proportion of the total income varying from 21 per cent. in the Central Provinces to 49 per cent. in Bihar and Orissa. This income is mainly expended upon civil works, such as roads and bridges (£40 millions); the other principal objects of expenditure being education (£2·7 millions), medical and sanitary works (£10·9 millions) and general administration.

Improvement Trusts.—A notable feature in the recent sanitary history of India is the activity played by the great cities in the direction of social improvements. In Bombay and Calcutta the Improvement Trusts are continuing their activities which are described in a separate chapter (q.v.). In Bombay the work of the Improvement Trust is being developed by the Bombay Development Directorate. Other cities are beginning to follow the examples of these great cities and Improvement Trusts have been constituted in Cawnpore, Lucknow and Allahabad in the United Provinces and in several of the larger cities of the Provinces of India. Their activities have, however, been severely curtailed by the financial stress.

Provincial Progress.—There was passed in *Bengal* in 1919 a Village Self-Government Act embodying the policy of constituting Union Boards at the earliest possible date for groups of villages throughout the province. The number of these boards continues to increase, rising from 1,500 to more than 2,000. Though they are in their infancy as yet, many of them show a remarkable aptitude for managing their own affairs.

In *Bombay* the development of village self-government is also proceeding, as the result of an Act for constituting, or increasing the power of village committees, which was passed last year by the Legislative Council. In this presidency, some 75 out of 157 municipalities had a two-thirds elected majority of councillors in the year 1920; and a distinct step forward has been projected by the administration in the direction of liberalizing the constitution of all municipal bodies. The policy of appointing a non-official president has been extended both to district and sub-district boards, and a large number of non-officials have also been appointed presidents of sub-districts (taluka) boards. In *Madras* also the institutions of local self-government continued to progress in an encouraging manner. The number of district boards in the Presidency was 24, with 863 members. The number of sub-district boards rose from 97 to 119; while those electing their own presidents increased from 13 to 38. The total number of Municipal Councils rose from 73 to 80 and the proportion of Indian to European and Anglo-Indian members further increased. In 1920-21 there were 54 municipal councils, consisting entirely of Indian members, as against 41 in the previous year. The average imposition of taxation per head of population is still very low, being only about four shillings. None the less, waterworks were undertaken in 7 municipal towns, while improvements and extensions to the existing schemes were undertaken in eight other municipalities. The number of educational institutions maintained by municipal councils rose to 915, which was 20 more than in the previous year; while the net educational charges amounted to 19·5 per cent. of the income from general taxation.

In the *United Provinces*, there has been a considerable, if unostentatious, progress during the year 1920-21. Unfortunately, not much progress has been made towards solving the main difficulties which confront municipalities in improving their system of taxation. Efforts have been made to introduce terminal taxes, and with certain boards this source of income is working well. It has also been proposed in some towns to extend the pilgrim tax by a surcharge on the tickets of third-class passengers. The receipts from water-supply are also increasing in various localities; but expenditure and income in this matter are still far from balancing. In fact, finance is still a greater obstacle which lies in the path of nearly all the boards. So far as district boards are concerned, little improvement can be expected while they are financially dependent on Government. It is recognised that their emancipation from official leading strings is the central item in the programme of reforms, and there is reason to hope that the amending Bill will make them as independent as is possible and desirable.

In the *Punjab* municipal administration continued to show improvement, the general attitude of the members in regard to their responsibilities being promising for progress in the future. The income of municipalities increased by over 15 lakhs of rupees (£0·15 million) in the year, and expenditure was kept within the figures for income—a point in which municipal committees compare favourably with district boards. The prevailing tendency towards the substitution of terminal taxes for octroi continued, and several important towns, including Lahore and Amritsar are preparing for the change. District boards are beginning to realise that Government cannot pour out ever-increasing grants in aid and the proposal has been made in some districts to impose fresh taxation and to raise the local rates. This is a most hopeful sign for the future.

In the *Central Provinces*, the previous year witnessed the passing of a Local Self-Government Act which will guide into proper channels the undoubtedly growing interest in public matters. The continued reduction of official members and chairman, and the wider powers of control given to local bodies will be an incentive to the development of local self-government, leading to an increased sense of public duty and responsibility.

In the *North-West Frontier Province*, the institution of local self-government is somewhat of a foreign growth. Certain of the municipal committees are still lax in the discharge of the responsibilities, and meetings are reported to be in frequent, but the attendance of non-official members is gradually increasing. Except where factional and personal considerations were involved, the members of the municipalities still remained apathetic. The same statement is unfortunately true of district boards, whose members, it is said, evince little real interest in their work.

Local Government Statistics.

Municipalities.—With this general introduction we can now turn to the statistical results of the working of Local Self-Government. The following table gives information as to the constitution of municipal committees, taxation, &c., in the chief provinces in 1920-21:—

	Population within Municipal Limits.	Number of Municipalities.	Total Number of Members	By Qualification.			By Employment.		By Race.		Incidence of Municipal Taxation per head.
				Ex-Officio.	Nominated.	Elected.	Officials.	Non-Officials.	Europeans.	Indians.	
Presidency Towns.											Rs. a. p.
Calcutta	903,173	1	50	..	25	25	3	47	16	34	12 7 6
Bombay	979,445	1	72	..	16	56	6	66	15	57	14 8 6
Madras	518,660	1	47	..	9	38	2	45	8	39	6 10 4
Rangoon	284,935	1	25	1	6	18	2	23	12	13	13 7 6
District Municipalities.											
Bengal	2,041,511	115	1,596	76	511	1,009	160	1,436	126	1,470	2 11 7
Bihar and Orissa	1,204,698	58	817	134	204	479	130	687	88	729	1 9 4
Assam	167,377	25	252	40	82	130	48	204	27	225	2 5 9
Bombay and Sind	2,590,854	157	2,330	297	739	1,294	356	1,974	135	2,195	3 13 4
Madras	2,482,077	81	1,217	45	411	761	95	1,122	52	1,165	2 0 3
United Provinces	2,984,773	84	1,054	51	105	898	76	978	72	982	2 5 9
Punjab	1,626,506	101	1,197	211	354	632	226	971	75	1,122	4 2 8
N. W. Frontier Province	141,928	6	117	34	83	..	34	83	16	101	6 2 9
Central Provinces and Berar	927,104	60	(a) 841	23	242	576	143	699	47	795	2 15 1
Burma	740 972	47	597	172	306	119	187	410	105	492	2 13 7

(a) One seat vacant.

Sanitation.

The history of the sanitary departments in India goes back for about fifty years. During that period great improvements have been effected in the sanitary condition of the towns, though much remains to be done; but the progress of rural sanitation which involves the health of the great bulk of the population has been slow, and incommensurate with the thought and labour bestowed on the subject. "The reason lies in the apathy of the people and the tenacity with which they cling to domestic customs injurious to health. While the inhabitants of the plains of India are on the whole distinguished for personal cleanliness, the sense of public cleanliness has ever been wanting. Great improvements have been effected in many places; but the village house is still often ill-ventilated and over-populated; the village site dirty, crowded with cattle, choked with rank vegetation, and poisoned by stagnant pools; and the village tanks polluted, and used indiscriminately for bathing, cooking and drinking. That the way to improvement lies through the education of the people has always been recognised."

Of recent years the pace has been speeded up as education progressed, education developed, and funds were available. In a resolution issued in May 23rd, 1914, the Government of India summarised the position at that time, and laid down the general lines of advance. This resolution (*Gazette of India*, May 25th, 1914) should be studied by all who wish to understand the attitude of the Government of India towards sanitation prior to the passing of the Reform Act of 1919. It will be found summarised in the Indian Year Book of 1922 (page 475 *et seq.*) and earlier editions. One of the greatest changes effected by the Reform Act of 1919 was the transfer of sanitation to the provinces making it a subject directly responsible to local control through Ministers. It is too early yet to attempt to indicate the effects of this change. In the last official report of sanitary work in India published in 1921-22, the general position is indicated in the following terms: "There is unfortunately little reason to suppose that the transfer of Sanitation to popular control will usher in the millennium at an early date. When all allowances are made for financial stringency, it cannot be said that the Reformed Provincial Governments have thrown themselves enthusiastically into the struggle with disease. The daily press, however, shows that popular interest in the problems of sanitation is slowly increasing, which of itself is a good thing. One of the encouraging features of the period has been the increasing number of local associations who are taking part in sanitary work. Voluntary agencies have multiplied, and private generosity both in money and service increased. While educated Indian opinion is showing itself gradually more responsive to the pressing requirements of public health, the steady fight against the diseases which afflict the country continues without intermission. The extermination of bubonic plague is now regarded as a matter of persistent and organised effort: but unfortunately, there has been retrenchment of expenditure on plague measures as a result of the introduction of ministerial control. This is probably due to diminished fear of a plague epidemic."

Birth and Death Rates.—The population of the areas in which births and deaths were registered in 1921 was 241,419,723. 7,774,776 births and 7,385,112 deaths were registered; the rates per mille being 32·20 and 30·59 as compared with an average of 35·01 and 38·2 respectively for the previous five years.

The lowest birth rates were recorded in Madras 27·0; North-West Frontier Province 27·3; Coorg 27·43; Bengal 28·0 and Assam 29·63, but an excess of deaths over births was noticed in Bengal, the United Provinces, the Central Provinces, North-West Frontier Province and Coorg. The death-rates were lower in the following Provinces, *viz.*, Delhi, Bengal, Assam, Madras, Coorg, Bombay and Burma (both upper and lower) and higher in the rest than in the preceding year:—

Province.	Birth Rates (per mille).		Death Rates (per mille).	
	1920.	1921.	1920.	1921.
Delhi	47·36	45·5	35·54	31·24
Bengal	30·0	28·0	32·7	30·1
Bihar and Orissa	32·2	34·6	30·9	32·8
Assam	31·53	29·63	28·98	26·48
United Provinces	35·55	34·39	37·23	39·57
Punjab	42·9	41·5	28·6	30·13
N. W. Frontier Province	29·8	27·3	23·4	31·59
Central Provinces and Berar	39·17	37·9	40·11	44·01
Madras	28·4	27·0	21·8	20·2
Coorg	23·81	27·43	45·86	28·56
Bombay	30·28	32·59	28·65	26·00
Burma, Lower	31·23	26·9	25·74	22·06
Burma, Upper	37·95	34·82	27·59	20·43
Ajmer-Merwara	27·77	31·13	25·71	28·41
Total ..	32·98	32·20	30·84	30·59

Chief Diseases.—There are three main classes of fatal disease: specific fevers, diseases affecting the abdominal organs, and lung diseases. Intestinal and skin parasites, ulcers and other indication of scurvy widely prevail. The table below shows the number of deaths from all causes and from each of the principal diseases in British India and death-rates per 1,000 :—

Years.	Deaths from all Causes.	Cholera.	Small-pox.	Fevers.	Dysentery and Diarrhœa.	Plague.	Respiratory Diseases.
1914 ..	7,155,771	280,730	76,590	4,092,345	278,225	266,588	261,149
		1·18	·32	17·16	1·17	1·12	1·09
1915 ..	7,142,412	404,472	83,282	3,990,287	261,800	380,501	257,721
		1·70	·35	16·73	1·10	1·60	1·08
1916 ..	6,940,436	288,047	60,642	4,085,784	248,381	205,527	286,247
		1·21	·25	17·13	1·04	·86	1·20
1917 ..	7,803,832	267,002	62,277	4,555,221	260,984	437,036	316,821
		1·12	·26	19·10	1·10	1·83	1·33
1918 ..	14,895,801	560,802	93,076	11,134,441	276,648	440,752	430,935
		2·35	·39	46·69	1·16	1·85	1·81
1919 ..	8,554,178	578,426	136,077	5,468,181	291,643	74,284	350,133
		2·43	·57	22·93	1·22	·31	1·47
1920 ..	7,355,654	130,140	101,329	4,931,202	218,734	99,368	333,669
		·55	·42	20·68	·92	·41	1·40
1921 ..	7,385,112	450,608	40,446	4,761,237	229,576	69 682	334,103
		1·87	0·17	19·72	0·95	0·29	1·38

Mortality.—There is no method by which the deaths actually due to influenza in 1918 can be calculated. If it be assumed that the excess in the deaths in 1918 over the mean of the previous 5 years was the result—direct or indirect—of influenza, the figure would come to 7,718,307. This is an overestimate owing to the disturbing factor of other epidemic diseases, such as plague, cholera, malaria and relapsing fever, which raised the mortality in various parts of India during the first half of the year. There is no certain evidence that influenza was present in India before June 1st: it is, however, probable that if it were, it had no appreciable influence on the death rate for India as a whole. This suggests that the excess in the mortality from all causes between June 1st and December 31st over the 5 years mean—6,812,633—may be a more reliable index. This may, however, be a slight underestimate, for, in the last half of 1918 the mortality from plague was exceptionally low as compared with the quinquennial mean.

Another estimate may be obtained by subtracting from the total mortality from all causes the deaths registered as due to the chief epidemic diseases—plague, cholera and small-pox, and comparing this figure with one similarly obtained for the previous quinquennium. On this basis the estimate would be 7,304,478. A fourth figure may be estimated by taking the excess in the mortality from "fevers" and respiratory diseases over the average for 5 years. In 1918 this excess came to 7,151,971.

Without any claim to accuracy it is suggested that the mortality directly and indirectly due to influenza was in the neighbourhood of the mean of the last three figures, 7,089,694.

Cholera.—450,608 deaths were registered in 1921 against 130,140 in 1920 400,297 of the deaths occurred in the five provinces of Bengal, Bihar and Orissa, Madras, the United Provinces and the Central Provinces and Berar. The death-rate from cholera for India was 1·87 against 0·55 in 1920. No part of India was absolutely free from the disease during the year, but in Delhi Province and Coorg the death-rate was 0·04 each.

Dysentery and Diarrhœa.—A year in which cholera is prevalent means a rise in the number of deaths ascribed to these diseases. In 1921, 229,576 deaths were recorded as compared with 218,734 in 1920. The death-rate was 0·95, against 1·09, the quinquennial mean. The highest death-rates were returned by the Central Provinces and Assam.

Small-pox—caused 40,446 deaths, of these 9,792 occurred in the Madras Presidency. The death-rate was 0·17 as compared with a quinquennial mean of 0·38.

Plague.—69,682 deaths were registered against 99,368 in 1920. 71,088 of the deaths occurred in the first half of the year and 28,280 in the second half. In 1919 the corresponding figures were 53,205 and 21,079. The plague year does not correspond with the calendar year: it runs from July 1st of one year to June 30th of the next. The low mortality in the second half of 1918 corresponds with the first half of 1918-19 epidemic and is about one-fifth of the mean mortality from plague during the corresponding period of the past twenty years. It cannot be claimed that this reduction in mortality is due to plague preventive measures, although there are signs that popular appreciation of such measures is growing: the low incidence of plague was probably directly connected with the meteorological and agricultural conditions of the year.

The most satisfactory symptom of the growing public confidence in anti-plague measures is the

increased demand for inoculation with anti-plague vaccine. The greatest reliance is placed on evacuation. Valuable as this measure undoubtedly is, it may spread infection. Refugees from a plague infected town or village in some cases go with their goods and chattels to uninfected towns or villages, the epidemics in which are sometimes traceable to this immigration.

Rat destruction is not popular. There is no doubt that an efficiently conducted rat campaign is of great value, but the co-operation of the people is difficult to secure.

Fevers.—It is perhaps more difficult than usual to analyse the deaths ascribed to "fevers." 4,761,237 deaths, or 64·5 per cent. of the total deaths were included under this head. The decennial mean for mortality from fevers is 5,093,801.

THE HEALTH OF THE ARMY.

British.—The average strength of European Troops, Regulars and Territorials, in India during 1919 was 56,561 as compared with 87,982 in 1918. The following table shows the main facts as regards the health:—

Period.	Average strength.	Admissions.	Deaths.	Invalids sent home.	Average constantly sick.
1910-14 average	69,440	39,389	303	488	2,094·57
1916	60,737	46,892	397	1,343	2,414·56
1917	80,825	62,372	390	1,337	3,686·45
1918	87,982	90,637	1,424*	2,007	5,286·61
1919	56,561	54,982	438	4,324	3,245·84

Period.	Ratio per 1,000 of strength.				Average period of illness of each soldier calculated on average strength.	Average duration of each case of sickness.
	Admissions.	Deaths.	Invalids sent home.	Average constantly sick.		
1910-14 average	567·2	4·51	7·03	30·13	*10·00	*19 39
1916	772·0	6·54	22·11	39·75	14·55	18·85
1917	771·7	4·83	16·54	45·60	16·65	21·57
1918	1,030·2	16·19	22·81	60·00	21·93	21·29
1919	972·1	7·74	76·40	57·39	20·95	21·55

* Worked out on quinquennium aggregates.

Many factors adversely affected the health statistics of the British troops in India during the year 1919.

Although active hostilities with Germany ceased towards the end of 1918, reconstruction at Home, the return of Dominion and Commonwealth troops to their homes, the demobilisation of our armies and the time entailed in the enlistment and formation of the post-war army did not permit of the relief of the Garrison and Territorial units garrisoning India until the autumn of 1919, when the first formations of the post-war army commenced to arrive.

The Garrison units, and to some extent the Territorial troops, in India during the latter period of the war, were composed largely of elderly men and soldiers who, from minor disabilities, had been found temporarily unfit to reinforce the armies operating in Mesopotamia and East Africa. Naturally such men were least able to resist the climatic conditions of India and helped to swell the admissions to hospital.

On the other hand the relieving formations which arrived towards the end of 1919 contained a high proportion of young soldiers under 20 years of age, and many instances were found pointing to the fact that the medical inspection of the men prior to embarkation for India had not been carried out with the thoroughness and the appreciation of climatic conditions that is necessary in the case of soldiers who are about to serve in a tropical country. In addition a certain proportion of "B" category men were included in the units.

As is always the case with new arrivals in India, especially soldiers of the types mentioned above, numbers suffered from complaints which, though trivial in themselves, increased the admissions to hospital.

The general unrest in Northern India, and the hostilities by Afghanistan and all along the North-West Frontier from May 1919 onwards had the effect of retaining men in the plains in unusual numbers, during a very trying hot weather, who under more normal circumstances would have been serving at hill stations.

Indian.—The average strength of Indian troops including those on duty in China and other stations outside India, but excluding those under field service conditions, was 229,731 in 1919 as compared with 341,458 in 1918.

The following table gives the actuals and ratios of sickness, deaths, and invaliding for the quinquennial period 1910-14 and for the years 1916-1919 inclusive :—

Period.	Average strength.	Admissions.	Deaths.	Invalids.	Average constantly sick.	Ratio per 1,000 of strength.			
						Admissions.	Deaths.	Invalids.	Average constantly sick.
1910-14 (average)..	130,261	71,213	573	699	2,662	544·6*	4·39*	5·4*	20·7*
1916.. ..	139,076	105,333	1,248	3,745	5,250	757·4	8·97	26·9	37·7
1917.. ..	191,242	141,787	2,201	3,421	6,556	741·4	11·51	17·9	34·3
1918.. ..	341,458	292,393	9,959	6,539	13,897	856·3	29·17	19·2	40·7
1919.. ..	229,731	176,313	2,742	4,999	9,191	767·5	11·94	21·8	40·0

* Worked out on quinquennial aggregates.

The fact that the admission ratio for all causes has not in spite of the return of peace conditions, fallen below the level at which it stood during the great war, is attributable to many factors of which the following are a few of the more important:

1. The continuation, though in a less intense form, of the Influenza pandemic with the effect its resultant debility is known to have on the incidence of other diseases.

2. The return to India of many troops from field service overseas in Mesopotamia and Egypt, and from the North-West Frontier operations, with the well known result on the incidence of venereal disease.

3. The necessity for keeping the army up to a strength much above that of the years before the great war resulted in the enlistment of men below the best standard of physical fitness.

HEALTH OF THE GENERAL POPULATION.

Births.—The births in 1921 numbered 7,774,776, less by 89,456 than the number recorded in 1920. The birth rate was 32·20 as compared with a quinquennial mean of 35·01. All provinces excepting Bombay, Punjab, Bihar and Orissa, Assam, Ajmer-Merwara, Coorg and Delhi shared in the decreased birth rate.

Every year in each part of India a great divergence is noted between the maximum and minimum birth rate for each registration unit. The discrepancy is so wide that it can only be explained by difference in the accuracy of registration. Speaking generally the inaccuracy is more apparent in municipal than in rural areas.

Deaths.—7,385,112 deaths were registered as compared with 7,355,654 in 1920; an increase of 29,458. The death rate was 30·59 as compared with a quinquennial mean of 38·2. The rural death rates for India as a whole have always been below the urban, but in 1918 it was in excess by 6·22. In 1921, the urban death rate exceeded the rural by 3·01. The excess in the urban death rate was thus distributed: Coorg (15·96), Burma (15·89), Bombay (10·95). Ajmer-Merwara (10·30), Delhi (9·37), United Provinces (7·92), Madras (5·40), Central Provinces and Berar (5·17), Punjab (3·70) and North-West Frontier Province (0·22). In Bengal, Bihar and Orissa and Assam the rural death rates are usually in excess of the urban being 4·7, 1·1 and 2·68 respectively, in 1921.

MEDICAL INSTITUTIONS.

Medical Colleges.—There are five medical colleges (Bombay, Madras, Calcutta, Lahore and Lucknow), the students in which numbered in 1919, 3,043 including a few women. There are also 18 medical schools. There is an X-ray institution at Dehra-Dun.

Pasteur Institutes.—There were Pasteur Institutes for anti-rabic treatment at Kasauli (Punjab), Coonoor (Madras), Shillong (Assam) and Rangoon (Burma). In these four institutes 8,632 patients were treated during the year.

Lunatic Asylums.—The treatment of lunatics at asylums prevails on a comparatively small scale; but the asylum population is steadily increasing. The number of asylums in 1920 was 23. The number of patients admitted was 2,619 as against 2,608 in 1919. The total asylum population of the year was 10,157.

Leper Asylums.—There are many leper asylums among which may be mentioned the Madras Government Leper Asylum, the Matunga Leper Home, Bombay, the Trivandrum State Leper Asylum and the Calcutta Leper Asylum. There are also many asylums or homes, frequently under some sort of Government supervision, including about 50 asylums of the Mission to Lepers.

LEPROSY IN INDIA.

It is exceedingly difficult to give any estimate of the total number of lepers in the Indian Empire to-day. The census figures of 1921 give the total as 102,513, as against 109,094 in 1911. But it is doubtful if this figure represents anything more than the worst cases, and possibly a majority of this number are the begging and pauper lepers who are seen all over the country. Dr. E. Muir, the Leprosy Research Worker at the Calcutta School of Tropical Medicine, says that "we think that it would not be an over estimate to put down the number of lepers in India somewhere between a half and one million."

Treatment.—In a recent article on this subject by the Secretary to the Mission to Lepers the position is summed up as follows:—

"Voluntary segregation is the right thing to encourage for those who will segregate themselves and receive treatment. Compulsory segregation is the course to follow in the case of those who persist in mixing with the healthy population and thus spreading the disease, as is the case with pauper and begging lepers. The extension of the use of the latest treatments is most important. Special leper clinics should be established by Government in suitable centres and the treatment provided free. And, lastly, an educational campaign should be commenced as soon as possible, and information about the disease itself—how it is spread and how to diagnose it, also the benefits of segregation and the efficacy of the latest treatments—spread all over the country. The situation was never more hopeful, and a wisely directed campaign against the disease would be certain to end in the stamping out of the disease in the whole of India."

CHILD WELFARE MOVEMENT.

Amongst the most pressing problems of India's health is that presented by the appalling infant mortality. It has been calculated that every year no fewer than 2 million Indian babies die, while many others survive only to grow weak and feeble from unhygienic surroundings during infancy. A noteworthy feature has been the further progress of the infant welfare movement, which owes much to the All-India Maternity and Child Welfare League initiated by Lady Chelmsford. In all the great centres of population, work is now being done for the training of midwives, for the instruction of mothers and for the care of babies. Training centres for Indian and Anglo-Indian women have been opened in order to spread the elements of infantile hygiene to other parts of India. Most hopeful sign of all, Indian ladies are beginning to interest themselves in this work in large numbers. But such is the magnitude of the field, that consistent and widespread effort on a scale hitherto impossible must be undertaken, if any appreciable reduction is to be made in the appalling mortality of young children. The admirable work done year by year by the National Association for supplying Female Medical Aid to the Women of India, has been facilitated by the decision of the Legislative Assembly to grant an increased Government subsidy to the figure of £ 25,000.

Centres of Activity.—The Child Welfare Directory gives the following list of places where the movement is already at work:

Bombay.—The centre of much active and enthusiastic welfare work; the Lady Willingdon Maternity Homes near the people's chawls being unique of their kind in India. The Bombay Infant Welfare Society founded by Lady Lloyd has already established 8 Infant Welfare Centres where prenatal, maternity and child welfare work is being carried on.

Surat.—The Henderson Ophthalmic Scheme for treating Ophthalmia Neonatorum and stemming "the enormous amount of preventible and curable blindness that is laying its shadow over the health, happiness and usefulness of this great portion of our Empire."

Bijapur.—Mr. Henderson, I.C.S., has now started the same beneficent work for blind babies as in Surat.

Dharwar.—

Delhi.—Work was started in 1914 by two lady health visitors brought out from England by the Government of India. Their salaries are now met by the Delhi Municipality, a substantial grant being paid towards them by Government; three infant welfare centres have been established and a comprehensive scheme for the training and supervision of indigenous *dais* is carried on. A training school for health visitors and midwife supervisors has been established in connection with this scheme and is financed by the Lady Chelmsford League. The Secretary of this school from whom all particulars may be obtained is Mrs. Young, M.B., 1, Ludlow Castle Road, Delhi.

Madras.—Under the Provincial Branch of the Lady Chelmsford League a number of Infant Welfare Centres have been opened in the City, also a school for training health visitors under Mrs. Chinappi, M.B., the Medical Superintendent of the Co-operative Midwives Scheme, by means of which trained midwives are provided for the City and much antenatal, maternity and infant welfare work is carried on. There are also local centres of the Lady Chelmsford League in the Madras *mofussil*.

Punjab.—The Punjab Branch of the Lady Chelmsford League was founded in 1921 and has established an Infant Welfare Centre and a school for training health visitors in Lahore under two health visitors brought from England. Its object is to establish child welfare centres with a trained health visitor in charge in each district.

United Provinces.—A Branch of the Lady Chelmsford League was established in 1923 and is at present mapping out its course of action.

Ahmedabad.—Three Maternity Homes, and five creches in mills.

Calcutta.—Six Midwife Supervisors and six Health Visitors with subordinate assistants and six welfare centres.

Dacca.—A Scheme for the training of indigenous *dais* was opened in 1921 and is meeting with marked success.

Lahore.—Baby Welcome and 2 English Health Visitors.

Lyallpur.—1 Welfare Centre.

Simla.—1 Welfare Centre and Health Visitor, employed by the Simla Municipality.

Ludhiana.—Much good work under W. C. M. College.

Sialkot.—

Dehra Ismail Khan.—

Lucknow.—Municipal Scheme and Midwife Supervisor.

Agra.—Training of *dais* under Victoria Memorial Scholarship Fund.

Bareilly.—Maternity Scheme opened by Mrs Stubbs in 1922.

Shahjahanpur.—

Gorakhpur, Hardwar, Almora.—

Jubbulpore, Nagpur, Bhopal, Kapurthala, Medak.—

Bangalore.—Creche, two English Health Visitors and 7 Midwives.

So far all the schemes have devoted their attention to combating the prejudices of the mothers in respect of new-born children. In a land of so many languages and superstitions progress will necessarily be slow and India has yet to decide whether she will work intensively and try to rear a few well developed children as far as adolescence or extensively attempt to bring a large number of infants through the first critical months, only to have them perish at a later stage from the many ills that childhood is heir to in a land of great poverty, under-nourishment, epidemics and famine. In Western lands the Child Welfare Movement has no more marked characteristic than its inability to stop expanding. Its ramifications know no bounds. Its inevitable corollaries are endless, and like the banyan tree it will no doubt in India also develop innumerable fresh roots, medical supervision, dental clinics, better housing, open air playgrounds, etc., etc. But these are not yet. Its preliminary task is to educate the mothers of India to the enormity of allowing two million babies to perish every year and to convince them of the equally important fact that a high death rate always spells also a high damage rate of sickly, under-developed, incompetent citizens.

INDIAN RED CROSS SOCIETY.

When the war first broke out, what is generally termed Red Cross work was undertaken in India and Mesopotamia by the St. John Ambulance Association and by a number of provincial organisations working on independent lines. From August 1916, the central work was taken over by the Indian Branch of the Joint War Committee of the Order of St. John of Jerusalem and the British Red Cross Society. The final report of that Committee shows that up to June 1920 its total receipts amounted to Rs. 1,77,85,716 of which some 17 lakhs had been contributed by the British Red Cross Society. It had spent about 67 lakhs in Mesopotamia · nine lakhs on the Afghan War and Waziristan Expedition; in Mesopotamia and India combined it had spent on Red Cross objects in all about 117 lakhs.

It closed its career in June 1920 under the following circumstances. In the summer of 1919, an invitation had been received to join the International league of Red Cross Societies, having for its object the extension of Red Cross work in the sphere of purely civil activity. Though there was then no formally constituted Red Cross Society in India, the invitation was accepted, thus giving India a distinct position in a world wide League of humanitarian societies. A Bill to constitute an Indian Red Cross Society was introduced by Sir Claude Hill in the Imperial Legislative Council in March 1920, and duly passed into law as Act XV of 1920. This Act handed over the balance of the Joint War Committee to the new Society, and authorised it not only to direct the utilization for war purposes of the capital funds at its disposal but also to devote the interest, as far as possible, for civil purposes. The Act allows the constitution of autonomous provincial societies affiliated to the main Society, and it is with these branches that the task lies of organising and stimulating the new civil activities of the Red Cross throughout India. Provincial Societies have now been constituted in all provinces, Central India and Delhi; in Bengal the Society was constituted by a special Act of the Bengal Legislature.

The **objects** on which the funds of the Society may be spent are—

1. The care of the sick and wounded men of His Majesty's Forces, whether still on the active list or demobilised.

2. The care of those suffering from Tuberculosis, having regard in the first place to soldiers and sailors, whether they have contracted the disease on active service or not.

3. Child welfare.

4. Work parties to provide the necessary garments, etc., for hospitals and health institutions in need of them.

5. Assistance required in all branches of nursing, health and welfare work, ancillary to any organisations which have or may come into being in India and which are recognised by the Society.

6. Home Service Ambulance Work.

7. Provision of comforts and assistance to members of His Majesty's Forces, whether on the active list or demobilised.

Constitution.—His Excellency the Viceroy is President of the Society. The Managing Body ordinarily consists of a Chairman to be nominated by the President and 25 members of the Society of whom 12 are the Vice-Presidents nominated by Provincial or State Branches; 8 elected by the Society at the Annual General Meeting from among the members of the Society and 5 nominated by the President.

The present Chairman of the Managing Body is the Hon'ble Sir W. M. Hailey, K.S.I., C.I.E., I.C.S., and the Honorary Secretary Lieut.-Colonel H. Hutchinson, I.M.S.

Finances.—The operations of the Joint War Committee were brought to a close in June 1920 with a capital investment of the face value of Rs. 56,33,000 and Rs. 8,01,500-3-6 in floating and fixed deposit accounts. The Society has

since invested further funds in various securities and its finances in July 1921 stood at a capital investment of the face value of Rs. 61,33,000 and about Rs. 65,000 in fixed and floating accounts. The income derived from the capital of the Society (which is 3½ lakhs at present after providing for certain liabilities of the Central Society, is distributable under the Act to the Provincial Branches in proportion to their contributions to the Central "Our Day" Fund. In the year 1920, partly owing to the Central Society's heavy commitments on the North-West Frontier, and partly due to the fact that the Provincial Branches had not been fully formed, only a sum of Rs. 32,000 was distributed. In the year 1921, however, 1½ lakh was set aside for distribution to Branch Societies. The work in Bombay was greatly strengthened by the collection of a sum of approximately Rs. 10 lakhs in December 1922.

LUNACY AND ASYLUMS IN INDIA.

The accommodation for mentally afflicted persons in British India is, like that for those afflicted bodily, very inadequate. In the Native States, the condition of affairs as regards the provision of institutions for the care and treatment of the insane, is still worse as no Asylums exist there at all, so that those whose malady is such as to render their freedom a public menace, are for the most part confined in the local jails.

According to the Census Reports of 1911 out of a total population of 315,156,396 (India and Burma), there are 81,006 persons insane making a proportion of insane to sane of 5 per every 10,000.

In the United Kingdom the proportion of insane to sane is roughly 40 per 10,000, while in New Zealand it is as much as 45 per 10,000. In reviewing these figures it must be borne in mind that those of the United Kingdom and New Zealand include the "feeble-minded," an item that is not included in the figures for British India.

INDIA.

Provinces, States and Agencies.	General population.			Insane population.		
	Male.	Female.	Total.	Male.	Female.	Total.
Provinces under British Administration.	124,872,691	119,393,851	244,267,542	42,064	26,094	68,158
States and Agencies ..	36,465,244	34,423,610	70,888,854	7,979	4,869	12,848
Total for all India ..	161,338,935	153,817,461	315,156,396	50,043	30,963	81,006

For the care of the 81,006 insanes of India and Burma, there exists accommodation in Asylums for roughly 8,000, hence only one person in ten out of the total insane population of the country, can be afforded accommodation in the institutions that exist especially for their care and treatment.

The following table gives the number of Lunatic Asylums in each province during 1922, the total population of such institutions in each province and the number discharged, cured and died.

The number of asylums has not changed.

There has been a decrease in the admissions and re-admissions during the year largely accounted for by the decrease in the admissions of military insanes.

Province.	Number of Asylums.	Admitted and readmitted during year.	Total Asylum Population.			Discharged cured.	Died.	Daily average strength.	Daily average sick.	Criminal Lunatic.
			Males.	Females.	Total.					
*Bengal	4	..	..	..	..	..	..	..	..	..
Assam	1	107	446	105	551	64	27	443·82	40·09	216
Bihar and Orissa ..	2	104	384	138	522	67	29	417·61	49·42	151
United Provinces ..	3	348	1,352	307	1,659	100	114	1,309·82	216·94	304
Punjab	1	322	919	249	1,168	113	58	837·17	40·61	198
Central Provinces ..	1	56	348	92	440	36	20	349·20	22·03	117
Bombay	6	454	1,452	453	1,905	267	117	1,443·0	58·0	244
Madras	3	344	997	289	1,286	157	82	967·46	125·27	206
Burma	2	225	931	165	1,096	59	66	904·98	148·64	447
Total .. 1920..	23	2,509	8,081	2,012	10,093	1,019	800	7,601·94	863·32	2,406
Total .. 1921..	23	2,245	7,870	2,016	9,886	1,035	768	7,649·62	849·32	2,434

* Figures for 1922 are not available.

The administration of Asylums is under the direct control of the Provincial administrative Medical Officers. In the case of the so-called "Central" Asylums, that is to say, the Asylums at Madras, North Yeravda (Bombay Presidency), Lahore (Punjab), Agra (United Provinces of Agra and Oudh), Berhampore (Bengal), and Rangoon (Burma) as well as the Asylum at Ranchi the charge of the institution is in the hands of a wholetime medical officer who is termed the "Superintendent". He is usually, but by no means always, a trained alienist. The remaining Asylums are in the charge of the Civil Surgeon of the locality in which they happen to be situated. Not one of the existing Asylums in British India can be said to be up-to-date as regards construction, organisation, staffing or equipment. In every instance, even including the new Asylum for Burma which is now under construction in Rangoon, the custodial aspect of the Institution has received the greatest amount of consideration with the result that only a very little attention has been paid to all that goes towards the remedial requirements of the institution. It will probably take some years yet to obtain in India proper recognition of the fact that an Asylum for persons suffering from mental diseases should be a "hospital" in every sense of the term, hence its main raison d'être is to treat and to cure, and that every other consideration must be made secondary to this fundamental concept. Indeed, in almost every country in the world which makes any pretension to be regarded as civilised, the term "Asylum" has now been abolished for all institutions dedicated to the care and treatment of the insane. Owing to the lack of interest in Psychiatry and all that this term generally connotes in Europe and America, the nomenclature that is still followed in the classification of mental diseases renders all official returns that are supposed to deal with the types of insanity occurring in the various Asylums in India, comparatively worthless. Even were a less obsolete classification of the varieties of mental diseases introduced it would not be possible in the existing absence of properly trained alienists to render information that would be of any great statistical value from a psychiatric stand-point.

The following table shews the classification of the **types of insanity** recorded in the reports published by every Province in India in the year 1919:

The principal types of insanity treated during the year 1922 *in the Lunatic Asylums, in the Provinces of—*

—	Bengal.	Assam.	Bihar & Orissa.	United Provinces.	Bombay.	Madras.	Punjab.	Central Provinces.	Burma.	Total.
Idiocy	56	4	4	62	54	34	84	18	23	..
Mania	381	254	169	563	753	412	438	208	439	..
Melancholia	295	203	32	163	357	155	175	94	320	..
Mental Stupor ..	7	..	17	41	30	43	2	..	29	..
Delusional Insanity ..	75	9	21	50	148	82	40	13	73	..
Insanity caused by *Cannabis indica* or its preparations ..	173	71	4	225	131	106	139	2	4	..
Dementia	82	1	175	189	265	254	85	26	107	..

It will be seen from the foregoing that the largest number of cases in the Asylums are shewn as "Mania" and "Melancholia." These terms "Mania" and "Melancholia" are now-a-days regarded as obsolete. For purposes of comparison of the terms that are nowadays employed to distinguish psychopathic states with those that are still permitted to hold good in India the following extract has been made from a recent report published by the Union of South Africa:—

Infection Psychoses.
Exhaustion Psychoses.
Intoxication Psychoses.
Thywigenous Psychoses.
Dementia Præcox.
Dementia Paralytica.
Organic Dementras.
Involution Psychoses.
Manic-depressive Psychosis.
Paranoia.
Epileptic Psychoses.
Psychogenic Neurosis.
Constitutional Psychopathic State.
Psychopathic Personalities.
Defective Mental Development.

As regards the **incidence of insanity** among the various races of India as well as the incidence of insanity in relation to occupation no really reliable information is obtainable in view of the comparative paucity of cases in proportion to the general population that come under observation. On the other the incidence by age is shown fairly well in the Census Report of 1911 to be as follows:

INDIA.

AGE.	Insane.		Distribution of the insane by age per 10,000 of each sex.	
	Male.	Female.	Male.	Female.
YEARS.				
0- 5	508	427	102	139
5-10	2,715	1,750	547	568
10-15	4,131	2,696	833	876
15-20	4,663	3,165	940	1,028
20-25	5,543	3,392	1,118	1,095
25-30	6,298	3,120	1,270	1,013
30-35	6,528	3,466	1,316	1,126
35-40	4,839	2,431	976	790
40-45	4,760	3,067	960	996
45-50	2,849	1,759	574	571
50-55	2,765	2,174	558	706
55-60	1,187	915	239	297
60-65	1,478	1,325	567	795
65-70	486	371		
70 and over age unspecified	853	751		
	446	174		
Total for all India	50,043	30,963	....	....

A further result of the general apathy, both official and non-official, towards matters pertaining to psychiatry, the subject of "feeble mindedness" has not yet come to be recognised as one that has any practical bearing on the welfare of the state as a whole with the result that there is no official institution for the care and education of feeble-minded children.

As regards the relation of insanity to crime, and more especially as regards the confinement of criminal insanes in jails, the report of the recent Commission of Enquiry into the subject of Indian Jails (published in 1920) contains some valuable suggestions. As things are the ideas both as regards the theory and the practice of dealing with insanity and crime in India, embodied in the existing legislation can only be described as archaic.

(See also "Insanity in India" by Colonel G. F. W. Ewens, I.M.S., and "Lunacy in India" by Major A. W. Overbeck-Wright, M.D., D.P.E., I.M.S.)

Drug Culture.

Two monographs on the cultivation of drugs in India, by Mr. David Hooper, of the Indian Museum, Calcutta, and by Mr. Puran Singh, of the Indian Forest Department, Dehra Dun, have lately been published. Mr. Hooper, in his paper, states that one-half of the drugs in the British Pharmacopœia are indigenous to the East Indies, and nearly the whole of the rest could be cultivated or exploited. The following are given as those that could be grown in quantity and as worthy of the attention of cultivators and capitalists: —

Belladonna, most of which is still imported, grows well in the Western Himalayas from Simla to Kashmir, the Indian-grown plant containing 0·4 to 0·45 per cent. of alkaloid.

Digitalis is quite acclimatised on the Nilgiris, growing there without any attention. The Madras Store Department obtains all its requirements from Ootacamund, and the leaf has been found equally active to that grown in England.

Henbane is a native of the temperate Himalayas from 8,000 to 11,000 ft. It was introduced into the Botanic Gardens, Saharanpur, in 1840, and it has been steadily cultivated there up to the present time, and the products supplied to medical depots satisfy the annual demand.

Ipecacuanha has been raised with a small measure of success in the hilly parts of India, and it only requires care and attention to raise it in sufficient amount to make it commercially remunerative.

Jalap-root grows as easily as potatoes in the Nilgiris, and there is no reason why the annual requirements (about 4,000 lbs.) for the Medical Stores of Bengal, Bombay and Madras should not be obtained from Ootacamund.

Mr. Puran Singh discussed the subject in a number of the "Indian Forester in 1914": he states that most of the drugs in the British Pharmacopœia grow wild in India, and that there is already a large export trade for some of them. He adds, however, that materials collected at random cannot be expected to fetch full prices as they seldom come up to standard quality, and he adds: "The few drugs that are not indigenous to India could easily be made to grow in some part or other of this vast land. The great advantage accruing from the systematic cultivation of drugs is that a regular supply of genuine drugs of standard quality is assured. The variation in the quality of wild-grown drugs is sometimes a very serious drawback to finding a profitable market for them. The quality of *Podophyllum Emodi* growing wild in India is an illustration in point. This plant was discovered by Sir George Watt in the year 1888, and now, even after twenty-four years, in which it has been shown to be identical with the American drug that is being employed for pharmaceutical purposes, it still remains unrecognised by the British Pharmacopœia, which, as explained by the "Chemist and Druggist" some time ago, is solely due to the uncertainty which still exists as to its physiological activity".

Mr. Singh also points out that the Indian consumers of medicine depend mostly on herbs growing wild in the Forests, the more important of these probably numbering at least 1,000. This inland trade is very large; the possibilities in the Punjab alone being put at Rs. 50,00,000. He mentions saffron, liquorice, and salep as products exotic to India, whose cultivation in this country looks full of promise. Mr. Singh suggests that a complete survey be made of the extent of the inland trade in medicinal products found growing wild in Indian forests in order to arrive at the figures of annual consumption, and that the forest areas where the most important drugs grow should be preserved. Inquiries should be instituted as to the best methods of cultivation, and if need be, the means of extending the artificial propagation. It is to provide data to induce the private capitalist to embark on such enterprises that Mr. Singh advocates the formation of some body to go into the matter. He suggests that India is well worthy of attention by those in this country who are interested in extending the culture of drugs in the British Empire. The Forest Department has already begun the cultivation of Indian podophyllum-root in the Punjab, United Provinces and the North-Western Frontier, and several maunds of dried rhizome are sold annually for local consumption. Mr. Hooper also shows that a start has been made in regard to the cultivation of belladonna, henbane and digitalis. One of the principal difficulties to be overcome is to ensure a ready market, and there is also always the danger of overproduction to be considered.

Essential Oils.

SANDALWOOD OIL is, by far the most important perfumery product of India. The sandalwood tree is a root parasite, obtaining its nourishment from the roots of other trees by means of suckers. It grows best in loose volcanic soil mixed with rocks, and preferably ferruginous in character. Although in rich soil it grows more luxuriantly, less scented wood is formed, and at an altitude of 700 feet it is said to be totally devoid of scent. The best yield of oil is obtained from trees growing at an altitude of 1,500 to 4,000 feet, but the tree requires plenty of room so as to enable it to select vigorous hosts to feed it.

PALMAROSA OIL, also known as Indian geranium or "Turkish geranium oil" is another of the principal perfume products of India. It is derived from the grass, *Cymbopogon Martini*, which is widely distributed in India, where it is known as "Motya." Gingergrass is an oil of inferior quality, possibly derived from older grasses or from a different variety of the same species. Both oils contain geraniol, the proportion in palmarosa being from 75 to 95 per cent. and in gingergrass generally less than 70 per cent. These oils are used in soap, perfumery, and for scenting hair oils and pomades.

LEMONGRASS OIL is derived from *Cymbopogon citratus* and *Cymbopogon flexuosus*. The former is a native of Bengal, and is largely cultivated all over India, but the oil distilled on the Malabar Coast and Cochin is derived principally from *C. flexuosus*.

VETIVER, OR CUS-CUS, is a perennial grass, *Vetivera zizanoides*, found along the Coromandel Coast and in Mysore, Bengal and Burma, in

most heavy soil along the banks of rivers. The leaves are practically odourless and only used for thatching and weaving purposes. The roots are used in perfumery and in the manufacture of mats and baskets.

THE MALABAR CARDAMOM, *Elettaria cardamomum*, is the source of the seeds official in the British and other Pharmacopœias. Cardamom oil of commerce is, however, not distilled from this variety on account of the high price, but is obtained almost exclusively from the long cardamom found growing wild and cultivated in Ceylon. The oil is used medicinally as a carminative and is also employed by perfumers in France and America.

COSTUS ROOT (the root of *Saussurea lappa*) is a native of Kashmir, where about 2,000,000 lbs. are collected annually. It is exported in large quantities to China where it is used for incense. It is also used to protect shawls and clothes from the attacks of insects. Its odour resembles that of orris root.

BLUMEA BALSAMIFERA is the source of the Nagai camphor used in China for ritualistic and medicinal purposes. This shrubby composite is found in the Himalayas and is indigenous to India. It is widely distributed in India and is used by the natives against flies and other insects.

EUCALYPTUS plantations are situated chiefly in the neighbourhood of Ootacamund, Coonoor and Wellington, at elevations varying from 5,500 to 8,400 feet the best being at from 7,200 to 8,000 feet. The climate of this region is fairly cool, equable and moist, with a well-distributed rainfall of about 50 to 80 inches; although frosts occur, the winters are mild on the whole, and snow is unknown. The soil, a red clay overlying gneissose rock, is rich and deep in some parts, shallow and poorer in others. A large factory is being built for the distillation of eucalyptus oil at Ootacamund. It is believed there is a considerable future for the undertaking, provided a sufficient supply of the leaves is available.

Manufacture of Quinine.

Government Cinchona plantations were started in India in 1862 from seed introduced by Sir Clements Markham from South America, of which the plant is a native. There are two main centres, Darjeeling and the Nilgiri Hills. In both localities a portion of the area is owned by tea or coffee planters, and the bark they produce is either sold to the Government or exported. Several species of cinchona are cultivated in India: namely, *Cinchona succirubra* (red bark), *C. calisaya* and *ledgeriana* (yellow bark), and *C. officinalis* (crown bark). The commonest species in Darjeeling is *C. ledgeriana*, and in Southern India *C. officinalis*. A hybrid form is also largely grown and yields a good bark. At the Government factories both cinchona febrifuge and quinine are made. Thanks to these factories, practically no quinine is nowadays imported for Government purposes.

DRUGS MANUFACTURE COMMITTEE.

In 1918 the Board of Scientific Advice accepted a proposal for the formation of a Drugs Manufacture Committee to investigate the possibilities of the cultivation of medicinal plants in India and the manufacture of drugs from them on a commercial scale. The Government of India acted on this recommendation and appointed a Committee whose primary functions are to investigate. (1) the possibilities of the cultivation of medicinal plants in India, and (2) the manufacture of drugs from them on a commercial scale.

It was announced in February 1920, that considerable progress had been made and that several articles which before the war were imported were being manufactured in India.

An Indian pharmacopœia. In a lecture delivered in 1923, Major R. N. Chopra, I.M.S., Professor of Pharmacology at the Calcutta School of Tropical Medicine, made some suggestions as to the lines on which the research should be followed in this field.

Firstly, there were drugs to be tested which were of established medicinal value in Western Medicine and which were in use in the Pharmacopœas of different countries.

Secondly, money can be saved by substituting drugs which, though not exactly the same, have similar properties and actions resembling the imported and often expensive remedies.

Thirdly, to test the drugs of known value in Ayurvedic, Tibbi and other indigenous systems and which are not used by the Western systems. In all the rich foliage of India and amongst those herbs used by the leading Kabirajs and Hakims, there must be many new preparations which are at present not more widely known.

Indian pharmacology has a great future before it and the Indian population should welcome the way that has now been shown by the work commenced at the Calcutta School of Tropical Medicine. No better example of this can be given than the discovery and application of the ethyl esters of hydno-carpic acid, the active principle of chaulmoogra oil by Sir Leonard Rogers, which has now put the treatment of leprosy on a sound basis. The scientific examination of drugs is a laborious process in which the chemist plays as important a part as the medical man. At present this has not been realized by the medical profession, and consequently little provision has been made for them in research schemes. A larger staff of chemists is therefore needed if any rapid advance is to be made and the work to be carried on at the same standard of efficiency as the other countries. It is by work of this type that it is hoped to see some day established an Indian Pharmacopœia, depending mainly upon indigenous sources of supply, formulated and adapted for the special requirements of India and bringing medicine and the healing art within the means and resources of the masses.

Intoxicating Drugs.

Among the drugs which are of great medicinal value, but of which the misuse has been a source of crime and disease among the people of India, there are, in addition to cocaine, **Opium** (for details of the trade see article

ou opium) which is the oldest and the best known. A resolution of the Government of India, dated August 19, 1912, adopted the policy of suppressing all public gatherings for the purpose of smoking opium and of prohibiting all manufacture of opium smoking preparations save by an individual of a small quantity for his own private consumption. The form which legislation should take was left to the local Governments, provided that an assembly of three or more persons for the purpose of smoking opium should be made illegal. In adopting this policy Government distinguished between opium smoking and opium eating. "Opium, said the Resolution, as taken in moderation by the average Indian is eaten either as a mild stimulant, or as a prophylactic against malaria, or for the relief of pain or in the treatment of diabetes. It is in fact a household remedy for many ills, and it is safe to say that as a national habit the eating of opium is less injurious than is the consumption of alcohol in many other countries. Centuries of inherited experience have taught the people of India discretion in the use of the drug, and its misuse is a negligible feature in Indian life. These conclusions were accepted by the Shanghai Commission (of 1909) who, while they recommended the gradual suppression of the practice of opium smoking, refrained from advising the abandonment of the policy of regulation by which the practice of opium eating in the country has hitherto been successfully kept under restraint."

Next to opium and cocaine, the most common drugs are the three **hemp** products which are freely used throughout British India. The Indian hemp is a shrub growing wild in the hills and lower elevations, and cultivated in the plains. The leaves of the wild plants, collected and dried in the sun, constitute **bhang**, a sort of green tea, which is mixed with boiling water and drunk as an infusion. This has an exhilarating effect, followed by a feeling of intoxication. When the female plants are cultivated they exude a resinous juice, which causes the flowering tops to stick together. Collected under these conditions the tops are rolled in the hands or pressed under foot; the first process produces "round ganja," and the second "flat ganja." **Ganja** is a stronger form of hemp than bhang, and is used for smoking. The third form of Indian hemp is **charas**, the resinous secretion of the plant that develops when it is grown at certain altitudes. Large quantities of charas are produced in Chinese Turkestan, and enter India by way of Leh. This is sold over the northern part of the country, and used for smoking purposes.

The Cocaine Traffic.

The form of cocaine chiefly used in India is Cocaine Hydrochloride. This salt forms light shining crystals, with a bitterish taste, and is soluble in half its weight of water. The alkaloid cocaine—of which this is a salt—is obtained from the dried leaves of the Erythroxylon Cocaine which grows in Bolivia, Peru, Java, Brazil and other parts of South America. The leaves are most active when freshly dried and are much used by the Natives as a stimulant. Tea made from them has a taste similar to green tea and is said to be very effectual in keeping people awake. In India the Coca plant seems never to have been cultivated on a commercial scale. It has been grown experimentally in the tea districts of Ceylon, Bengal and Southern India and has been found to produce a good quality and quantity of cocaine. As the plant has not been seriously cultivated and as there is no possibility for the present of the drug being manufactured in India, no restrictions have as yet been placed on its cultivation.

Spread of the habit.—The cocaine traffic in India which seems to be reaching alarming proportion in spite of legislation and strict preventive measures is of comparatively recent growth; though it is impossible to estimate how widespread it was in 1903 when the Bombay High Court for the first time decided that cocaine was a drug included within the definition of an intoxicating drug in the Bombay Abkari Act. Since that date the illegal sale of cocaine in India has largely increased and the various provincial Excise Reports bear witness to the spread of the "Cocaine habit." The consumers of the drug, which is notoriously harmful, are to be found in all classes of society and in Burma even school children are reported to be its victims; but in India as in Paris the drug is mostly used by prostitutes or by men as an aphrodisiac. The habit has spread chiefly to those classes which are prohibited by religion or caste rules from partaking of liquor and the well-known Indian intoxicating drugs.

Imports from Europe.—Cocaine and its allied drugs are not manufactured in India, but are imported. Most of the drug which is smuggled into India, comes from Germany and bears the mark of the well-known house of E. Merck, Darmstadt. This firm issues cocaine in flat packets of various sizes ranging from 1 to 3 ounces which are easily packed away with other articles and greatly favour the methods of smugglers. Owing to its strength and purity cocaine eaters prefer this brand to any other in the market. Restrictions on export from Europe have been under consideration for some time but as yet no international scheme devised to that end has been agreed upon. That trade was stopped during the war but Japanese imports into India became an almost equal danger.

Smuggling.—So far as the cases already detected show, the persons who smuggle the drug by sea from Europe and places outside India, into India, are chiefly sailors, stewards, firemen and sometimes engineers and officers of foreign ships. The ports through which cocaine enters India are Bombay, Karachi, Calcutta, Madras, Marmagoa and Pondicherry. The main inland distributing centres are Delhi, Lucknow, Meerut, Lahore, Mooltan, Surat and Ahmedabad. Delhi especially is notorious for the cocaine trade. Great ingenuity is employed in smuggling cocaine through the Custom houses. It is packed in parcels of newspapers, books, toys and piece-goods and in trunks which have secret compartments. The retail trade in the towns is very cunningly organized and controlled. In addition to the actual retailers, there is a whole army of watchmen and patrols whose duty is to shadow the Excise and Police Officials and give the alarm when a raid is contemplated. Since the commencement of the war several cases of importation of Japanese cocaine have been detected, the importers being Chinese and Japanese sailors. Chinese opium smugglers bring cocaine from Japan here to exchange it for Indian opium, which is smuggled into China. Most of the cocaine seized bears the mark "Sanscido & Co., Kobe." a few seizures of American cocaine have been made, of late. In 1921-22 the largest seizure of cocaine made by the Excise Department in Bombay was one of 28,875 grains.

Price.—The amount seized is either given to Hospitals in India or destroyed. It is no longer possible to buy cocaine from any betel-nut seller as it was ten years ago, but scores of cases in the Police Courts show that the retail trade thrives, though to a diminished extent, in Bombay. High profits ensure the continuance of the trade. At present the English quotation varies from 36 to 40 shillings per oz. and the price as sold by licensed chemists in India varies from Rs. 27 to Rs. 31 per oz. Owing to the war and the consequent stoppage of illicit importations from Austria and Germany it is not possible to buy the smuggled drug from the wholesale dealers for less than Rs. 100 to 120 per ounce and when sold by the grain the price realized varies from Rs. 400 to 425 per ounce. These profits are further enhanced by adulteration with phenacetin and inferior quinine.

The law in regard to Cocaine.—This varies in different provinces. A summary of the law in Bombay is as follows: No cocaine can be imported except by a licensed dealer and importation by means of the post is entirely prohibited. The sale, possession, transport and export of cocaine are prohibited except under a license or permit from the Collector of the District. A duly qualified and licensed Medical practitioner is allowed to transport or remove 20 grains in the exercise of his profession; and as far as 6 grains may be possessed by any person if covered by a *bona fide* prescription from a duly qualified Medical practitioner. The maximum punishment for illegal sale, possession, transport, etc., under Act V of 1878 as amended by Act XII of 1912 is as follows: Imprisonment for a term which may extend to one year or fine which may extend to Rs. 2,000 or both and on any subsequent conviction imprisonment for a term which may extend to 2 years or fine which may extend to Rs. 4,000 or both. The law in Bombay has been further amended so as to enable security to be taken from persons who have been convicted of cocaine offences. The new Act also contains a section for the punishment of house owners who let their houses to habitual cocaine sellers.

INDIAN TOBACCO.

The tobacco plant was introduced into India by the Portuguese about the year 1605. As in other parts of the world, it passed through a period of persecution, but its ultimate distribution over India is one of the numerous examples of the avidity with which advantageous new crops or appliances are adopted by the Indian agriculturist. Five or six species of *Nicotiana* are cultivated, but only two are found in India, namely, *N. Tabacum* and *N. rustica*. The former is a native of South or Central America, and is the common tobacco of India. About the year 1829 experiments were conducted by the East India Company towards improving the quality of leaf and perfecting the native methods of curing and manufacturing tobacco. These were often repeated, and gradually the industry became identified with three great centres: namely, (1) Eastern and Northern Bengal (more especially the District of Rangpur); (2) Madras, Trichinopoly, Dindigul, Coconada and Calicut in Southern India; and (3) Rangoon and Moulmein in Burma. Bengal is the chief tobacco growing Province, but little or no tobacco is manufactured there. The chief factories are near Dindigul in the Madras Presidency, though, owing to the imposition of heavy import duties on the foreign leaf used as a cigar wrapper, some cigar factories have been moved to the French territory of Pondicherry.

The question of improving the quality of Indian tobaccos has received the attention of the Botanical section of the Agricultural Research Institute, Pusa, and three Memoirs have been published recording the results of investigations in that direction. The immediate problem at Pusa is the production of a good cigarette tobacco. Many attempts have been made in the past to introduce into India the best varieties of cigarette tobacco from America, but the results have been disappointing. It is now hoped to build up by hybridization new kinds of tobacco, suited to Indian conditions of growth, which possess in addition the qualities necessary to obtain a better price.

Area under Cultivation.—The cultivation of tobacco is very widespread in Burma. The two main varieties are called "Burmese tobacco" and "Havana tobacco." Of the Burmese tobacco there are two main varieties "Seywet-gyi," the large-leaved variety and "Seywet-gyun," a smaller-leaved variety with pointed leaves. The former yields a heavier crop, but the latter gives better quality. There is always a great demand on the market for both the Havana and the Burma tobacco. The smooth leaves of the Havana plant are used for the wrappers and the coarser Burmese leaf for the filling.

The most important tobacco tracts in British India are:—(*i*) the Coimbatore and Dindigal tract of Madras, where the *Usi-Kappal* and *Wara Kappal* varieties are largely grown, the former supplying the Trichinopoly cigar; (*ii*) the Godavari Delta of Madras; (*iii*) the Rangpur tract of Bengal; (*iv*) the Districts of Bihar and Orissa; (*v*) Guzerat in Bombay and (*vi*) the delta tract of Burma.

The season for harvesting varies in different localities ranging from December to June, but the bulk of the crop is harvested during the months of February, March and April. The leaves when quite dry, are assorted and placed in heaps in stacks to ferment. They are then tied into bundles of 25 or 30, a useless leaf being employed for tying each bundle. The leaves are laid perfectly flat, the bundles being fan-shaped. In this condition they are baled, the broom-like ends projecting outwards. By varying the degree of fermentation of the leaves, different qualities of tobacco are obtained. A black variety is used in India for cake tobacco, and this is the most common product, but a certain amount of yellow leaf is grown for cigar making.

Small Holding Crop.—The area under tobacco in British India is always well above the million-acre line, and there are some 100,000 acres in the Indian States. The outturn varies, according to the attention given to the crop, from 200lb. to as much as 3,000 lb. of cured leaf per acre. The long-established Indian theory has been that the crop is suited only to small holdings, as it requires considerable attention and liberal manuring. But these latter conditions, as the history of the Assam tea industry shows, are not necessarily a bar to large plantations and organized production. The possibilities in this direction have been little explored, largely because cultivation in small holdings was current when British influence was established in India, whereas the cultivation of tea owes its introduction entirely to British enterprise. The great bulk of the tobacco grown in the country disappears in local consumption, but the export trade is developing.

Export Trade.—In the last three fiscal years the imports into the United Kingdom from India have risen from 1,677,00 lb. to 3,577,000lb. The trade continues to advance, and in the first five months of the fiscal year 1923-24 the shipments to England reached close upon 800,000lb., as compared with 600,000lb. in the corresponding period of last year and 435,000lb. in the first five months of the previous year.

Since the duty in England is charged by weight and not by value, India, as an exporter of the relatively cheaper grades, has to pay more duty in proportion than some foreign countries. But the higher degree of preference she will now enjoy will provide a substantial set off, and at the same time stimulate the efforts being made to raise the quality of production. Another factor in the same direction is the effect of the heavier import duties on tobacco shipped to India, and the consequent tendency of middle-class and other consumers to find satisfaction in the homegrown article.

The School of Oriental Studies.

This School was established by Royal Charter in June 1916. The purposes of the School (as set out in the Charter) are to be a School of Oriental Studies in the University of London to give instruction in the languages of Eastern and African peoples, Ancient and Modern, and in the Literature, History, Religion, and Customs of those peoples, especially with a view to the needs of persons about to proceed to the East or to Africa for the pursuit of study and research, commerce or a profession, and to do all or any of such other things as the Governing Body of the School consider conducive or incidental thereto, having regard to the provision for those purposes which already exists elsewhere and in particular to the co-ordination of the work of the School with that of similar institutions both in this country and in its Eastern and African Dominions and with the work of the University of London and its other Schools.

The School possesses noble and adequate buildings, in Finsbury Circus, provided for them by Government under the London Institution (Transfer) Act of 1912. The sum of £25,000 required for the alteration and extension of the buildings of the London Institution for the purposes of the School was voted by Parliament. The School buildings are quiet, although they are in the heart of the City. The School provides teaching in more than forty languages. In a considerable proportion of the spoken languages instruction is given by teachers belonging to the countries where the languages in question are spoken, as it is the aim of the School to provide as far as possible both European and Oriental Lecturers in the principal languages included in the curriculum.

Courses on the History, Religions, and Customs of Oriental and African countries form a special feature in the teaching of the School. Inter-collegiate arrangements have been made with University College for instruction in Phonetics, modern phonetic methods being used to facilitate the acquirement of correct pronunciation. Inter-collegiate arrangements will also be made with the London School of Economics for instruction in the Sociology and Anthropology of the less civilised races.

Courses are also provided in Indian Law and the History of India, and arrangements are made from time to time for special courses of lectures to be given by distinguished orientalists not of the staff of the School.

Patron, H. M. the King. *Chairman of the Governing Body*, Sir John Hewett, M.P., G.C.S.I. K.B.E., C.I.E. *Director*, Professor Sir E. Denison Ross, C.I.E., PH.D.

Teaching Staff.

	Name.	*Subjects.*	*Title.*
1.	Sir T. W. Arnold, C.I.E., LITT.D., M.A.	Arabic (Classical)	Professor.
2.	T. Grahame Bailey, M.A., B.D., D. LITT.	Hindustani (Urdu & Hindi)	Reader.
3.	L. D. Barnett, LITT.D., M.A.	Ancient Indian History and Sanskrit	Lecturer.
2.	C. O. Blagden, M.A.	Malay	Reader.
	P. H. Chang	Chinese (Mandarin)	Lecturer.
	G. H. Darab-Khan	Persian	,,
3.	Caroline A. F. Rhys Davids D.LITT., M.A.	Pali	,,
3.	W. Doleret, M.A., I.C.S. (retired)	Gujarati	,,
6.	H. H. Dodwell, M.A.	History	Professor.
8.	A. S. Doniach, B.LITT.	Modern Hebrew	Lecturer.
	E. Dora Edwards	Chinese (Mandarin)	,,
	H. A. R. Gibb, M.A.	Arabic (Classical)	,,
	J. Withers Gill, O. B.E.	Hausa	,,
3.	A. L. Hough	Burmese	,,
	Commander N. E. Isemonger, R. N. (retired)	Japanese	,,
	Sheikh H. Abdel Kader	Arabic (Egyptian)	,,
	S. G. Kanhere	Marathi	,,
	G. E. Leeson	Hindustani (Urdu & Hindi)	,,
3.	W. M. McGovern, D. Phil.	Japanese	,,
3.	W. Sutton Page, B.A., B.D., O.B.E.	Bengali	Reader.
3.	T. G. F. Palmer	Hindustani	Lecturer.
2.	W. Hopkyn Rees, D.D.	Chinese	Reader.
3.	Ali Riza Bey	Turkish	Lecturer.
4.	Sir E. Denison Ross, C.I.E., PH.D.	Persian	Professor
3.	A. Sabonadiere, I.C.S. (retired)	Indian Law	Lecturer.
3.	A. Seli	Arabic (Syrian and Classical)	,,
	S. Topalian	Turkish	,,
7.	R. L. Turner, M.A., M.C.	Sanskrit	Professor
5.	Alice Werner	Swahili & other Bantu languages	,,
2.	M. de Z. Wickremasinghe, M.A.	Tamil and Telugu	Reader.
3.	C. E. Wilson, B.A.	Persian	Lecturer.
	S. Yoshitake	Japanese	,,

1. University Professor of Arabic and Appointed Teacher.
2. University Reader and Appointed Teacher.
3. Recognised Teacher in the University of London.
4. University Professor of Persian and Appointed Teacher.
5. University Professor of Swahili and other Bantu languages.
6. University Professor of the History and Culture of British Possessions in Asia, with special reference to India.
7. University Professor of Sanskrit.
8. Ahad Ha'am Lectureship in Modern Hebrew.

Chambers of Commerce.

Modern commerce in India was built up by merchants from the west and was for a long time entirely in their hands. Chambers of Commerce and numerous kindred Associations were formed by them for its protection and assistance. But Indians have in recent years, taken a large and growing part in this commercial life. The extent of their participation varies greatly in different parts of India, according to the natural proclivities and genius of different races. Bombay, for instance, has led the way in the industrial and commercial regeneration of the new India, while Bengal, very active in other fields of activity, lags behind in this one. Arising from these circumstances we find Chambers of Commerce in Bombay, Karachi, Calcutta, Madras and other important centres, with a membership both European and Indian; but alongside these have sprung up in recent years certain Associations, such as the Bombay Indian Merchants' Chamber and Bureau, of which the membership is exclusively Indian. These different classes of bodies are in no sense hostile to one another and constantly work in association.

The London Chamber of Commerce in 1912, realising the increasing attention demanded by the economic development of India, took steps to form an "East India Section" of their organization. The Indian Chambers work harmoniously with this body, but are in no sense affiliated to it, nor is there at present any inclination on their part to enter into such close relationship, because it is generally felt that the Indian Chambers can themselves achieve their objects better and more effectively than a London body could do for them, and on various occasions the London Chamber, or the East India Section of it have shown themselves out of touch with what seemed locally to be immediate requirements in particular matters.

A new movement was started in 1913 by the Hon. Sir Fazulbhoy Currimbhoy Ibrahim, a leading millowner and public citizen of Bombay, which aims at effecting great improvement in strengthening Indian commercial organization. Sir Fazulbhoy's original plan was for the formation of an Indian Commercial Congress. The proposal met with approval in all parts of India. The scheme was delayed by the outbreak of war but afterwards received an impetus from the same cause and the first Congress was held in the 1915 Christmas holiday season in the Town Hall, Bombay. The list of members of the Reception Committee showed that all the important commercial associations of Bombay were prepared to co-operate actively.

The Congress was attended by several hundred delegates from all parts of India. Mr. (now the Hon. Sir) D. E. Wacha, President of the Bombay Indian Merchants' Chamber, presided, as Chairman of the Reception Committee, at the opening of the proceedings and the first business was the election of Sir Fazulbhoy Currimbhoy as the first President. The Congress resolved upon the establishment of an Associated Indian Chamber of Commerce, and elected a Provincial Committee empowered to take the necessary steps to get the Association registered and to enrol members and carry on work. The Congress also approved of the draft constitution.

The following are the principal paragraphs of a Memorandum of Association of the new Associated Chamber as approved by the Congress.—

I. The name of the Chamber will be "THE ASSOCIATED INDIAN CHAMBER OF COMMERCE."

II. The Registered Office of the Chamber will be in Bombay.

III. The objects for which the Chamber is established are:—

(*a*) To discuss and consider questions concerning and affecting trade, commerce, manufactures, and the shipping interests, at meeting of delegates from Indian Chambers of Commerce and Commercial Associations or Bodies and to collect and disseminate information from time to time on matters affecting the common interests of such Chambers or Associations or Bodies and the commercial, manufacturing and shipping interests of the country.

(*b*) To communicate the opinions of the Chambers of Commerce and other Commercial Associations or Bodies separately or unitedly, to the Government or to the various departments thereof, by letter, memorial, deputation or otherwise.

(*c*) To petition Parliament or the Government of India or any Local Government or authority on any matter affecting trade, commerce, manufacture or shipping.

(*d*) To prepare and promote in Parliament or in the Legislative Councils of India, both Imperial and Provincial, Bills in the interest of trade, commerce, manufactures, and shipping of the country and to oppose measures which, in the opinion of the Chamber, are likely to be injurious to those interests.

(*e*) To attain those advantages by united action which each Chamber or Association or body may not be able to accomplish in its separate capacity.

(*f*) To have power to establish an office either in England or in any part of British India with an Agent there, in order to ensure to the various Chambers early and reliable information on matters affecting their interests and to facilitate communication between the Chamber or individual chambers and the Government or other public bodies, and generally to conduct and carry on the affairs of the Chamber.

(*g*) To organise Chambers of Commerce, Commercial Associations or Bodies in different trade centres of the Country.

(*h*) To convene when necessary the Indian Commercial Congress at such places and at such times as may be determined by a Resolution of the Chamber.

(*i*) To do all such other things as may be incidental or conducive to the above objects.

The Articles of Association provide for the management of the Chamber by an Executive Council composed of a President, Vice-President, and ten other members elected at the annual meeting of the Associated Chamber, the Executive Council to present a report and statement of accounts at each annual meeting. The Articles declare the number of members of the Associated Chamber not to exceed one hundred, and the Executive Council are given power to elect honorary members. "There shall be an annual meeting of the Associated Indian Chamber held at Bombay on a date to be fixed by the Executive Council in the month of February," or at some other time, and "semi-annual or special meetings . . . may be convened by the Executive Council or on the requisition of one-third of the total number of members addressed to the Secretary . . . "

The following are details of the principal Chambers of Commerce and kindred bodies in India at the present time :—

BENGAL.

The Bengal Chamber of Commerce was founded in 1834. Its head quarters are in Calcutta. Other societies connected with the trade and commerce of the city are the Royal Exchange, the Bengal Bonded Warehouse Association, the Calcutta Trades Association, the Bengal National Chamber of Commerce and the Marwari Chamber of Commerce. The Bengal Chamber is registered with a declaration of membership of 300. Its objects are the usual purposes connected with the protection of trade "in particular in Calcutta." There are two classes of members. Permanent (Chamber and Associate) and Honorary.

Merchants, bankers, shipowners representatives of commercial, railway and insurance companies, brokers, persons and firms engaged in commerce, agriculture, mining or manufacture, and joint stock companies or other corporations, formed for any purpose or object connected with commerce, agriculture, mining or manufacture, and persons engaged in or connected with art, science or literature, may be elected as permanent members of the Chamber.

The following are the office bearers of the Chamber for the year 1923-24 :—

President.—Mr. W. L. Carey, M.L.C. (Bird & Co.)

Vice-President.—Hon. Sir Robert Watson Smyth. (Turner Morrison & Co., Ld.)

Committee.—Mr. J. W. A. Bell, M.L.C. (Mackinnon, Mackenzie & Co.), Mr. A. M. Clark, M.L.C. (Bengal Nagpur Railway), Mr. J. B. Crichton (Mercantile Bank of India, Ld.), The Hon. Sir Edgar Holberton, C.B.E. (Marshall Sons & Co. (India), Ld.), Mr. Nigel F. Paton (Graham & Co.), Mr. J. A. Tassie (James Finlay & Co. Ld.), and Mr. A. d'A. Wills, M.L.C. (Gillanders Arbuthnot & Co.).

The Secretary of the Chamber is Mr. H. M. Haywood, C.I.E., Asst. Secys.—Mr. D. K. Cunnison and Mr. A. C. Daniel.

The following are the public bodies (among others) to which the Chamber has the right of returning representatives, and the representatives returned for the current year :—

Council of State.—Hon. Sir Robert Watson Smyth.

Bengal Legislative Council.—Mr. J. W. A. Bell, M.L.C., Mr. A. M. Clark, M.L.C., Mr. J. Y. Philip, M.L.C., Mr. A. Cochran, O.B.E., M.L.C., Mr. R. B. Wilson, C.I.E., M.L.C., Mr. A. d'A. Willis, M.L.C.

Calcutta Port Commission.—Mr. E. J. Oakley (Kilburn & Co.), Mr. R. O. Law (Birkmyre Brothers), Mr. J. W. A. Bell, M.L.C., (Mackinnon, Mackenzie & Co.), Mr. J. H. Pattinson, M.L.C. (H. V. Low & Co. Ld.), Hon. Sir Robert Watson Smyth, (Turner Morrison & Co., Ld.), and Mr. Nigel F. Paton (Graham & Co.)

Calcutta Municipal Corporation.—Messrs. Norman R. Luke (Jas. Luke & Sons), W. S. J. Wilson, M.L.C. (Turner Morrisons & Co., Ld.), George Morgan, M.L.C. (Morgan, Walker & Co.) and J. Campbell Ferrester, M.L.C. (Smith Forrester & Co.).

Bengal Boiler Commission.—Messrs. R. Neish (Tittagarh Jute Mills Co., Ld., No. 2.), H. H. Reynolds (Andrew Yule & Co.) and H. E. Skinner, M.L.C. (Jessop & Co., Ltd.)

Board of Trustees of the Indian Museum.—Hon. Sir Robert Watson Smyth (Turner Morrison & Co., Ltd.).

Bengal Smoke Nuisances Commission.—Messrs. J. D. Balfour (Burn & Co., Ltd.) and G. Robertson (Union Jute Coy's., S. Mill.)

Calcutta Improvement Trust.—Mr. A. H. Johnstone, B.A., B.E., A.M.I.C.E. (East Indian Railway.)

The Chamber elects representatives to various other bodies of less importance, such as the committee of the Calcutta Sailors' Home, and to numerous subsidiary associations. The following are the recognised associations of the Bengal Chamber of Commerce :—

Calcutta Wheat and Seed Trade Associations Indian Jute Mills Association, Indian Tea Association, Calcutta Tea Traders Association, Calcutta Fire Insurance Agents Association, Calcutta Import Trade Association, Calcutta Marine Insurance Agents Association, The Wine, Spirit and Beer Association of India, Indian Mining Association, Calcutta Baled Jute Association, Indian Paper Makers' Association, Indian Engineering Association, Calcutta Jute Fabrics Shippers Association, Calcutta Hydraulic Press Association, Jute Fabric Brokers' Association, Baled Jute Shippers' Association, Calcutta Jute Dealers' Association, Calcutta Liners' Conference, Calcutta Hides and Skins Shippers' Association, Northern India Tanners' Federation, Indian Indigo Association, Calcutta Motor Insurance Association, Indian Lac Association for Research and Calcutta Accident Insurance Association.

The Chamber maintains a Tribunal of Arbitration for the determination, settlement and adjustment of disputes and differences relating to trade, business, manufactures, and to customs of trade, between parties, all or any of whom reside or carry on business personally or by agent or otherwise in Calcutta, or elsewhere in India or Burmah, by whomsoever of such parties the said disputes and differences be submitted. The Secretary of the Chamber acts as the Registrar of the Tribunal, which consists of such members or assistants to members as may, from time to time, annually or otherwise be selected by the Registrar and willing to serve on the Tribunal. The Registrar from time to time makes a list of such members and assistants.

The Chamber also maintains a Licensed Measurers Department controlled by a special committee. It includes a Superintendent (Mr. R. Ellis), Deputy Superintendent (Mr. A. H. Lugg), Head Office Manager (Mr. C.G. Smith) and three Assistant Superintendents (Messrs. J. G. Smyth) A. H. Mathews, and G. C. G. Smyth and the staff at the time of the last official returns consisted of 105 officers. The usual system of work for the benefit of the trade of the port is followed. The Department has its own provident fund and compassionate funds and Measurers' Club. The Chamber does not assist in the preparation of official statistical returns. It publishes weekly the *Calcutta Prices Current* and its Monthly Supplement and also publishes a large number of statistical circulars of various descriptions in addition to a monthly abstract of proceedings and many other circulars on matters under discussion.

BOMBAY.

The object and duties of the Bombay Chamber, as set forth in their rules and regulations, are to encourage a friendly feeling and unanimity among commercial men on all subjects involving their common good; to promote and protect the general mercantile interests of this Presidency; to collect and classify information on all matters of general commercial interest; to obtain the removal, as far as such a Society can, of all acknowledged grievances affecting merchants as a body, or mercantile interests in general; to receive and decide references on matters of usage and custom in dispute, recording such decisions for future guidance, and by this and such other means, as the Committee for the time being may think fit, assisting to form a code of practice for simplifying and facilitating business; to communicate with the public authorities, with similar Associations in other places and with individuals, on all subjects of general mercantile interests; and to arbitrate between parties willing to refer to, and abide by, the judgment of the Chamber.

The Bombay Chamber was established in 1836, under the auspices of Sir Robert Grant, who was then Governor of the Presidency, and the programme described above was embodied in their first set of rules. There is affiliated with the Chamber the Bombay Millowners' Association, which exists to carry out the same general objects as the Chamber in the special interests of "millowners and users of steam and water power." According to the latest returns, the number of Chamber members is 144 and the number of Associated members is 2. Of these numbers 19 represent banking institutions, 7 shipping agencies and companies, 3 firms of solicitors, 3 railway companies, 6 insurance companies, 16 engineers and contractors, 92 firms engaged in general mercantile business.

All persons engaged or interested in mercantile pursuits desirous of joining the Chamber and disposed to aid in carrying its objects into effect are eligible to election to membership by ballot. The Chamber member's subscription is Rs. 360 and the Associate member's subscription is Rs. 300 per annum and an additional charge of Rs. 640 per annum is made to firms as subscription to the trade returns published by the Chamber. Gentlemen distinguished for public services, or "eminent in commerce and manufactures," may be elected honorary members and as such are exempt from paying subscriptions. Any stranger engaged or interested in mercantile pursuits and visiting the Presidency may be introduced as a visitor by any Member of the Chamber inserting his name in a book to be kept for the purpose, but a residence of two months shall subject him to the rule for the admission of members.

Officers of the Year.

The affairs and funds of the Chamber are managed by a committee of nine ordinary members, consisting of the chairman and deputy-chairman and seven members. The committee must, as a rule, meet at least once a week and the minutes of its proceedings are open to inspection by all members of the Chamber, subject to such regulations as the committee may make in regard to the matter. A general meeting of the Chamber must be held once a year and ten or more members may requisition, through the officers of the Chamber, a special meeting at any time, for a specific purpose.

The Chamber elects representatives as follows to various public bodies:—

The Council of State, one representative.

Legislative Council of the Governor of Bombay, two representatives.

Bombay Municipal Corporation, one member, elected for three years.

Board of Trustees for the Improvement of the City of Bombay, one member, elected for two years.

Board of Trustees of the Port of Bombay, five members, elected for two years

Representatives on the Legislative Councils become ex-officio members of the committee of the Chamber, during their terms of office, if they are not already members.

The following are the officers of the Chamber for the year 1923-24 and their representatives on the various public bodies:—

Chairman.—Sir Frank Nelson, Kt., M.L.C.

Deputy Chairman.—L. S. Hudson, Esq.

Committee.—F. C. Annesley, Esq., R. Mclean, Esq., N. Birrell, Esq., V. A. Grantham, Esq., R. R. Hynd, Esq., A. P. Morrison, Esq., C. G. Nomico, Esq.

Secretary: Mr. C. B. Sayer.

Representatives on—

Council of State: The Hon'ble Sir Arthur Froom, Kt.

Bombay Legislative Council: Sir Frank Nelson, Kt., M.L.C., & V. A. Grantham, Esq., M.L.C.

Bombay Port Trust: The Hon'ble Sir Arthur Froom, Kt., F. C. Annesley, Esq., A. K. Graham, Esq., T. E. Cunningham, Esq., Harry T. Gorrie, Esq.

Bombay Improvement Trust: Harry T. Gorrie, Esq.

Bombay Municipal Corporation: G. L. Winterbotham, Esq.

Sydenham College of Commerce Advisory Board: Sir Frank Nelson, Kt., M.L.C., E. C. Dalton, Esq

Bombay Smoke Nuisances Commission: A. Geddis, Esq.

St. George's Hospital Advisory Committee: R. R. Hynd, Esq.

Indigenous Industries Advisory Committee: N. Birrell, Esq.

Indian Central Cotton Committee: V. A. Grantham, Esq.

Empire Cotton Growing Corporation: Osborne Marshall, Esq.

Advisory Committee to the Director of Development: F. A. H. East, Esq.

Auxiliary Force Advisory Committee: D. W. Wilson, Esq., C.I.E., V.D.

Ex. Services Association, (India): Sir Frank Nelson, Kt., M.L.C.

Army Canteen Board (India): Sir Frank Nelson, Kt., M.L.C.

Special Work.

One of the most important functions performed by the Chamber is that of arbitration in commercial disputes. Rules for this have been in existence for many years and have worked most satisfactorily. The decisions are in all cases given by competent arbitrators appointed by the General Committee of the Chamber and the system avoids the great expense of resort to the Law Courts.

A special department of the Bombay Chamber is its Statistical Department, which prepares a large amount of statistical returns connected with the trade of the port and of great importance to the conduct of commerce. The department consists of fourteen Indian clerks who, by the authority of Government, work in the Customs House and have every facility placed at their disposal by the Customs authorities. They compile all the statistical information in connection with the trade of the port, in both export and import divisions, which it is desirable to record. No other Chamber in India does similar work.

The Bombay Chamber publishes a Daily Arrival Return which shows the receipts into Bombay of cotton, wheat and seeds, and a Daily Trade Return, which deals with trade by sea and shows in great detail imports of various kinds of merchandise and of treasure, while the same return contains particulars of the movements of merchant vessels.

The Chamber publishes twice a week detailed reports known as Import and Export manifests, which give particulars of the cargo carried by each steamer to and from Bombay.

Three statements are issued once a month. One shows the quantity of exports of cotton, seeds and wheat from the principal ports of the whole of India. The second gives in detail imports from Europe, more particularly in regard to grey cloths, bleached cloths, Turkey red and scarlet cloths, printed and dyed goods, fancy cloth of various descriptions, woollens, yarns, metals, kerosine oil, coal, aniline dyes, sugar, matches, wines and other sundry goods. The third statement is headed, "Movements of Piece Goods and Yarn by Rail," and show the despatches of imported and local manufactured piece-goods and yarn from Bombay to other centres of trade served by the railways.

The "Weekly Return" issued by the Chamber shows clearances of a large number of important destinations of merchandise. A return of "Current Quotations" is issued once a week, on the day of the departure of the English mail, and shows the rates of exchange for Bank and Mercantile Bills on England and Paris, and a large quantity of general banking and trade information.

The annual reports of the Chamber are substantial tomes in which the whole of the affairs of the Chamber and the trade of the port during the past year are reviewed.

The Chamber has also a Measurement Department with a staff of 18, whose business is that of actual measurement of exports in the docks before loading in steamers. Certificates are issued by these officers with the authority of the Chamber to shippers and ship agents as to the measurement of cotton and other goods in bales or packages. The measurers are in attendance on the quays whenever there are goods to be measured and during the busy season are on duty early and late. The certificates granted show the following details:—

(*a*) the date, hour and place of measurement
(*b*) the name of the shipper;
(*c*) the name of the vessel;
(*d*) the port of destination;
(*e*) the number and description of packages;
(*f*) the marks;
(*g*) the measurement; and, in the case of goods shipped by boats;
(*h*) the registered number of the boat;
(*i*) the name of the tindal.

Bombay Millowners' Association.

The Bombay Millowners' Association was established in 1875 and its objects are as follow:—

(*a*) The protection of the interests of millowners and users of steam water and/or electric power in India.
(*b*) The promotion of good relations between the persons and bodies using such power;
(*c*) The doing of all those acts & things by which these objects may be furthered.

Any individual partnership or company, owning one or more mill or mills or one or more press or presses or one or more ginning

or other factory or factories actuated by steam, water, electric and/or other power is eligible for membership, members being elected by ballot. Every member is entitled to one vote for every complete sum of Rs. 50 paid by him as annual subscription.

The membership of the Association in 1922 numbered 94.

The following is the Committee for 1923 :—

Capt. E. V. Sassoon, (*Chairman*), Mr. S. D. Saklatvala, Esq., (*Deputy Chairman*), The Hon'ble Sir Dinshaw E. Wacha, Kt., Sir Dinshaw M. Petit, Bart., Sir Fazulbhoy Currimbhoy, Kt., C.B.E., A. Geddis, Esq., Cowasjee Jehangir, Esq. (Junior), C.I.E., O.B.E., H. H. Lakin, Esq., H. M. Mehta, Esq., Ratansi D. Morarji, Esq., Laljee Naranjee, Esq., J. B. Petit, Esq., Munmohandas Ramji, Esq., M.L.A., N. B. Saklatvala, Esq., C.I.E., H. H. Sawyer, Esq., C. D. Silas, Esq., S. A. Taylor, Esq., Madhowji D. Thackersey, Esq., C. N. Wadia, Esq., C.I.E., T. Watts, Esq., C. B. Sayer, Esq., *Secretary*. T. Maloney, Esq., M.C., Tech. Asst. Secretary.

The following are the Association's Representatives on public bodies :—

Bombay Legislative Council: Mr. H. P. Mody.
Bombay Port Trust: Mr. J. A. Kay.
City of Bombay Improvement Trust: Mr. J. A. Kay.
Victoria Jubilee Technical Institute: Mr. Jehangir Bomanjee Petit.
Bombay Smoke Nuisances Commission: Messrs. N. B. Saklatvala, C.I.E. and W. A. Sutherland.
Advisory Board of Sydenham College of Commerce and Economics: Mr. J. A. Kay.
Central Cotton Committee: Mr. J. A. Kay.
Empire Cotton Growing Corporation: Mr. W. H. Brady.
Development of Bombay Advisory Committee: Mr. Jehangir B. Petit.
Bombay Technical and Industrial Educational Committee: Mr. J. A. Kay.
Royal Institute of Science Advisory Committee: Mr. J. A. Kay.
League of Nations—Commissions of Enquiry: Mr. J. A. Kay.

Indian Merchants' Chamber.

The Indian Merchants' Chamber was established in the year 1907. Its objects are :—

(*a*) To encourage friendly feeling and unanimity among business community on all subjects connected with the common good of Indian merchants.

(*b*) To secure organised action on all subjects relating to the interests of the Indian business community directly and indirectly.

(*c*) To promote the objects of the Indian business community in matters of inland and foreign trade, shipping and transport, industry and manufacture, banking and insurance.

(*d*) To collect and disseminate statistical and other information securing the promotion of the objects of the Chamber and to make efforts for the spread of commercial and economic knowledge.

(*e*) To take all steps which may be necessary for promoting, supporting or opposing legislation or other action affecting the aforesaid interests by the Government or any Department thereof or by any local body or bodies and in general to take the initiative to secure the welfare of the business community in all respects.

(*f*) To make representations to Local Central or Imperial authorities, Executive or Legislative on any matter affecting trade, commerce, manufacture or shipping, banking or insurance.

(*g*) To undertake by arbitration the settlement of commercial disputes between merchants and businessmen and also to provide for arbitration in respect of disputes arising in the course of trade, industry or transport, and to secure the services of expert technical and other men to that end if necessary or desirable.

(*h*) To advance and promote commercial and technical education and to found and support establishments and institutions for such purposes.

(*i*) To undertake special enquiries and action for securing redress for legitimate grievances of any branch of trade or industry as also all such other actions as may be conducive to the extension of trade, commerce or manufactures, or incidental to the attainment of the above objects.

(*j*) To secure the interests and well-being of the Indian business communities abroad.

(*k*) And generally to do all that may be necessary in the interests of the realisation of the above objects of the Chamber directly or indirectly.

There are three classes of members :—

(1) Ordinary, (2) Patrons and (3) Honorary.

(1) There are three classes of ordinary members :—

(*a*)—Residents of Bombay and its suburbs who will have to pay Rs.75 as annual subscription ; but joint stock Companies will have to pay Rs. 100 per year.

(*b*)—Mofussil members who will have to pay Rs. 25 as annual subscription.

(*c*)—Associations which will have to pay Rs. 125 as annual subscription.

Admission Fee :—All the ordinary members and patrons pay Rs. 100 as admission fee which is credited to a capital fund of the Chamber and not expended on revenue account except with the consent of the general body.

(2) Patrons:—Indian firms or individual Indian merchants can join as Patrons Firms will have to pay Rs. 5,000

and individuals Rs. 2,500 as donation, the proceeds of which will be credited to a capital fund which shall not be expended on revenue account but the interest whereof shall be taken to revenue account.

(3) Honorary members:—Gentlemen distinguished for public services or eminent in commerce and manufactures or otherwise interested in the aims and objects of the Chamber may be elected as Honorary members by a General Meeting of the Chamber on the recommendation of the Committee and as such shall be exempted from paying subscriptions. They shall not be entitled to vote at any meeting of the Chamber nor shall they be eligible to serve on the Committee.

Any Indian gentleman, firm or association engaged in mercantile pursuits or interested in trade and commerce desirous of joining the Chamber shall be eligible for membership.

The following bodies are connected directly and indirectly with the Chamber:—

The Grain Merchants' Association (which is a member).

The Hindustani Native Merchants' Association (which is a member).

The Bombay Rice Merchants' Association.

The Bombay Yarn, Copper and Brass Native Merchants' Association.

The Mauritius Shippers' Association.

The Bombay Shroff Association.

The Native Share and Stock Brokers' Association.

The Bombay Diamond Merchants' Association.

The Bombay Pearl Merchants' and Jewellers' Association.

The Bombay Bullion Exchange, Ltd.

The Bombay Paper and Stationery Merchants' Association.

The Bombay Stock Exchange, Ltd.

The Ghee Merchants' Association, Bombay.

The Japan and Shanghai Silk Merchants' Association, Bombay.

Under the Montagu-Chelmsford Reforms, the Chamber has the right of electing one representative on the Indian Legislative Assembly and one on the Bombay Legislative Council. The Chamber also has the right to elect five representatives on the Bombay Port Trust and one representative on the Bombay Municipal Corporation.

The following are the Office-bearers of the Indian Merchants' Chamber for the year 1923:—

Chairman.—Devidas Madhowji Thakersey, Esq., J.P.

Vice-Chairman.—Hon. Mr. Phiroze C. Sethna.

Committee.—Manmohandas Ramjee Esq., M.L.A., Sir Purshotamdas Thakurdas, C.I.E., M.B.E., M.L.A., Hon. Mr. Lallubhai Samaldas, C.I.E., Hansraj Pragji Thakersey, Esq., Lalji Naranji, Esq., Sir Fazulbhoy Currimbhoy, Jehangir Bomanjee Petit, Esq., M.L.C., Fazal Ibrahim Rahimtoola, Esq., B. F. Madon, Esq., Ishwardas Lakshmidas, Esq., N. M. Muzumdar, Esq., Girjashanker B. Trivedi, Esq., Laxmidas Rowjee Tairsee, Esq., Morarji Mulraj Khatau, Esq., Mahomedbhoy Hajibhoy Lalji, Esq., S. N. Pochkhanawalla, Esq., S. B. Billimoria, Esq., Gulabchand Devchand Zaveri, Esq., Motilal Kanji, Esq., Veiji Lakhamsey Nappoo, Esq., Kekobad Cawasji Dinshaw, Esq., Kikabhoy Premchand, Esq., Jamnadas Vasanji Manji, Esq.

Co-opted Members.—The Bombay Shroff Association (H. D. Jasani, Esq., Manu Subedar, Esq., Walchand Hirachand, Esq., M. M. Amersey, Esq., Jamnadas Dwarkadas, Esq.

The following are the Chamber's representatives on various public bodies:—

Indian Legislative Assembly: Sir Purshotamdas Thakurdas, C.I.E., M.P.E., M.L.A.

Bombay Legislative Council: Mr. Lalji Naranji, M.L.C.

Chamber's Representatives on the Board of Trustees of the Bombay Port Trust: Sir Purshotamdas Thakurdas, C.I.E., M.B.E., Mr. Devidas Madhavji Thackersey, Mr. Chhotalal Kilachand Devchand, Mr. Ishwardas Laxmidas, Mr. Lalji Naranji, M.L.C.

Chamber's Representative on the Bombay Municipal Corporation: Mr. Ishwardas Laxmidas.

Representative on the Advisory Committee to the Bombay Development Department: Mr. Lalji Naranji.

Representative on the Advisory Committee of the Director of Industries: Mr. Lalji Naranji.

Representative on the Indian Central Cotton Committee: Sir Purshotamdas Thakurdas, C.I.E., M.B.E.

Representative on the Advisory Committee of the Royal Institute of Science in Bombay: Sir Purshotamdas Thakurdas, C.I.E., M.B.E.

Representative on the Advisory Committee of the Grant Medical College, Bombay: Mr. Devidas Madhowji. (Ex-officio.)

Secretary: Mr. J. K. Mehta, M.A.

Assistant Secretary: Mr. K. M. Desai, B. Com.

The Chamber's Monthly Gujarati Journal has been converted into an Anglo-Gujarati Quarterly and is published in July, October January and April.

Cotton Trade Association.

The Bombay Cotton Trade Association, Limited was founded in 1876. The object for which it was established were, *inter alia*, "to adjust disputes between persons engaged in the cotton trade, to establish just and equitable principles in the trade to maintain uniformity to rules, regulations and usages in the trade, to adopt standards of classification in the trade, to acquire, preserve and disseminate useful information con-

nected with the cotton interests throughout all markets and generally to promote the cotton trade of the City of Bombay and India and augment the facilities with which it may be conducted." In 1892 the Association was incorporated under the Indian Companies Act, 1882, with a Capital of Rs. 50,000, in 50 shares of Rs. 1,000 each. In 1917 the share capital was increased to Rs. 60,000. In addition to the shareholders (Members), the Association had in 1918 126 Associate Members. The affairs of the Company are managed by a Board of Directors not less than nine or more than twenty in number. The present Directorate is constituted as follows:—

Mr. C. W. Du Breul, *Chairman*; The Hon. Sir P. Thakurdas, Kt., C.I.E., M.B.E, *Deputy Chairman*; Messrs. W. Ellis Jones, N. S. B. Samoilys, C. H. Roberts, W. Schmid, H. B. Moore, K. H. McCormack, V. A. Grantham.

Secretary.—Mr. D. Mehta.

Bombay Native Piece-Goods Merchants' Association.

The objects of the Association are as follow:—(*a*) To promote by creating friendly feelings and unity amongst the Merchants, the business of the piece-goods trade in general at Bombay, and to protect the interest thereof; (*b*) to remove as far as it will be within the powers of the Association to do so, all the trade difficulties of the piece-goods business and to frame such line of conduct as will facilitate the trade; (*c*) to collect and assort statistics relating to piece-goods and to correspond with public bodies on matters affecting trade, and which may be deemed advisable for the protection and advancement of objects of the Association or any of them; and (*d*) to hear and decide disputes that may be referred to for arbitration.

The following are the office-bearers for the current year:—

Chairman—Mr. Manmohandas Ramji, M.L.A., J.P.

Deputy Chairman.—Mr. Devidas Madhavji Thakersey, J.P.

Hon. Joint Secretaries.—Messrs. Goculdas Jivraj Dayal and Hurjiwan Walji.

Hon. Treasurer.—Mr. Mulji Luxmidas.

Grain Merchants' Association.

The object of this body is "to promote the interests of the merchants and to put the grain and oil-seeds trade on a sound footing." It is an influential body of large membership. The office holders for the current year are as follow:—

Chairman.—Mr. Velji Lakhamsi, B.A., LL.B.

Vice-Chairman.—Mr. Purshotam Hirji.

Hony. Secretary.—Mr. Nathoo Cooverji.

Secretary.—Mr. Uttamram Ambaram, B.A., LL.B.

The address of the Association is 262, Masjid Bunder Road.

KARACHI.

The objects and duties of the Karachi Chamber of Commerce are set forth in terms similar to those of Bombay. Qualifications for membership are also similar. Honorary Membership may be conferred upon "any gentlemen interested in the affairs and objects of the Chamber" subject to election by the majority of votes of members. All new members joining the Chamber pay Rs. 500 entrance fee and the monthly subscription is Rs. 18. The subscription to the Chamber's periodical returns is at present fixed at Rs. 5 per month. The affairs of the Chamber are managed by a committee of ten members, consisting of a Chairman Vice-Chairman and eight members, elected at the annual meeting of the Chamber as early in the year as possible. The Chamber elects a representative on the Bombay Legislative Council, three representatives on the Karachi Port Trust and two on the Karachi Municipality. There were last year 65 members of the Chamber. The following are the officers for the current year:—

Chairman—Mr. F. Clayton, M.L.C. (Fleming, Shaw & Co.).

Vice-Chairman.—Mr. R. S. Backhouse, (David Sassoon & Co., Ltd.).

Committee.—Messrs J. R. Affeltranger (Volkart Brothers), J. R. Baxter (Mackinnon, Mackenzie & Co.), C. C. Demetriadi (Ralli Brothers), Geo. Gordon (Chartered Bank of India, Australia & China), Mr. F. R. Hawkes, O.B.E. (North Western Railway), H. G. Houghton (Donald Graham & Co.), J. Humphrey, O.B.E. (Anderson & Co.), and B. Frank Jones, (Forbes, Forbes, Campbell & Co., Ltd.)

Representatives on the Bombay Legislative Council.—Mr. F. Clayton, M.L.C.

Representatives on the Karachi Port Trust.—Mr. F. Clayton, M.L.C., Mr. C. C. Demetriadi & Mr. J. R. Baxter.

Representatives on the Karachi Municipality.—Mr. F. R. Hawkes, O.B.E. & Mr. W. B. Hossack.

Secretary.—Major Alan Duguid, A.F.C., late R.A.F.

Public Measurer.—Major Alan Duguid (Ag.)

The following are the principal ways in which the Chamber gives a special assistance to members. The Committee take into consideration and give an opinion upon questions submitted by members regarding the custom of the trade or of the Port of Karachi. The Committee undertake to nominate European surveyors for the settlements of disputes "as to the quality or condition of merchandise in which both parties desire the Chamber to do so." When two members of the Chamber or when one member and a party who is not a member have agreed to refer disputes to the arbitration of the Chamber or of an arbitrator or arbitrators nominated by the Chamber, the Committee will undertake to nominate an arbitrator or arbitrators, under certain regulations. Similarly, the Chamber under certain regulations, will undertake to appoint an arbitrator or arbitrators for the settlement of disputes in which neither of the parties are members of the Chamber. A public measurer is appointed under the authority of the Chamber to measure pressed bales of cotton, wool hides and other merchandise arriving at or leaving the port.

MADRAS.

The Madras Chamber of Commerce was founded in 1886. All merchants and other persons engaged or interested in the general trade, commerce and manufactures of Madras are eligible for membership. Any assistant signing a firm or signing *per-pro* for a firm is eligible. Members who are absent from Madras but pay their subscriptions may be represented in the Chamber by their powers-of-attorney, as honorary members, subject to ballot Honorary members thus elected are entitled to the full privilege of ordinary members. Election for membership as by ballot at a general meeting, a majority of two-thirds of the recorded votes being necessary to secure election. Every member pays an entrance fee of Rs. 100, provided that banks, corporate bodies and mercantile firms may be represented on the Chamber by one or more members and are liable for an entrance fee of Rs. 100 once in ten years each. The subscriptions shall not exceed Rs. 300 per annum, payable quarterly in advance, subject to reduction from time to time in accordance with the state of the Chambers' finances. Absentees in Europe pay no subscription and members temporarily absent from Madras pay one rupee per month. Honorary members are admissible to the Chamber on the usual conditions. Members becoming insolvent cease to be members but are eligible for re-election without repayment of the entrance donation.

The Chamber undertakes arbitrations and surveys the granting of certificates of origin and the registration of trade marks. One of the rules for the last named is "that no trade mark on ticket shall be registered on behalf of an Indian firm trading under a European name."

The following publications are issued by the Chamber:—Madras Price Current and Market Report, Tonnage Schedule and Madras Landing Charges and Harbour Dues Schedule.

There are 53 members and seven honorary members of the Chamber in the current year and the officers and committee for the year are as follows:—

Chairman.—Mr C. E. Wood, M.L.C.

Vice-Chairman.—Mr. A. J. Leach, M.L.C.

Committee.—Mr. H. F. P. Hearson, Mr. K. Kay, Mr. N. M. Murray, Mr. C. H. Straker and Mr. R. C. M. Strouts.

The following are bodies to which the Chamber are entitled to elect representatives, and the representatives elected for the year:—

Madras Legislative Council.—Messrs. C. E. Wood, and A. J. Leach.

Madras Port Trust.—Messrs. C. E. Wood, A. J. Leach, R. C. M. Strouts and K. Kay.

Madras Municipal Corporation.—Messrs. R. Lee, A. J. Power and A. B. Bradshaw.

British Imperial Council of Commerce, London—Mr. A. D. Jackson, (Europe).

Secretary.—Mr. H. E. H. Sladen.

Southern India Chamber.

The Southern India Chamber of Commerce has its Registered Office in Madras. The objects of the Chamber are those usual for such bodies, concerning the promotion of trade, especially in the Madras Presidency, and the interests of members. Special objects are stated to be:—

"To maintain a Library of books and publications of commercial interest, so as to diffuse commercial information and knowledge amongst its members.

"To establish Museums of commercial products or organise exhibitions, either on behalf of the Chamber or in co-operation with others."

There are two classes of members, permanent and honorary. The usual conditions as to eligibility for election prevail.

The right of electing two representatives to the Madras Port Trust was accorded to the Chamber by the Madras Port Trust Amendment Act, 1915. Members of the Chamber hold seats in the Madras Legislative Council and the Chamber has also been accorded the right of electing a representative to that body. Under the Madras City Municipal Act, 1919, the Chamber has the right of electing two Councillors to the Madras Corporation.

President.—Sir M. Ct. Muthia Chetty.

Vice-Presidents.—Dewan Bahadur Govindas Chathoorbhujadas and Mr. C. Abdul Hakim Sahib.

Honorary Secretaries.—Mahomed Musa Sait and C. Gopala Menon.

Assistant Secretary.—C. Duraiswamy Aiyangar, B.A.

UPPER INDIA CHAMBER.

The Upper India Chamber of Commerce is concerned with trade, commerce and manufactures in the United Provinces and has its registered office at Cawnpore. Members are elected by the Committee, subject to confirmation by the next general meeting of the Chamber. Gentlemen distinguished for public service, or eminent in commerce or manufactures, may be elected honorary members of the Chamber by the members in a General Meeting and such shall be exempted from paying any subscription to the Chamber. There is no entrance fee for membership, but subscriptions are payable as follows:—A firm company or association having its place of business in Cawnpore, Rs. 200 a year; an individual member, resident or carrying on business in Cawnpore, Rs. 100: firms or individuals having their places of business or residence outside Cawnpore pay half the above rates, but the maintenance of a branch office in Cawnpore necessitates payment of full rates.

The affairs and funds of the Chamber are managed by a Committee of ten members, which has power to constitute Local Committees, of from four to seven members each, at trade centres where membership is sufficiently numerous to justify the step. Such Local Committees have power to communicate only with the Central Committee.

The Chamber appoints arbitration Tribunals for the settlement and adjustment of disputes when invited, to do so, members of the Tribunals being selected from a regular printed list of arbitrators.

The Chamber has in the present year 78 members, three honorary members and six affiliated members.

The following are the officers :—

Upper India Chamber of Commerce Committee, *President.*—Mr. S. H. Taylor (Messrs. Begg, Sutherland & Co., Ltd.); *Vice-President.*—Mr. G. M. Hunter Thoms (The Muir Mills Co., Ltd.); *Members* :—Mr. W. R. Watt (British India Corporation Ltd.); Mr. A. A. Black, (The New Victoria Mills Co., Ltd.); Babu Ram Narain (Cawnpore); Mr. A. Smart (The Allahabad Bank Ltd.); Mr. A. L. Carnegie (British India Corporation Ltd.); Mr. E. M. Souter (Messrs. Ford & Macdonald Ltd.); *Chamber's Representative on the United Provinces Legislative Council*, Sir Thomas Smith, M.L.C. (Muir Mills Co., Ltd.); Mr. H. B. Saxby, M.L.C., (British India Corporation, Ltd).

Secretary.—Mr. J. G. Ryan.

Head Clerk.—Mr. B. N. Ghosal.

PUNJAB.

The Punjab Chamber of Commerce has its headquarters at Delhi and exists for the care of mercantile interests on the usual lines in the Punjab, the North-West Frontier Province and Kashmir. There is a branch of the Chamber at Amritsar. Members are elected by ballot, the only necessary qualification being interest in mercantile pursuits. There is no entrance fee. The rate of subscription is Rs. 10 per month. The Chamber returns one member to a seat on the Reformed Punjab Legislative Council jointly with the Punjab Trades Association and one on the Municipal Corporation, Delhi and Amritsar.

The following are the Officers, Committee and Representatives on public bodies as at the end of 1923:—

Chairman : Mr. V. F. Gray.

Deputy Chairman: Mr. P. Mukerjee.

Managing Committee: Messrs. T. K. Fordyce, F. J. Price, D. Simpson, D. N. Bhanja, P. Mukerjee, G. Pershad and Lalla Shri Ram.

Secretary: E. S. Hearn.

The Chamber is affiliated with the British Imperial Council of Commerce, London, and is represented in England by Sir James Walker, C.I.E., Alliance Bank of Simla, and Mr. H. C. Chalmers, National Bank of India, Ltd., London, and is a member of the Associated Chambers of Commerce of India and Ceylon, Calcutta.

UNITED PROVINCES.

The number of members on register is 102 (72 Local and 30 Mofussil). All the important commercial and industrial interests of the Provinces of Agra and Oudh are represented.

Committee.

President.—Rai Bahadur Lala Bishambhar Nath, M.L.A., Proprietor of Sri Krishna Ginning Factory and Director of the Punjab National Bank, Ltd., Cawnpore.

Vice-Presidents.—Babu Sriram Khanna (Managing Director of Messrs. Ramchandra Gurshaimu Cotton Mills Co., Ltd., Lucknow); Lala Ramkumar (of Messrs. Ramkumar Rameshurdass), Cawnpore.

Secretary—Rai Bahadur Babu Vikramajit Singh, M.L.C., Director of British India Corporation, Ltd., Cawnpore.

Joint Secretary.—Babu Gur Prasad Kapoor (of Messrs. Basti Ram Mata Prsn, Cawnpore).

Members.

Members—Babu Dwarka Prasad Singh, Cawnpore; Mahashey Kashinath, Cawnpore; Babu Behari Lal, Cawnpore; Babu Kalka Prasad (of Messrs. Puttan Lal Gopi Narain), Cawnpore; Lala Jairamdass Sahib (of the Lyalpur Sugar Co., Cawnpore); Mr. I. D. Varshanie, Proprietor of the U. P. Glass Works, Ltd., Bahjoi District Moradabad; Lala Jwahir Lal Jainy (of Messrs. Jainy Brothers, Cawnpore); Mr. Hiralal Khanna (of Mr. Jwala Prasad Radha Krishan, Cawnpore); Mr. J. P. Srivastava, Cawnpore; Lala Rameshwar Prasad (of Messrs. Ganga Dhar Baij Nath, Cawnpore); Mr. C. Y. Chintamani, Benares; Lala Sadiram (of Messrs. Sadi Ram Ganga Prasad, Ganges Flour Mills Co., Ltd., Cawnpore).

BURMA.

The Burma Chamber of Commerce, with headquarters at Rangoon, exists to encourage friendly feeling and unanimity among commercial men on all subjects involving their common good, to promote and protect trade, commerce and manufactures and, in particular, the general mercantile interests of the province, to communicate with public authorities, associations and individuals on all matters, directly or indirectly affecting these interests, and to provide for arbitration between parties willing to refer to, and abide by, the judgment of arbitrators appointed by the Chamber. The following are affiliated bodies:—

Burma Fire Insurance Association.

Burma Marine Insurance Agents' Association.

Rangoon Import Association.

Burma Motor Insurance Agents' Association.

The Chamber elects representatives to the following Public Bodies:—

Council of State.

Burma Legislative Council.

Rangoon Port Trust Board.

Rangoon Municipal Corporation.

Victoria Memorial Park Trustees.

Pasteur Institute Committee.

Burma Boiler Commission.

Burma University Council.

Rangoon Development Trust.

Standing Advisory Committee on Communications in Burma.

Rangoon European Stipend Board.

Accountancy Classes Advisory Board, Rangoon.

Ex-Services' Association, India.

Advisory Committee Constituted under the Auxiliary Force Act, 1920.

All British corporations, companies, firms or persons engaged or interested in mercantile pursuits, such as merchants, bankers, shipowners and brokers or who are connected with agriculture, mining, manufactures, insurance, railways, commerce, art, science or literature shall be eligible to become Chamber Members. Every non-British concern or person, similarly engaged or interested as indicated above, other than a subject of a State with which the British Empire was at War on September 19th, 1918, shall be eligible for election as an Associate Member. The annual subscription of each Chamber Member shall be Rs. 480 per annum and of each Associate Member Rs. 360 per annum. An entrance fee of Rs. 150 is payable by each new Member. Officials and others indirectly connected with the trade of the province or who may have rendered distinguished service to the interests represented by the Chamber may be elected by the Committee either on their own motion or on the suggestion of two Members as Honorary Members of the Chamber. Honorary Members are not required to subscribe to the funds of the Chamber.

The Chamber undertakes arbitrations in addition to its ordinary work. It does not publish any statistical returns.

Secretary.—Mr. C. A. Cuttriss, M.B.E., F.R.G.S. F.R.S.A.

Representative on the Council of State.—Sir Edgar Holberton, KT., C.B.E.

Representatives on the Burma Legislative Council.—A. J. Anderson, Esq., C.S.I., M.L.C., J. Hogg, Esq., M.L.C.

Representatives on the Rangoon Port Trust Board—Messrs. A. J. Anderson, C.S.I., M.L.C., J. W. Richardson, J. Hogg, M.L.C., W. Archibald.

Representative on the Rangoon Municipal Committee.—Mr. W. G. Lely.

Victoria Memorial Park Trustee.—Mr. A. J. Anderson, C.S.I., M.L.C.

Pasteur Institute Committee.—Mr. A. J. Anderson, C.S.I., M.L.C.

Burma Boiler Commission.—Mr. C. A. Cuttriss, M.B.E., F.R.G.S., F.R.S.A.

Burma University Council.—Mr. H. Smiles, M.A.

Rangoon Development Trust.—Mr. W. T. Henry.

Standing Advisory Committee on Communications in Burma.—Mr. A. J. Anderson, C.S.I., M.L.C.

Rangoon European Stipend Board.—Mr. C. A. Cuttriss, M.B.E., F.R.G.S., F.R.S.A.

Accountancy Classes Advisory Board.—Mr I. Baird.

Ex-Services' Association, India.—Mr. C. P. Hill.

Advisory Committee constituted under the Auxiliary Force Act, 1920.—Mr. W. A. Gray.

COCANADA.

The Cocanada Chamber of Commerce was established on 29th October, 1868.

The following are the office-holders of the Cocanada Chamber of Commerce, which has its headquarters at Cocanada, the chief port on the Coromandel Coast, north of Madras:—

Messrs. A. E. Todd, *Chairman.* C. Hodding (Coromandel Co., Ltd.), R. Turnbull (Wilson)

& Co.), A. E. Todd (Simson Bros. Ltd.,) M.R.Ry. Diwan Bahadur K. Suryanarayanamurty Naidu Garu and G. M. Lake (Innes & Co.), W. G. Thompson (Shaw Wallace & Co.), G. Kivron (Volkart Bros.), P. Lefaucheur (Gordon Woodroffe & Co.), L. F. R. Bosworth (J. H. Vavasseur & Co., Ltd.), W. L. Ranking (The Northern Circars Development Co.), F. N. Ryall (Alfred Joensson Co., Inc.), G. Attwood (Imperial Bank of India, Cocanada).

Secretary--Mr. G. A. LeStyne.

The rules of the Chamber provide "that by the term 'member' be understood a mercantile firm or establishment, or the permanent agency of a mercantile firm or establishment, or a society of merchants carrying on business in Cocanada, or other place in the Districts of Kistna, Godavari, Vizagapatam, and Ganjam, and duly electing according to the Rules of the Chamber, and that all such be eligible but only members resident in Cocanada can hold office. Members are elected by ballot. The Committee, when called upon by disputing members or non-members of the Chamber, give their decision upon all questions of mercantile usage and arbitrate upon any commercial matter referred to them for final judgment. In either case a minimum fee of Rs. 16 must accompany the reference with Rs. 5 from a non-member and Re. 1 from a member as payment for the Chamber's Sealed Certificate.

The Committee consist of 3 members, including the Chairman, and the Committee are elected by ballot, the Chairman at the general meeting of January in each year, for a term of 12 months. The entrance fee for each member, whose place of business is in Cocanada, is Rs. 100 and for each member whose place of business is elsewhere is Rs. 25. The subscription for each member whose place of business is in Cocanada is Rs. 120 per annum, payable quarterly and for each member whose place of business is elsewhere is Rs. 60 per annum, payable in advance. Committee meetings are held on the 1st Tuesday in the month and general meetings on the 3rd Tuesday or when ordered.

A Fortnightly Circular of current rates of produce freights, and exchange is drawn up by the Committee.

CEYLON.

The Ceylon Chamber of Commerce was established on the 25th March 1839 and was incorporated in 1895, with its headquarters at Colombo. All firms and persons engaged in the general trade of Ceylon are admissible as members and every person or firm desirous of joining the Chamber must be proposed by one member, seconded by another and balloted for by the whole Chamber. The affairs of the Chamber are conducted by a Board of Directors consisting of Chairman and Vice-Chairman and from 5 to 10 members.

The following is the membership of the Board at the present time :—

Hon'ble Col. E. J. Hayward, C. B. E. & D. (*Chairman*); Mr. J. J. Wall (*Vice-Chairman*), Mr. O. M. Ash, Mr. H. French, Mr. J. J. Dickson, Mr. S. P. Hayley, Mr. C. A. Pearcy, Mr. N. J. G. Robertson, Mr. R. S. Wright, Hon'ble Mr. A. Warden, Mr. R. Whittow.

Secretary.—Mr. C. F. Whitaker.

Representative in the Legislative Council.—Hon'ble Col. E. J. Hayward, C. B. E. & D.

Famine.

To the student of Indian administration nothing is more remarkable than the manner in which great problems arise, produce a corresponding outburst of official activity to meet them and then fall into the background. This general truth is illustrated by a study of the history of famine in India. For nearly forty years it was the bogey of the Indian administrator. The forecasts of the rains were studied with acute anxiety. The actual progress of the rains was followed with no less anxiety, and at the first signs of a bad or poor season the famine relief machinery was furbished up and prepared for any emergency. The reason for this is clear if we examine for a brief space the economic condition of the Indian peasantry. Nearly three-quarters of the people are directly dependent on agriculture for their daily bread. Very much of this agriculture is dependent on the seasonal rains for its existence. Immense areas in the Bombay Presidency, Madras, the United Provinces and Central India are in a region of erratic and uncertain rainfall. The rainy season is short and if for any natural reason there is a weakness, or absence, of the rain-bearing currents, then there is either a poor harvest or no harvest at all. In Western lands everyone is acquainted with the difference between a good and a poor season, but western countries offer no parallel to India, where in an exceptionally bad year wide tracts of thickly populated land may not produce even a blade of grass. In the old days there were no railways to distribute the surplus of one part of India to the districts where the crop had failed. There were often no roads. The irrigation works were few and were themselves generally dependent on the rainfall for their reserves. The people lived from hand to mouth and had no store of food to fall back upon. Nor had they any credit. In the old days then they died. Commencing with the Orissa famine in 1865-67 the Government of India assumed responsibility for the saving of human life in such crises. After the famine of 1899-1900 this responsibility was also shouldered by the Indian States. Stage by stage this responsibility was expressed in the evolution of a remarkable system of famine relief covering the whole field. But now that machinery has reached a remarkable degree of perfection, it is rusting in the official armouries, because the conditions have changed. The whole of India is covered with a network of railways, which distributes the produce of the soil to the centres where food is required. The extension of irrigation has enormously increased the product of the soil and rendered large areas much less dependent on the monsoon rainfall. At the same time the scientific study of the problems of Indian agriculture has raised the capacity of even the "dry" zones. The peasantry has accumulated a certain reserve against the rainless days from the prosperity which accompanied the period of high prices. The rapid spread of the co-operative credit movement has mobilised and strengthened rural credit. The spread of manufacturing enterprise has lightened the pressure on the soil. The relation of famine to the question of Indian administration has therefore changed. In an exceptionally bad year it may create administrative difficulties; it has ceased to be an administrative and social problem.

Famine under Native Rule.

Famines were frequent under Native rule, and frightful when they came. "In 1630" says Sir William Hunter, in the History of British India, "a calamity fell upon Gujarat which enables us to realise the terrible meaning of the word famine in India under Native rule. Whole cities and districts were left bare of inhabitants." In 1631 a Dutch merchant reported that only eleven of the 260 families at Swally survived. He found the road thence to Surat covered with bodies decaying on the highway where they died, there being none to bury them. In Surat, that great and crowded city, he could hardly see any living persons; but "the corpses at the corner of the streets lie twenty together, nobody burying them. Thirty thousand had perished in the town alone. Pestilence followed famine." Further historical evidence was adduced by Sir Theodore Morrison in his volume on the Economic Transition of India. It has come to be seen that whilst railways have checked the old-fashioned practice of storing grain in the villages they have made the reserves, where they exist, available for the whole of India. In India there is now no such a thing as a food famine; the country always produces enough food for the whole of the population; famine when it comes is a money famine and the task of the State is confined to providing the means for those affected by drought to earn enough to buy food. The machinery whereby this is done will be examined after we have seen the experiences through which it was evolved.

History of Recent Famines.

The Orissa famine of 1865-67 may be taken as the starting point because that induced to first great and organised effort to combat distress through State agency. It affected 180,000 square miles and 47,500,000 people. The Bengal Government was a little slow in appreciating the need for action, but late food was poured into the district in prodigious quantities. Thirty-five million units were relieved (a unit is one person supported for one day) at a cost 95 lakhs. The mortality was very heavy, and it is estimated that a million people or one-third of the population, died in Orissa alone. This was followed by the Madras famine of 1866, and the famine in Western India of 1868-70. The latter famine introduced India to the great migration from Marwar which was such a distinguishing feature of the famine of 1899-1900; it is estimated that out of a total population of a million and a half in Marwar, one million emigrated. There was famine in Behar in 1873-74, then came the great South Indian Famine of 1876-78. This affected Madras, Mysore, Hyderabad and Bombay for two years and in the second year extended to parts of the Central and United Provinces and to a small tract in the Punjab. The total area affected was 257,000 square miles and the population 58,500,000. Warned by the excessive expenditure in Behar and actuated by the desire

to secure economy the Government relief programme was not entirely successful. The excess mortality in this famine is said to have been 5,250,000 in British territory alone. Throughout British India 700,000,000 units were relieved at a cost of Rs. 8¼ crores. Charitable contributions from Great Britain and the Colonies aggregated Rs. 84 lakhs.

The Famine Codes.

The experiences of this famine showed the necessity of placing relief on an organised basis. The first great Famine Commission which sat under the presidency of Sir Richard Strachey, elaborated the Famine Codes, which amended to meet later experience, form the basis of the famine relief system to-day. They recommended (1) that employment should be given on the relief works to the able-bodied, at a wage sufficient for support, on the condition of performing a suitable task; and (2) that gratuitous relief should be given in their villages or in poor houses to those who are unable to work. They recommended that the food supply should be left to private agency, except where that was unequal to the demands upon it. They advised that the land-owning classes should be assisted by loans, and by general suspensions of revenue in proportion to the crop failure. In sending a Famine Code to the provincial governments, the Government of India laid down as the cardinal feature of their policy that the famine wage "is the lowest amount sufficient to maintain health under given circumstances. Whilst the duty of Government is to save life, it is not bound to maintain the labouring population at its normal level of comfort." Provincial codes were drawn up, and were tested by the famine of 1896-97. In that 307,000 square miles were affected, with a population of 69,500,000. The numbers relieved exceeded 4,000,000 at the time of greatest distress. The cost of famine relief was Rs. 7½ crores, revenue was remitted to the extent of Rs. 1½ crore, and loans given aggregating Rs. 1¾ crore. The charitable relief fund amounted to about Rs. 1¾ crore, of which Rs. 1¼ crore was subscribed in the United Kingdom. The actual famine mortality in British India was estimated at 750,000. The experiences of this famine were examined by a Commission under Sir James Lyall, which reported that the success attained in saving life and the relief of distress was greater than had ever been recorded in famines, comparable with it in severity, and that the expense was moderate. But before the Local Governments had been given time to digest the proposals of this Commission or the people to recover from the shock, the great famine of 1899-1900 supervened.

The Famine of 1899-1900.

This famine affected 475,000 square miles with a population of 59,500,000. In the Central Provinces, Berar, Bombay, Ajmer, and the Hissar district of the Punjab famine was acute: it was intense in Rajputana, Baroda, Central India, Hyderabad and Kathiawar. It was marked by several distinctive features. The rainfall over the whole of India was in extreme defect, being eleven inches below the mean. In several localities there was practically no rain. There was in consequence a great fodder famine, with a terrible mortality amongst the cattle. The water supply was deficient, and brought a crop of difficulties in its train. Then districts like Gujarat, where famine had been unknown for so many years that the locality was thought to be famine immune, were affected; the people here being softened by prosperity, clung to their villages, in the hope of saving their cattle, and came within the scope of the relief works when it was too late to save life. A very large area in the Indian States was affected, and the Marwaris swept from their impoverished land right through Central India like a horde of locusts, leaving desolation in their train. For these reasons relief had to be given on an unprecedented scale. At the end of July 4,500,000 persons were supported by the State, Rs. 10 crores were spent on relief, and the total cost was estimated at Rs. 15 crores. The famine was also marked by a widespread acceptance by Indian States of the duty hitherto shouldered by the Government of India alone—the supreme responsibility of saving human life. Aided by loans to the extent of Rs. 3½ crores, the Indian States did a great deal to bring their administration into line with that in British India. Although actual deaths from starvation were insignificant, the extensive outbreaks of cholera, and the devastating epidemic of malaria which followed the advent of the rains induced a famine mortality of approximately a million. The experiences of this famine were collated by the Commission presided over by Sir Antony MacDonnell. This Commission reported that taking the famine period as a whole the relief given was excessive, and laid down certain modified lines. The cardinal feature of their policy was moral strategy. Pointing out that if the people were assisted at the start they would help themselves, whilst if their condition were allowed to deteriorate it proceeded on a declining scale, they placed in the forefront of their programme the necessity of "putting heart into the people." The machinery suggested for this purpose was the prompt and liberal distribution of tagai loans, the early suspension of revenue, and a policy of prudent boldness, starting from the preparation of a large and expansive plan of relief and secured by liberal preparations, constant vigilance, and a full enlistment of non-official help. The wage scale was revised; the minimum wage was abolished in the case of able-bodied workers; payments by results were recommended; and proposals were made for saving cattle.

The Government of India is now in possession of complete machinery to combat the effects of drought. In ordinary times Government is kept informed of the meteorological conditions and the state of the crops; programmes of suitable relief works are kept up to date, the country is mapped into relief circles, reserves of tools and plant are stocked. If the rains fail, policy is at once declared, non-officials are enlisted, revenue suspended and loans for agricultural purposes made. Test works are then opened, and if labour in considerable quantities is attracted, they are converted into relief works on Code principles. Poor houses are opened and gratuitous relief given to the infirm. On the advent of the

rains the people are moved from the large works to small works near their villages, liberal advances are made to agriculturists for the purchase of plough, cattle and seed. When the principal autumn crop is ripe, the few remaining works are gradually closed and gratuitous relief ceases. All this time the medical staff is kept in readiness to deal with cholera, which so often accompanies famine, and malaria, which generally supervenes when the rains break.

Famine Protection.

Side by side with the perfection of the machinery for the relief of famine has gone the development of famine protection. The Famine Commission of 1880 stated that the best, and often the only means of securing protection from the extreme effects of famine and drought, are railways and irrigation. These are of two classes, productive and protective. Productive works being estimated to yield profits which will pay interest and sinking fund charges are met from loans; protective works, which do not pay, directly from revenue. In order to guarantee that there should be continuous progress with protective works, the Famine Insurance Grant was instituted in 1876. It was decided to set apart from the general revenues Rs. 1½ crores annually or one million sterling. The first charge on this grant is famine relief, the second protective works, the third the avoidance of debt. The chain of protective railways is now practically complete. Great progress is being made with protective irrigation. Acting on the advice of the Irrigation Commission an elaborate programme of protective irrigation works has been constructed, particularly in the Bombay Deccan—the most famine susceptible district in India—and in the Central Provinces.

The Outlook.

Such in brief is the official programme and organisation which has been built up out of the experience and practice of the past. Yet everything goes to show that Government activity to save human life will never be wanted in the future on the colossal scale of former times, even so recently as 1899-1900. Each succeeding failure of the rains indicates that there has been in silent progress an economic revolution in India. In the year 1918 the rains failed more seriously and over a wider area than during any monsoon in the recent history of India. The deficiency in the rainfall was more marked than in the great famine of 1899. Yet such was the increased resisting power of the people that instead of a demand for State relief from over five millions, the maximum number at any time in receipt of public assistance was never so large as six hundred thousand. The shock to the social life of the community was insignificant; the effects of the drought completely disappeared with the good rains of the following year.

Increased Resisting Power.

The causes of this economic change in the conditions of India, whose influence is widespread are many. We can only briefly indicate them here. There is a much greater mobility in Indian labour. Formerly when the rains failed the ryot clung to his village until State relief in one form or another was brought almost to his doors. Now at the first sign of the failure of the rains he girds up his loins and goes in search of employment in one of the industrial centres, where the supply of labour is rarely equal to the demand, or on the constructional works which are always in progress either through State or private agency in the country. Then the ryot generally commands some store of value, often mistermed a hoard. The balance of exports in favour of India in normal times is approximately £ 50 millions a year. The gold and silver bullion in which this is largely liquidated is distributed all over the country, in small sums or in ornaments, which can be drawn upon in an emergency. The prodigious coining of rupees during the last two years of the war, and the continuous absorption of gold by India, represent small diffused savings, which take this form owing to the absence of banking institutions and lack of confidence in the banking system. There has been a large extension of irrigation. More than one-third of the land in the Punjab is now under irrigation, and in other Provinces, particularly in the famine-susceptible tracts of the Bombay Deccan, irrigation works have been constructed, which break the shock of a failure of the rains. Then the natural growth of the population has been reduced by plague and famine diseases, followed by the great influenza pandemic of 1918-19, which swept off five millions of people. This has not only prevented the increase of congestion, but has brought some areas particularly in the Indian States, below their former population-supporting capacity. The increase of railways distributes the resources of the country with ease; the spread of the co-operative credit Movement has improved rural credit. Finally, there is the considerable development of manufacturing industry, which is generally short of labour and helps to absorb the surplus of a famine year. Whilst the Government is completely equipped with a famine code, there is no reason to suppose that there will ever recur such an emergency as that of 1899. Famine can now be efficiently met by the liberal distribution of tagavi, the suspension and remission of the land revenue demand, the relief of the aged and others who cannot work, the provision of cheap fodder for the cattle, with possibly some assistance, in transporting the affected population of the famine-affected tract to the industrial centres.

The Indian Famine Trust.

Outside the Government programme there is always scope for private philanthropy, especially in the provision of clothes, help for the superior class poor who cannot accept Government aid, and in assisting in the rehabilitation of the cultivators when the rains break. At every great famine large sums have been subscribed, particularly in the United Kingdom, for this purpose, and in 1899-1900 the people of the United States gave generous help. With the idea of providing a permanent famine fund, the Maharaja of Jaipur gave in 1900 a sum of Rs. 16 lakhs, in Government securities, to be held in trust for the relief of the needy in time of famine. This Trust has now swollen to Rs. 34 lakhs.

The report of the Board of Management states that during the year 1922 grants for relief of distress were made in the case of Madras amounting to Rs. 25,000,

BOY SCOUTS.

The Boy Scouts movement, initiated in England by Lt.-Gen. Sir Robert Baden Powell (the Chief Scout), has spread widely in India, both among Europeans and Indians. The Viceroy is Chief Scout of India and the heads of Provinces, are Chief Scouts in their own areas. The aim of the Association is to develop good citizenship among boys by forming their character—training them in habits of observation, obedience and self-reliance—inculcating loyalty and thoughtfulness for others—and teaching them services useful to the public and handicrafts useful to themselves.

It is confidently anticipated that in the Boy Scout Movement will be found a natural mean of bridging the gulf between the different races existing in India. The movement is non-official, non-military, non-political and non-sectarian. Its attitude towards religion is to encourage every boy to follow the faith he professes. Every boy admitted as a Scout makes a three-fold promise to do his best: (1) to be loyal to God and the King; (2) to help others at all times; and (3) to obey the Scout law. The law referred to lays down—

1. That a Scout's honour is to be trusted;

2. That he is loyal to God and the King, his parents, teachers, employers, his comrades, his country and those under him;

3. That he is to be useful and to help others;

4. That he is a friend to all and a brother to every other scout, no matter to what social class the other belongs;

5. That he is courteous;

6. That he is a friend to animals;

7. That he obeys orders;

8. That he smiles and whistles under all difficulties;

9. That he is thrifty;

10. That he is clean in thought, word, and deed.

INDIAN HEAD-QUARTERS.

Patron.—H. R. H. The Prince of Wales, K.G.

Chief Scout for India.—His Excellency the Earl of Reading.

Chief Commissioner.—(Vacant.)

General Secretary.—Sir Geoffrey de Montmorency, K.C.V.O., &c.

General Council for India—

Ex-officio.—The Chief Commissioner for India.
The Provincial Commissioners.
The Presidents of Provincial Councils.

Elected.—(Not completed.)

Nominated.—(Not completed.)

Scout Strength.

PROVINCE.	SCOUTS.	CUBS.	TOTAL.
Madras	3,516	692	4,208
Bombay	1,440	256	1,696
Bengal	1,469	401	1,870
United Provinces ..	1,352	99	1,451
Punjab	1,386	90	1,476
Central Provinces ..	1,536	109	1,645
Behar and Orissa ..	450	58	508
Assam	60	40	100
Bangalore	178	15	193
Baluchistan	114	14	128
Burma	1,606	321	1,927
Total ..	13,107	2,095	15,202

The Need.—More than sixty per cent. of the vast population of India subsist on agriculture and the majority of these millions generally live, under present conditions, from hand to mouth. The ryot's occupation is healthy and productive, and he is proverbially honest and straightforward in his dealings, except when years of famine and hardship make him at times crafty and recalcitrant. Owing to his poverty, combined with want of education and consequent lack of foresight, he has to incur heavy debts to meet occasional expenses for current seasonal purposes, the improvement of his land, or for ceremonial objects, and he has therefore to seek the assistance of the local money-lender, known as the Sowkar or the Mahajan. The rate of interest on such advances, though varying from province to province and even in different parts of a province, is generally very high. In addition to charging excessive rates the Sowkar extorts money under various pretexts and takes from the needy borrower bonds on which stamp duties are payable. One of the chief causes of the ryot's poverty is, that owing to the absence of security and his short-sightedness due to want of education, he does not as a rule collect and lay by his savings, but fritters away his small earnings in extravagant and unproductive expenditure, on the purchase of trinkets and ornaments, and on marriage and other ceremonies. In some cases, he hoards coins under the ground with the likelihood that on his death the money is lost to his family for good. This absence of thrift and the habit of dependence, in case of difficulty, on the Government or on the Sowkar are the bane of his life. There is besides a total absence of ideals or desire for progress. A co-operative society would change all this, inasmuch as it would provide him with a suitable institution in which to lay by his savings and would teach him the valuable lesson of self-help through the sense of responsibility he would feel in being its member. Thus the chronic poverty and indebtedness of the Indian agriculturist afford a very good field for the introduction of co-operative methods, especially as his work is of a productive character likely to enable him to earn a better living under circumstances more favourable than they are at present.

Genesis of the Movement.—The question of improving rural credit by the establishment of agricultural banks was first taken up in the early nineties when Sir W. Wedderburn, with the assistance of the late Mr. Ranade, prepared a scheme of Agricultural Banks which was approved of by Lord Ripon's Government but was not sanctioned by the Secretary of State. The matter was not again taken up until about fifteen years later when Lord Wenlock's Government in Madras deputed Mr. F. A. (now Sir Frederick) Nicholson, to report on the advisability of starting Agricultural or Land Banks in the Presidency for the relief of the agriculturists. There was in existence in Madras an indigenous system of banking available for the person of small means. This institution called the Nidhi, corresponded in some respects to the Provident Funds and Friendly Societies in European countries. Though these Nidhis provided cheap capital to the agriculturists the spirit of co-operation was lacking in them. Sir Frederick submitted an exhaustive report to Government suggesting that the formation of co-operative societies afforded an excellent means for relieving rural indebtedness. Unfortunately, the report was not received favourably either by the non-official public or by the Government of Madras and no action was taken on its suggestions. The next few years saw two of the worst famines from which India had ever suffered, and in 1901, Lord Curzon appointed a Commission to report on the measures to be adopted in future to prevent famines and to protect the ryot from their ravages. The Commission laid stress on the proper working of the Agriculturists' Loans and the Land Improvement Loans Acts under which *takavi* advances are made to cultivators. This system was given a long trial in the years previous to the great famines as well as during the years succeeding the 1899-1900 famines. But it is acknowledged on all hands that the system has not been successful in solving the problem of rural stagnation, as it is clear that it is not facility for obtaining cheap capital alone which will raise the agriculturist and relieve him from his debts, but the provision of capital combined with the inculcation of habits of thrift and self-help. This Commission also recommended that the principal means of resisting famines was by strengthening the moral backbone of the agriculturist and it expressed its view that the introduction of co-operation in rural areas might be useful in securing this end.

Co-operative Credit Societies' Act.—These recommendations induced Lord Curzon to appoint a Committee with Sir Edward Law at its head to investigate the question and a report was submitted to Government recommending that co-operative societies were worthy of every encouragement and of a prolonged trial. Sir Anthony (now Lord) Macdonell and others were at the same time making experiments on similar lines in the United Provinces and the Punjab with satisfactory results. All these activities, however, took an organized shape only when Lord Curzon's Government introduced in the Supreme Legislative Council a Bill to provide for the constitution and control of co-operative credit societies. The main provisions of the Bill which became the Co-operative Credit Societies' Act (Act X of 1904) were :—

(1) That any ten persons living in the same village or town or belonging to the same class or caste might be registered as a co-operative society for the encouragement of thrift and self-help among the members.

(2) The main business of a society was to raise funds by deposits from members and loans from non-members, Government and other co-operative societies, and to distribute the money thus obtained in loans to members, or with the special permission of the Registrar, to other co-operative credit societies.

(3) The organization and control of co-operative credit societies in every Presidency were put under the charge of a special Government officer called the Registrar of Co-operative Credit Societies.

(4) The accounts of every society were to be audited by the Registrar or by a member of his staff free of charge.

(5) The liability of a member of a rural society was to be unlimited.

(6) No dividends were to be paid on the profits of a rural society, but the profits were to be carried at the end of the year to the reserve fund, although when this fund had grown beyond certain limits fixed under the bye-laws, a bonus might be distributed to the members.

(7) In urban societies no dividend was payable until one-fourth of the profits in a year were carried to the reserve fund.

Soon after the passing of the Act, the local Governments in all the Presidencies and major provinces appointed Registrars with full powers to organise, register, and supervise societies. In the early stages of the working of this Act, Government loans were freely given, and the response to the organising work of the Registrars was gradual and steady throughout most parts of the country.

Co-operative Societies' Act.—As co-operation progressed in the country defects were noticed in the Co-operative Credit Societies' Act and these were brought to the notice of Government by the Annual Conferences of the Registrars. In two directions the need for improved legislation was especially felt. In the first place, the success of credit societies had led to the introduction of co-operative societies for distribution and for purposes other than credit for which no legislative protection could be secured under the then existing law. And, secondly, the need for a freer supply of capital and for an improved system of supervision had led to the formation of various central agencies to finance and control the primary credit societies and these central agencies ran all the risks attendant on a status unprotected by legislation. The Government of India, recognising the desirability for removing these defects, decided to amend the old Act, and a Bill embodying the essential alterations proposed was introduced in the Imperial Legislative Council, and after a few amendments it emerged from the Council as the Co-operative Societies' Act (II of 1912) replacing Act X of 1904. The outstanding features of the new Act were as under :—

(*a*) It authorised the formation of societies for purposes other than credit, which was possible under the old Act only with the special permission of the Local Government. (This extension of co-operation to purposes other than credit marks an important stage in its development in India.)

(*b*) It defined in precise terms the objects for which co-operative societies could be organised.

(*c*) It removed the arbitrary division of societies into rural and urban and substituted a more scientific division in accordance with the form of liability adopted.

(*d*) It facilitated the growth of central agencies by insisting on limited liability, by means of a special clause about the registration of a society one of whose members is a registered society.

(*e*) It empowered Local Governments to frame rules and alter bye-laws so as to put restrictions on the dividends to be declared by societies and allowed them the discretion to sanction distribution of profits to their members by unlimited liability societies.

(*f*) It allowed societies with the permission of the Registrar to contribute from their net profits, after the reserve fund was provided for, amounts up to 10 per cent. of their remaining profits to any charitable purpose as defined in the Charitable Endowments' Act. (This kept the movement in touch with local life by permitting societies to lend assistance to local educational and charitable institutions.)

(*g*) It prohibited the use of the word "co-operative" as part of the title of any business concern except a registered society.

Composition of the Capital of Agricultural Societies.—On the organization of agricultural credit was necessarily concentrated the attention of the promoters, for it presented a far more important and far more difficult problem than industrial credit. There was a great variety of types among the agricultural societies started in different provinces, and some Registrars adopted the "Raiffeisen," and some the "Luzzatti" methods in their entirety. The commonest type, as in the Punjab, Burma, and the United Provinces, is the unlimited liability society with a fee for membership and a small share capital, the share payments to be made in instalments. In some cases the system insists on compulsory deposits from members before entitling them to enjoy the full privileges of membership. The system in Bombay and the Central Provinces is different, there being no share-capital but only a membership-fee. Part of the working capital is raised by deposits from members and other local sympathisers, but the bulk of it in all provinces is obtained by loans from central and other co-operative societies. In all the Presidencies, the Government set apart in the initial stages every year a certain sum to be advanced as loans to newly started co-operative societies, usually up to an amount equal to the deposits from members, raised by a society. State aid in the form of money doles has now become an exception rather than the rule and this withdrawal in no way hampers the development of the movement on account of the rapid increase of co-operative financing agencies and the growth of public confidence in the primary societies. Out of a total working capital of 13¾ crores, 1¼ crore were shares, 1¾ crore reserves, ¾ crore deposits of members, 1 crore deposits from non-members and 8 crores loans from central societies.

Constitution of Agricultural Credit Societies.—The typical agricultural credit society in India corresponds to the "Raiffeisen society", the management being gratuitous, the profits indivisible, and the area of work limited. In the Punjab, the United Provinces and Burma where shares form an integral part of the system, the distribution as dividend of a portion of the profits after ten years working is permitted under certain restrictions, although in the Punjab the tendency now is to make the profits wholly indivisible and the shares non-withdrawable. In parts of the country there are villages where a few literate men may be found but most of these are hardly fit enough to undertake the responsibl

work of a secretary, being practically ignorant of account keeping. In such villages either the village school-master or the village accountant is appointed secretary. In some places, where a suitable person is not available on the low pay a single society can afford, neighbouring societies are grouped together with a whole-time, well paid secretary. As the work of societies develops, the need for trained secretaries is being felt more keenly, for it is now realized that the function of a secretary does not consist merely in writing the accounts correctly. With a view to meet the demand for trained secretaries, training classes have been organized in Bombay, in the Punjab and elsewhere during the last few years, and efforts have been made to provide education in co-operation through the new educational and propagandist associations which have been organized in some of the major provinces. Arrangements have also been devised in some provinces to educate the members of managing committees in the principles of the movement through peripatetic instructors and courses of simple lectures.

Internal Management of Societies.—The managing committee of a society consists of 5 to 9 members, the chairman being usually the leading person in the village. The daily work is carried on by the secretary, but the managing committee supervises the work and has alone the power to admit new members, to receive deposits, to arrange for outside loans, to grant loans to members and to take notice of defaulters. The accounts of the society are kept by the secretary and the necessary forms, papers, and books are usually supplied from the Registrar's office to simplify the work of the secretary. The books are kept according to the rules framed by the Local Governments and are open to inspection by important local officials and the Registrar and his staff. The accounts are audited, at least once a year, by the auditors working under the Registrars of Co-operative Societies, and the societies are inspected from time to time by honorary or paid Inspectors. In Burma and Madras, the inspection is carried out by unions, while in the United Provinces, Bihar and Orissa, Ajmere-Merwara and Bengal the responsibility for supervision rests with the central banks. In the Central Provinces, the inspection is controlled by the Provincial Federation working through the central bank. In Bombay, supervision is exercised partly by unions, partly by central banks and partly by honorary organizers. In the Punjab, while paid for by societies, the inspecting staff works under the direct orders of the Registrar.

The supreme seat of authority in co-operative societies is the entire body of members assembled in general meetings. At the annual general meeting held at the close of the co-operative year the accounts are submitted, the balance-sheet passed, and the managing committees with the chairmen and secretaries are elected. The general meeting fixes in some provinces the borrowing limit of individual members, lays down the maximum amount up to which the managing committee may borrow during the ensuing year, dismisses members for misconduct or serious default, and settles the rates of interest for loans and deposits. All the net profits of society are annually carried to the reserve fund, which is indivisible, that is, incapable of distribution as dividend or bonus, which cannot be drawn upon without the sanction of the Registrar, and which must be invested in such a manner as the rules framed under the Act may prescribe. It is intended to meet unforeseen losses and to serve as an asset or security in borrowings. Except in the Central Provinces and Madras, the reserve funds of primary societies are generally utilised as an addition to their working capital. In most other provinces, primary societies are free to utilize their reserve funds as part of the working capital except when they have considerable outside deposits and have not made special arrangements in respect of fluid resource to cover such borrowings.

Main defects.—The main defects of primary societies may be summarized. The most prominent is the evil of unpunctuality. This is due more to easy going ways of life and the narrowness of margin between income and expenditure than to recalcitrancy. Next is the frequent apathy of the members in the work of the societies owing to lack of education and absence of higher ideals. The general body leaves affairs wholly to the discretion of the committee and the committee transfers its powers to the chairman, secretary or some other member. Then there is the objectionable practice of making book-adjustments and taking *benami* loans. A grave defect is the inability of the societies to act as real banks, accepting for deposit money when presented, meeting withdrawals of such saving deposits or temporary surplus funds without delay, and granting loans on demand according to actual requirements. In many a society, activity is displayed only twice in the year, once during the cultivation season when loans are advanced and again after harvest time when recoveries are collected. In several provinces, members have to wait for weeks before they can get funds for agricultural operations, and as such operations must be proceeded with resort to the money-lender is not uncommon. To provide for members who want large loans on the security of land for clearance of debt or agricultural improvement, a separate land mortgage society has been started in the Punjab, and may be found necessary in other Provinces where large amounts are required by agriculturists on the security of their landed property. As the bye-laws place a limitation on the amount of loan that can be advanced to an individual and financing agencies are often unable to make long-term advances, societies have, in no sense, supplanted the money-lender.

Non-agricultural Societies.—Non-agricultural credit societies have grown up in towns and cities as part of a movement for improving the economic and moral condition of persons engaged in handicrafts and cottage industries, of artisans and small traders, members of particular castes and employees of big firms and Government departments. These societies have usually a limited liability. This is due partly to the absence of any assets in real property among their members, but mainly to the field of their work not being compact as is the case of agri-

cultural societies, where every member may be expected to know every other member. Their constitution is based on the 'Schulze Delitzsche' model. In most societies the management is honorary, though sometimes, when the sphere of a society's work is extended, a paid staff is employed. There is in all societies a substantial share capital, payments being made in monthly instalments, and the rest of the working capital is obtained by local deposits from members and others. Loans from co-operative banks and societies usually form only a meagre proportion of the capital.

At the end of every year, one-fourth of the net profits must be carried to the reserve fund and the balance may be distributed as dividend or bonus. There are a few drawbacks in the working of these societies. The most serious of these complaints are that the spirit of co-operation is lacking in many non-agricultural societies, that there is too great a desire to go in for profits and dividends, and a growing tendency to make the societies close preserves once they have started running on profitable lines. The rates of interest on loans are at times higher than they ought to be, and the men at the head of the societies are loth to admit new members who are in need of loans for fear of the latter cutting down the profits

Included in this group are communal societies, and societies of employees of firms, railway companies and Government offices. There are again, in Bombay and Burma, a few societies organized on the lines of the People's Banks of Italy to assist small traders and artisans in towns and there are also some societies comprising members of particular communities. The larger banks in Bombay and Burma, especially open current accounts, grant cash credit and overdrafts and issue on discount local bills of exchange. These give promise of developing a truly non-capitalist system of banking run for the people and by the people, providing for the person of small means those modern banking facilities which have so largely assisted in developing trade and industries in other countries. Some of the larger non-agricultural societies, after meeting the needs of their members, have large balance on hand, which they are allowed, with the previous sanction of the Registrar, to advance to smaller primary societies. This practice is however, being gradually eliminated.

With the growth of industries and the development of cities, an important labouring class has grown up in big industrial towns and this class is as deeply indebted and as badly remunerated as the agriculturists ultimately are. Co-operation, if introduced, among people of this class, would open a new life to them besides being the means of their economic regeneration. Systematic efforts have been made in this direction, however, only in a few centres, elsewhere urban co-operation has so far been confined more or less to middle class people. The first experiment was initiated in Bombay under the auspices of an organization known as the Debt Redemption Committee. Some work in this direction has also been done in Madras, particularly among the depressed classes and among the low-paid employees of municipal bodies. The Social Service League of Bombay has lately started several promising societies among factory workers, and the formation of co-operative credit societies for workers in factories has come to be recognized as an essential feature of every well-considered scheme of welfare work.

Loans advanced.—The total amount of loans advanced to members by agricultural and non-agricultural societies during the year 1920-21 were Rs. 5,86,40,429 and Rs. 3,52,05,155, respectively. Loans are mostly given on the security of two co-members. Under the Act, societies are allowed, subject to certain conditions, to advance loans on the hypothecation of moveable or immoveable property, and there is nothing unco-operative in this so long as personal security, which is the central principle of co-operation, is given and the borrower's property is recognized as only a secondary or collateral protection. Mortgages are taken occasionally, especially as security for long-term loans or loans for large amounts.

It is impossible to insist on the restriction of loans to productive objects and there are circumstances under which unproductive loans are permissible and even advisable. What should be and generally is borne in mind is that precautions are taken by societies that the expenditure is inevitable and that it is not excessive in amount. The chief objects of the loans advanced are cultivation expenses, purchase of live-stock, fodder, seed, manure and agricultural implements, payment of rent, revenue or irrigation dues, land improvement and sinking of wells, purchase of new lands, repayment of debt or redemption of mortgaged land and personal maintenance in times of scarcity in agricultural societies, and for purchase of raw materials for industries, for trade, for house-building and for food and other necessaries of life in non-agricultural societies. The terms of the loans are one year or less on those for current needs, whether for agriculture or petty trade, and up to five years or so on loans for liquidation of old debts or for land improvement. An unsatisfactory feature of the co-operative system in some of the Provinces is the laxity and unpunctuality in the matter of repayment of loans by members and a general apathy in the matter on the part of societies. As co-operation is both financially and educationally a failure unless promptitude of payment is ensured, no efforts are spared by organizers to educate societies in this respect. The Co-operative Societies' Act grants to societies priority of claim over other creditors (except the State or the landlord) to enforce any outstanding demand due to the societies from members or past members upon the crops or other agricultural produce, and upon the cattle, fodder or agricultural implements, in cases where loans have been advanced for the purposes specified. Law Courts have ruled that such claim is not valid unless a decree is obtained by a society in its favour in advance. To carry out the intention of the framers of the legislation it is proposed to convert this claim into a lien and thus get over the legal difficulty. But not content with this, some co-operators have pleaded for special powers under which overdue loans may be recovered

as arrears of land revenue. Most local Governments have framed rules under the Act enabling the Registrar to refer disputed claims to arbitration and to enforce the award of the arbitrator in the same manner as a decree of the Civil Court. It has been suggested, and is the practice in some provinces that sums due under awards of arbitrators should be made recoverable according to the procedure allowed for the recovery of arrear of land revenue. The existence of a special privilege of this character may, however, lead to laxity in the selection of members and carelessness in the granting of loans and in securing regular repayments on them. The demand for a special procedure for the recovery of the dues of a cancelled society stands on a somewhat different footing and the Local Governments of Bengal and Bihar and Orissa were the first to adopt enactments enabling the contributions levied by the liquidator of a cancelled society to be collected in the same manner as arrears of land revenue on an application being made in that behalf by the Registrar of Co-operative Societies. Legislation on similar lines has since then been adopted in almost all other provinces.

The Financing of Agricultural Societies.—As soon as the initial stage of the movement passed, a very urgent problem had to be faced. This was to finance the agricultural societies the number of which was growing rapidly. And the problem was solved in different provinces according to the special conditions and the stages of development the movement had attained. In Madras, a central bank, which lent to co-operative societies all over the Presidency, was started without Government aid as early as in 1907. This was followed by the starting of banks at district head-quarters. In other Presidencies, district and taluka banks were established making good the deficiency in the local capital of the societies within their districts, and in some places joint stock banks were persuaded to make advances direct to agricultural societies or through the medium of local central banks. A large number of prosperous non-agricultural societies, as stated above, could afford to lend to agricultural societies. Government aid was also freely given in a few Provinces, although with the progress of the movement, however, this aid was discontinued. In Bombay, there was no movement to start local financing agencies and the slow increase in the number of societies made it difficult for Central Banks with a restricted area of operations to work successfully. Accordingly, the Bombay Central Co-operative Bank was founded in 1911, with the object of financing co-operative societies throughout the Presidency. Later on, local central banks came to be started, and have taken over from the central bank at Bombay the work of financing societies in the various districts. The bank at Bombay has therefore assumed the functions and even the name of a Provincial Bank.

The Madras Central Bank referred to above has also been converted into a Provincial Bank working in harmony with district banks. A Provincial Bank with central banks and societies affiliated to it is in existence in Upper Burma, and this Bank finances primary societies either through the affiliated local banks or through the guaranteeing unions composed of societies. An Apex Bank was started in the Central Provinces in 1913 to form a link between the district banks in the Province and the joint stock banks with branches in the province. It led to the establishment of a Provincial Bank with a similar constitution in Bihar and Orissa. A Provincial Bank composed of central banks as shareholders has been started in Bengal, where, as also in Bihar and Orissa, primary societies are at present financed by central banks at district or *taluka* head quarters. This federation of central banks at Calcutta has started work by transferring to itself the deposit liabilities of local banks, and distributing these according to requirements. The federation also acts as the balancing centre for the province and provides fluid resource to affiliated banks. In the United Provinces, primary societies are financed on the same system, and there, too, the starting of a Provincial Apex Bank under which central banks will be federated is under contemplation. The Punjab has a local central banking system and a proposal for the starting of an Apex Bank, issuing debentures, as in Bombay, with interest guaranteed by Government is under consideration. A provincial union has already been recently started which works as a financial federation for the local banks in the province and facilitates mutual aid between them till an Apex Bank comes into being. In addition to the Provincial Banks mentioned above, Mysore has a Provincial Bank and Assam started during the close of the year for which statistics are given.

The constitution of Central Banks is not uniform, but the existing banks may be classified under three general heads :—(1) banks of which the membership is confined to individuals or where societies are admitted as members on exactly the same footing as individuals, (2) banks of which the membership is confined to societies, and (3) banks which include societies and individuals as their members and secure to societies separate representation on the board of directors. The majority of the central banks are of the mixed type and there are hardly any of them which now adhere to the old capitalist constitution. The federal type is theoretically the best, but the paucity of the resources of the constituent primary societies, the lack of personnel and the need for enlisting the support of the urban middle classes have all combined to make the mixed type the most popular in almost all provinces. In Bengal and the Punjab, there has recently been an increase in the number of federal central banks, which are found to work well, provided their area of operation is much smaller than a revenue district and they serve a compact group of well-established societies.

Functions of Central Banks:—The functions of central banks are to balance the funds of societies and to supply capital. But their duties are not limited to the provision of banking facilities only, but often include the organisation and supervision of societies. Hence in all the major provinces with the exception of the Punjab, Madras and Burma, central

banks perform the functions of supervision and guidance of the societies affiliated to them, and in some they also organise new societies and even take up the work of training and propaganda. Usually the unit of area for central banks is fixed as co-terminous with the whole of a revenue district, as the personnel necessary for its successful working may be difficult to secure in a smaller area. However, in most of the provinces of Upper India and Bengal there are in existence central societies for *talukas* and occasionally for smaller tracts. An important class of institutions included under the statistics of central societies are unions. These may be described as federations of societies which are maintained for supervision, either combined or not with the assessment or guarantee of loans to primary societies. They do not, however, undertake banking business except in the Punjab, the unions in which, save for the smallness of the area they cover, in no way differ from the pure type of central bank referred to above. These unions have a very restricted area of operations, within a radius of five to eight miles from a central village. They are accepted as integral parts of the provincial organization in Burma and the Central Provinces, in one province serving as a link between primary societes and the provincial bank and in the other between primary societies and local banks. The system has also been extended to Madras, though in this province no guarantee is undertaken by the unions. In Bombay guaranteeing unions were introduced as local agencies for supervision and assessment of credit, but the tendency now seems to transfer these functions wholly to central banks.

Organization and Propaganda.—It may be mentioned that in most of the provinces the work of organising and looking after the societies is done by the Registrar with the help of a staff of assistant registrars, auditors and other officers and a few honorary non-official workers. Where the central bank system has properly developed, the directors of the central banks, either themselves or through a paid agency, organise societies and, as stated above, supervise their working. The number of honorary workers is steadily increasing and in some Presidencies there is a staff of specially-appointed honorary organisers who regularly assist the Registrars. The activities of the honorary workers are often, however, spasmodic and unorganized, and in most of the major provinces the need has been felt for some co-operative institution which will co-ordinate and systematize the efforts of non-official workers, and place them on a responsible basis. The objective is to have the movement directed and controlled through self-governing representative bodies like organisation societies or federations on the lines of similar institutions in Germany, England and Ireland. Such institutions carry on active educational propaganda, and through the agency of local committees and groups of workers, assist in the organization of new societies and attend to their supervision. Arrangements will also be possible for the carrying on the audit of societies—for which Government cannot continue to increase the official staff to an unlimited extent—on payment of some fixed contributions. Finally, such federations should have the ultimate voice in the determination of policy, and subject to the statutory powers of the Registrar gradually take over the entire control of the co-operative organization in a province. In the Central Provinces, there has been for ome years a Federation of Co-operative Banks and Societies which provides a regular and efficient system of supervision, audit and control, arranges for the training of the federation staff, attempts to secure uniformity of practice among co-operative institutions and to promote their interest and foster the spread of co-operation by active propaganda. A Provincial Union has also been started in Madras, but its objects are mainly educational and propagandist. Its activities are at present confined to the issuing of co-operative journals and the holding of conferences. Its constitution and its lines of work have now been revised so as to make it the central self-governing organization in the movement. A Central Institute to focus the efforts of co-operative workers and to carry on propagandist work was established in Bombay in 1918. The objects of this institution are to develop the co-operative movement in the Presidency, by promoting the study of co-operation and by co-ordinating the activities of several existing propagandist and organization agencies. The Institute has no powers of control, though it is expected to ascertain and represent the views of co-operators on questions affecting the movement. The activities of the Institute in the mofussil are carried on through its divisional branches formed on a linguistic basis and local branches in taluka or district towns. In Bengal, a similar propagandist organization has been started with identical aims. The Society has taken over some of the educational and propagandist work hitherto performed by the Co-operative Department, and has assisted in the organization of co-operative stores among students in colleges. It has opened branch centres and projected a comprehensive scheme for the training of members of village societies and their secretaries. A federation with a constitution more or less similar to that of the Central Provinces Federation but having divisional boards to decentralize control is also in existence in Bihar and Orissa, while in the Punjab a provincial union has been organized for conducting the audit of primary societies and undertaking general propagandist work. In Burma, the audit of primary societies is conducted by a central council consisting of important departmental officials and representatives of co-operative institutions. This also assists in the organization of the provincial conference and acts as an advisory body to the Registrar. Organization, supervision and propaganda are furthered by district federations of unions of primary societies. These are all recent developments and it is still too early to forecast on what lines the transfer of control to representative co-operative agencies will be carried out.

Other forms of Co-operation.—After the passing of the amended Co-operative Societies' Act, the application of co-operation to purposes, other than credit was greatly extended, but it is only during the last few years that a general

demand for producers' and consumers' societies and agricultural purchase and sale societies has exhibited itself. Before the year 1918-19, there were only a few store societies all over the country In all provinces, particularly in Madras, some beginning had been made in the direction of distributive co-operation among the middle classes, while in Bengal and the United Provinces some attention had been devoted to the starting of stores for students living in hostels attached to colleges. The movement obtained popular favour in view of the increasing prices of the daily necessaries of life, and the profiteering which assumed serious proportions at the close of the War. Supply unions, store societies, and distributive departments attached to credit societies have been organized in some provinces, while arrangements are contemplated for obtaining cheap, wholesale supplies for the various distributive organizations.

In some Provinces efforts have been made to revive the ancient handicrafts of the country and cottage industries by organising co-operative societies for the workers. Many of these societies merely provide cheap credit, but in some places they undertake the supply of raw materials and the sale of manufactured goods. An important industry which flourished in India before the introduction of machinery was handloom weaving and efforts have been made to revive it by the formation of co-operative societies of handloom weavers. Most of the weavers' societies are merely credit societies, but some undertake the purchase of good yarn for members, and others have store branches to sell the cloth produced by members. They have also been instrumental in introducing improved looms and methods among the conservative weaving classes. Other industrial societies to be found in very small numbers here and there are those for "gaolees" or milkmen, dyers, basket and brass workers in the Central Provinces, "Chammars" and "Dhers" in Bombay and Punjab, lacquerware workers, carpenters, wood carvers, blacksmiths and potters. In Bombay, the producers' movement has extended to communities like those of workers like coppersmiths and goldsmiths, carpenters, dyers, and others, and drawing its inspiration from the ancient guild spirit animating the communities, it aims at creating a strong economic organization among these various industrial workers and craftsmen, based on self-help and self-government. Another off-shoot of this movement is the starting of co-operative societies among skilled or unskilled labourers on the lines of the labour societies of Italy. The initiation came from Kashmir, while experimental societies were also started in Madras, and in Bombay. The object of these is to organize labourers to tender for public contracts for private works, to eliminate the middle-man contractor, and to utilize the profits he made for the economic and social betterment of the labouring community. The Indian Industrial Commission in the course of their inquiries devoted some attention to the development of small and cottage industries and the possibility of reviving them by the introduction of co-operation. Their recommendations on this subject are not very definite. State loans for purchase of costly plant or machinery are, however, recommended, and emphasis is laid on the necessity of arranging facilities for the marketing of products of home industries. The first step to industrial co-operation is to be taken by familiarizing workers with the principles of co-operative credit, though later on separate non-credit institutions would become necessary. Suggestions are made for technical guidance to workers, and the local departments of industries are advised to keep workers constantly informed about the demands of the markets. Organization of industrial societies is to be a function of local departments of industries, but as these will be engaged with problems of big industries, it is doubtful if the cottage and small industries will have much scope for development under their guidance and direction.

An interesting development of recent years in the provision of housing through co-operative societies. A good number of housing societies have been started in Bombay City and suburbs and also in a few other centres. They are generally organized on the co-partnership system, under which the society owns the houses and lets them to members at fixed rents. The scheme is feasible for such sections of the middle classes as can provide a certain proportion of the initial capital. Tenant-ownership societies have also been started. There are some building societies in Madras and a few more in Mysore, but their activities are confined mainly to the provision of capital for building schemes and only occasionally extend to the joint purchase of land or of building materials.

The province of Burma is a pioneer in the matter of cattle insurance, and to support the village insurance societies which have been started in the province, there has been organized a central re-insurance society, which receives some financial backing from Government. In other provinces co-operative insurance for cattle has made only slight progress, with the exception of the Punjab where the movement has advanced so far as to necessitate the starting of a re-insurance society.

Agricultural Co-operation.—Co-operative societies have until recently been organized only to supply cheap credit to their members, but there are various other fields of work to which they may extend their activities. Grain banks have, in some provinces, been started with advantage, receiving deposits in kind and allowing these to accumulate to be sold at profitable rates or distributed to the members in times of scarcity. Such banks have been started in Bombay, Madras and Bengal, Mysore and Coorg. Societies on a similar principle for the storage of fodder may assist in solving what has become an important problem in rural economy in some provinces. Another direction in which the co-operative principle is being adopted is the starting of societies for purchase of and distribution among members of pure and selected seed. A number of small seed societies have been organized in the Bombay Presidency, and in the Central Provinces and Berar the work appears to have been particularly well organized. Societies or the co-operative purchase and sale of manure

will also prove a great boon, and a few such stores have been established in Madras, Bengal and Bombay. In the Punjab and in Madras the supply of agricultural requisites has been undertaken either by the credit societies on the commission-indent system or special supply unions are organized for bulking orders, making contracts, distributing goods, and collecting payments.

Joint sale of produce gets popular as co-operative credit thrives and agriculturists become less dependent on local traders. While Burma led the way by starting societies for the joint sale of paddy, the most interesting developments in the direction have taken place in Bombay. Societies for the sale of agricultural commodities, chiefly cotton and jaggery have been started in several districts in the Deccan and the Karnatak. This aspect of co-operation has lately attracted considerable attention and attempts similar to those made in Bombay have been made in Madras and the Punjab, in the latter province with considerable success. It will indeed be a great achievement if these efforts are successful and the cultivator obtains adequate returns for his produce. At present he buys in the dearest market and sells in the cheapest. But if co-operative purchase and sale show good progress, his economic position will be much improved. Apart from separate societies for the purpose, credit societies and central banks, in many parts of the country, arrange for the joint sale of produce. In some places, credit societies undertake the joint purchase of agricultural implements for members, while in others separate registered societies are started for the purpose. In some provinces in Upper India, this work is performed by central banks for the societies affiliated to them.

Efforts have been made in some parts of the country to solve the problem of milk-supply—to reduce the price and increase the purity—by starting co-operative dairies, composed either wholly of gaolis or milkmen or the producers and the consumers together. Co-operative creameries and ghee producing societies have also been started in one or two provinces. Another interesting development is the starting of cattle-breeding societies in the Central Provinces and elsewhere. It is anticipated that these societies will assist in supplying the keen demand that exists for bulls of good stock. In a few provinces there are societies for rice-hulling, the manufacture of jaggery and for lift irrigation. The latter is an interesting development of co-operation which appears to have established itself in popular favour in some parts of Bengal. Ginning on co-operative lines has also been attempted. An interesting experiment in agricultural co-operation is the starting in the Punjab of societies for the consolidation of small and scattered holdings. These propose to re-group and re-allot the holdings of members, and if this voluntary action proves sufficient for the purpose, one of the gravest evils of modern Indian agriculture will be solved without the aid of State help or legislation. In Bombay action has been taken on somewhat different lines to deal with the problem of the uneconomic cultivator. A beginning has been made in the direction of starting co-operative societies for joint farming, and the movement may lead to the evolution of a system of co-operative cultivation of land such as has been extremely successful in Italy.

Co-operation has already been successful to some extent in redeeming the chronic indebtedness of the agriculturist, but if the improvement in his economic condition is to be permanent it is essential that he should be prevailed upon to adopt improved methods of production. The Agricultural Departments in various provinces do undertake propagandist work with this object, but their efforts have not proved as successful as they ought to be. A co-operative society provides an effective agency for reaching the agriculturist, and in many places societies have been the means of bringing home to him the need for improved methods and have been made the centres for conducting the propagandist activities of the Agricultural Department and district Agricultural Associations. As a result, a few societies have been enterprising enough to purchase modern agricultural implements, and the machinery recommended by the Department and to use the proper manures and the certified varieties of seeds. "Wherever agriculture and co-operation have experienced the assistance which each can derive from association with the other they are fast developing a truly organic connection."

Committee on Co-operation in India.—In July 1914, the Government of India issued a lengthy Resolution on Co-operation in India, surveying its progress in the country during the last ten years. They particularly emphasised the urgency of a proper financial organisation of societies and stated that "the responsibilities introduced by the addition to the co-operative organization of the central and provincial banks are of a serious character. To supervise the relations of such institutions with the money market on the one hand, and with their constituent societies on the other, is a task which requires a considerable degree of technical skill, and the administration of the whole co-operative movement in the stages above that of the individual society is a matter which must in the immediate future engage the serious attention of Government and of the people." In October, Government appointed a Committee under Sir Edward Maclagan to examine whether the movement especially in its higher stages and in its financial aspect was progressing on sound lines and to suggest any measures of improvement which seemed to be required. The enquiry was to be directed primarily to an examination of such matters as the constitution and working of central and provincial banks, the financial connection between the various parts of the co-operative organization, the audit, inspection, and management of all classes of societies, and the utilization of the reserve funds. In its Report, which was issued in September 1915, the Committee stated that it had not confined its enquiries to the subjects referred to it, for it had to recognise that the financial

welfare of the higher stages of the co-operative system was largely based on the soundness of the foundation.

Government Action on Committee's Report.—The Government of India have passed orders on the recommendations in the light of the opinions of the Local Governments. The views of the Local Government differ widely and clearly show that a uniform system cannot be introduced in provinces with diverse conditions. Several provinces have already decided to take action on such of the recommendations as are approved of by the Registrars and are suitable to local conditions, and the co-operative organization in most provinces has been modified more or less on the lines suggested. With a view further to elicit opinion on the recommendations, a special conference of the Registrars was convened in August 1918, to which all the Registrars and a few selected non-official co-operators were invited. The Conference was also asked to consider the suggestion made by the Committee on Co-operation that as the financing of the movement involved grave difficulties which baffled solution unless the discounting of pro-notes was arranged through an Imperial State Bank or the several Presidency Banks, a careful examination of the question was immediately called for. A proposal was made for the appointment of an expert committee, but the Government of India have practically shelved it by insisting that they would assemble the committee at some date convenient to them. Under the Reforms, co-operation has been made a provincial subject and also a transferred subject. The control of Co-operative Departments has been entrusted to Ministers and in Bombay, the United Provinces, and the Central Provinces, Bills have been drawn up for enactment by the local Legislative Councils to take the place of the Co-operative Societies Act.

Effect of Crisis on Co-operation.—It is hardly possible without any close and scientific inquiry such as has not yet been carried out to appreciate accurately the effects of the co-operative movement in enabling agriculturists to resist the rigours of a famine as also to judge the reaction of the latter on the co-operative organisation as there is an interplay of various economic forces affecting the life and industry of the agriculturists, the proportionate value of which cannot be estimated easily. The agricultural season of 1918-19, however, put the co-operative organisation in most provinces to a very severe test and the reports for the succeeding years afford some indication of the resisting power of the co-operative organization. In the Central Provinces, owing to the drying up of recoveries and the issue of large advances to agriculturists to tide over a bad season, the fluid resources of the movement were seriously depleted and the Apex Bank was able to meet its liabilities only with the financial assistance of Government. The fluid resources of the Provincial Bank were replenished and the Local Government, with the concurrence of the Government of India, placed credits at the disposal of the Provincial Bank and made advances direct to primary societies in the form of Tagavi loans. A Committee of Inquiry was appointed which made sweeping recommendations, the most important of which was the liquidation of the Provincial Bank and the placing of Central Banks in direct touch with Commercial Banks. This recommendation was however, subsequently turned down by the Local Government although some other recommendations such as the division of agricultural finance into short term crop loans and long term non-crop loans met with a considerable amount of public support. In Bengal and the Punjab, the return of favourable seasons has averted any breakdown of the system, which threatened to overtake them when agricultural scarcity on a wide scale caused serious difficulties some time ago. The same may now be asserted of the United Provinces, where there appeared to be some danger of the strain not being quite successfully withstood. With a better appreciation of the dependence of the agriculturist on seasons, and a more systematic management of the funds of central societies it is anticipated that in future the situation arising out of a failure of rains will be satisfactorily met. In 1913 and the following months, practically the whole of the country was subjected to a banking crisis of considerable magnitude, but a marked feature of this crisis was a tendency to withdraw deposits from commercial institutions and place them in co-operative banks. The outbreak of the War brought another set of influences into play and there was a temporary tendency to withdraw deposits and a temporary cessation of new deposits. The disturbance was not serious except in two or three provinces and by the end of the year 1914-15, the situation became practically normal. In two of the provinces where the situation caused some anxiety owing to the cessation of fresh deposits in central banks, the Government sanctioned advances to the extent of Rs. 5,00,000 to central societies to be utilized in case of urgent loans to agricultural societies or to meet withdrawals of deposits. On the whole, therefore, the movement appears to have stood the test of the War much better than might have been expected.

Social Reform.—Co-operation has, in some places, stimulated the desire for education and members of rural societies have been known even at advanced ages to receive the elements of education to enable them to put their signatures on the society's papers, and to take a lively interest in the internal work of their institutions. In Bombay, night schools for adults have been started with the aid of a splendid donation made by the late Sir Vithaldas D. Thackersey, while in the Punjab, Bihar, Bengal and elsewhere much expenditure on education is incurred by co-operative institutions themselves. In the Punjab separate rural societies have been registered to conduct night schools. There are not few cases where a society has set its face against drunkenness, expelled members notorious for their intemperate habits and has insisted on a high standard of morality and attempted to improve the standard of life. Societies have occasionally condemned excessive expenditure on marriages, and have thus indirectly trained members to habits

of thrift. Liquidation of old debts again has been rendered possible to a great extent and many an agriculturist who was formerly in a state of chronic indebtedness has been relieved of all his debts and freed from the necessity of incurring new ones. Credit has been much cheapened and it is now possible for the agriculturist to borrow at 9 to 18 per cent. what he could not borrow at less than 20 to 75 per cent. formerly. It has been calculated that in interest alone the agriculturists of India, by taking loans from co-operative credit societies instead of from the village money-lenders, are even now saving themselves from an unnecessary burden of at least 80 lakhs of rupees. The village rates of interest have naturally gone down considerably and the Sowkar is, in most places, not the terror and the force that he was. Business habits have been inculcated with the beneficial result that the agriculturist has learnt to conduct his own work more efficiently. Thrift has been encouraged and the value of savings better appreciated. Association in a body for common good has brought home to the people the blessings of unity, and litigation has often decreased in villages with society. In the Punjab, a number of societies have been started in the rural areas where members agree to refer all disputes to arbitration by their elected committees and to abide by the awards of arbitrators. Participation in the management of societies has instilled among members the important lessons of self-help and self-reliance; but the most important achievement of co-operation has been the growth of a sense of communal life—a feeling of "all for each and each for all" amongst the members of a co-operative body.

The following statements show the progress of the Co-operative movement in different provinces, and contain some information about their detailed working till the end of the official year 1921-22:—

Number of Societies for ... India, showing the increase since 1906-07.

—	Average for 4 years from 1906-07 to 1909-10.	Average for 5 years from 1910-11 to 1914-15.	Average for 5 years from 1915-16 to 1919-20.	1919-20.	1920-21	1921-22.
1	2	3	4	5	6	7
Central (including Provincial and Central Banks and Banking Unions).	17	231	304	400	449	480
Supervising and Guaranteeing Unions (including Re-insurance Societies).			638	994	1,150	1,246
Agricultural (including Cattle Insurance Societies).	1,713	10,891	25,873	36,716	42,582	46,788
Non-Agricultural	196	664	1,662	2,662	3,322	3,674
Total ..	1,926	11, 86	28,477	40,772	47,503	52,182

Number of Members by Provinces for 1921-22 *only.*

Province.	Population in millions.	Central (including Provincial and Central Banks and Banking Unions).	Supervising and Guaranteeing Unions (including Re-insurance Societies).	Agricultural (including Cattle Insurance Societies).	Non-Agricultural.	Total number of Members of primary Societies.	Number of Members of primary Societies per 1,000 inhabitants.
1	2	3	4	5	6	7	8
Madras	42·3	8,965	5,494	333,342	124,762	458,104	10·8
Bombay	19·3	7,592	445	208,460	112,154	320,614	16·6
Bengal	46·7	10,441	200	180,781	68,720	249,501	5·3
Bihar and Orissa	34·0	8,126	4,310	112,421	15,994	128,415	3·8
United Provinces	45·4	10,054	104	116,868	11,268	128,136	2·8
Punjab	20·7	10,454	13	241,240	17,594	258,834	12·5
Burma	11·7	5,354	4,639	107,667	26,122	133,789	11·4
Central Provinces and Berar ..	13·9	83,716	6,019	73,985	6,289	80,274	5·8
Assam	7·6	1,631	10	24,579	7,369	31,048	4·2
Coorg	0·2	64	..	6,208	1,162	7,370	36·8
Ajmer-Merwara	0·5	1,517	135	10,192	4,088	14,280	28·6
Hyderabad Administered Area ..	0·1	..	..	..	268	268	2·7
Delhi	0·5	156	..	1,628	934	2,562	5·1
Total (British India)	242·9	148,070	21,369	1,417,371	396,724	1,814,095	7·5
Mysore	6·0	2,383	..	51,377	43,152	94,529	15·8
Baroda	2·1	722	..	13,826	3,443	17,269	8·2
Hyderabad	12·5	2,335	..	28,742	7,257	36,099	2·9
Bhopal	0·7	1,468	185	12,298	..	12,298	17·6
Total (Indian States)	21·3	6,908	185	106,243	53,952	160,195	7·5
Grand Total	264·2	154,978	21,554	1,523,614	450,676	1,974,290	7·5

Number of Members for all India showing the increase since 1906-07.

—	Average for 4 years from 1906-07 to 1909-10.	Average for 5 years from 1910-11 to 1914-15.	Average for 5 years from 1915-16 to 1919-20.	1919-20.	1920-21.	1921-22.
1	2	3	4	5	6	7
Central (including Provincial and Central Banks and Banking Unions).	1,987	23,677	89,925	127,145	143,488	154,978
Supervising and Guaranteeing Unions (including Re-insurance Societies).			10,971	17,274	19,322	21,554
Agricultural (including Cattle Insurance Societies).	107,643	459,096	902,930*	1,181,718	1,362,391	1,523,614
Non-Agricultural	54,267	89,157	226,031	339,420	390,513	450,676
Total Number of members of primary Societies ..	161,910	548,253	1,128,961	1,521,138	1,752,904	1,974,290

*Excluding members of Cattle Insurance Societies at the end of 1915-16 and 1916-17, and those in Bombay and the United Provinces at the end of 1917-18.

Number of Societies by Provinces for 1921-22 *only.*

Province.	Population in millions.	Central (including Provincial and Central Banks and Banking Unions)..	Supervising and Guaranteeing Unions (including Re-insurance Societies).	Agricultural (including Cattle Insurance Societies).	Non-Agricultural.	Total number of Societies.	Number of Societies per 100,000 inhabitants.
1	2	3	4	5	6	7	8
Madras	42·3	33	209	6,289	856	7,387	17·5
Bombay	19·3	19	69	2,762	561	3,411	17·7
Bengal..	46·7	74	6	6,146	453	6,679	14·3
Bihar and Orissa	34·0	46	93	3,861	261	4,261	12·5
United Provinces	45·4	71	9	4,858	199	5,137	11·3
Punjab	20·7	110	1	8,798	401	9,310	45·0
Burma..	11·7	13	533	4,534	199	5,279	45·1
Central Provinces and Berar ..	13·9	35	309	4,528	95	4,967	35·7
Assam	7·6	18	1	555	57	631	8·3
Coorg	0·2	1	..	142	11	154	77·0
Ajmer-Merwara	0·5	7	2	460	43	512	102·4
Hyderabad Administered Area ..	0·1	..	..	..	8	8	8·0
Delhi	0·5	1	..	100	42	143	28·6
Total (British India)..	242·9	428	1,232	43,033	3,186	47,879	19·7
Mysore	6·0	16	..	1,233	270	1,519	25·3
Baroda	2·1	5	..	489	45	539	25·7
Hyderabad	12·5	13	..	1,278	173	1,464	11·7
Bhopal	0·7	18	8	755	..	781	111·6
Total (Indian States)	21·3	52	8	3,755	488	4,303	20·2
Grand Total	264·2	480	1,240	46,788	3,674	52,182	19·8

Working Capital for all India showing the increase since 1906-07.

	Average for 4 years from 1906-07 to 1909-10.	Average for 5 years from 1910-11 to 1914-15.	Average for 5 years from 1915-16 to 1919-20.	1919-20.	1920-21.	1921-22.
1	2	3	4	5	6	7
	Rs. (1,000)	Rs. (1,000)	Rs. (1,000)	Rs. (1,000)	Rs. (1,000)	Rs. (1,000)
Share capital paid up	13,19	88,87	2,51,97	3,40,09	4,05,25	4,63,69
Loans and deposits held at the end of the year from Members	14,12	88,28	96,35	1,37,02	1,63,60	2,24,74
Loans and deposits held at the end of the year from Societies	13,59	1,93,42*	47,81	73,94	99,41	1,23,76
Loans and deposits held at the end of the year from Provincial or Central Banks	..	..	5,03,19	7,26,62	†9,17,99	10,74,24
Loans and deposits held at the end of the year from Government	5,86	10,87	25,58	37,38	49,50	52,46
Loans and deposits held at the end of the year from Non-Members and other sources	19,69	1,41,98	4,70,25	6,45,84	†7,92,52	9,19,94
Reserve and other Funds	1,67	25,00	1,23,32	1,79,82	2,14,66	2,53,41
Total	68,12	5,48,42	15,18,47	21,40,71	26,42,93	31,12,24

*Includes loans from Provincial or Central Banks.
† Revised figure.

Working Capital by Provinces for 1921-22 only.

Province.	Population in millions.	Share Capital paid up.	Loans and Deposits held at the end of the year from							Number of annas per head of population.
			Members.	Societies.	Provincial or Central Banks.	Government.	Non-Members and other sources.	Reserve and other Funds.	Total.	
1	2	3	4	5	6	7	8	9	10	11
		Rs. (1,000)	Rs. (1,000)	Rs. (1,000)	Rs. (1,000)	Rs. (1,000)	Rs. (1,000)	Rs. (1,000)	Rs. (1,000)	As.
Madras	42·3	79,86	28,72	20,84	2,71,89	94	1,77,42	21,94	6,01,11	23
Bombay	19·3	59,10	1,04,05	40,92	86,24	12,09	1,11,30	21,60	4,35,30	36
Bengal	46·7	47,82	32,18	3,25	1,28,33	32	1,25,33	31,45	3,68,68	133
Bihar and Orissa	34·0	14,27	4,85	3,43	69,17	21	61,00	12,71	1,65,64	8
United Provinces .. .	45·4	31,64	4,42	1,37	44,13	1	42,73	19,98	1,44,28	5
Punjab	20·7	69,37	19,26	21,01	1,44,41	3,46	1,08,76	64,50	4,30,77	33
Burma	11·7	66,79	9,33	14,08	1,06,82	16,03	1,16,17	35,19	3,64,41	50
Central Provinces and Berar ..	12·9	27,01	2,53	13,79	1,47,14	6,09	98,18	21,41	3,16,15	36
Assam	7·6	2,91	2,82	1,11	3,66	28	6,78	2,84	20,40	4
Coorg	0·2	1,20	22	7	9	1	36	74	2,69	22
Ajmer-Merwara	0·5	7,39	26	11	14,94	10	17,02	3,33	43,15	138
Hyderabad Administered Area	0·1	22	32	9	..	..	..	1	64	10
Delhi	0·5	23	1	..	1,59	..	3,26	1	5,10	16
Total (British India) ..	242·9	4,07,81	2,08,97	1,20,07	10,17,91	39,54	8,68,31	2,35,71	28,98,32	19
Mysore	6·0	34,46	9,66	2,17	10,48	5	16,65	8,50	81,97	22
Baroda	2·1	1,99	4,07	57	7,63	2,24	8,12	3,95	27,67	21
Hyderabad	12·5	18,96	2,04	73	32,81	10,63	19,59	5,57	90,33	12
Bhopal	0·7	47	..	22	5,41	..	7,27	58	13,95	32
Total (Indian States) ..	21·3	55,88	15,77	3,69	56,33	12,92	51,63	17,70	2,13,92	16
Grand Total ..	264·2	4,63,69	2,24,74	1,23,76	10,74,24	52,46	9,19,94	2,53,41	31,12,24	19

The Women's Medical Service for India.

This Service is included in the National Association for supplying female medical aid to the Women of India, generally known as the Countess of Dufferin's Fund and is administered by the Council of that Fund. The Government of India has so far allotted the sum of £25,000 per annum towards its maintenance. The present sanctioned cadre is forty first class medical women. Recruitment of the service is made (*a*) in India by a medical sub-committee of the Central Committee which includes the Director-General, Indian Medical Service, the Honorary Secretary to the Central Committee, and a first-class medical woman; (*b*) in England, by a sub-committee, including a medical man and two medical women conversant with conditions in India. These sub-committees perform the duties of a medical board examining candidates for physical fitness, and for return to duty after invaliding.

The Council determines what proportions of the members of the Service is to be recruited in England and in India respectively. In the original constitution of the Service, duly qualified medical women who are in the service of, or who have rendered approved service to, the Countess of Dufferin's Fund, are to have the first claim to appointment, and thereafter special consideration is to be paid to the claims of candidates who have qualified in local institutions and of those who are natives of India.

Qualifications.—The qualifications are that the candidate must be (*a*) a British Subject resident in the United Kingdom or in a British Colony or in British India, or a person resident in any territory of any Native Prince or Chief under the suzerainty of His Majesty exercised through the Governor-General of India or through any Governor or other officer subordinate to the Governor-General of India. (*b*) Must be between the ages of twenty-four and thirty at entry. (*c*) She must be a first-class Medical Woman, *i.e.*, she must possess a medical qualification registrable in the United Kingdom under the Medical Act, or an Indian or Colonial qualification registrable in the United Kingdom under that Act: but this condition does not apply at the original constitution of the Service to medical women in charge of hospitals who, in the opinion of the Central Committee, are of proved experience and ability. (*d*) The candidate must produce a certificate of health and character. But the Central Committee reserves the power to promote to the service ladies not possessing the above qualifications, but who have shown marked capacity. Members of the Service are required to engage for duty anywhere in India or Burma. After one year of probation has been satisfactorily passed their appointments are confirmed. The services of Members may be lent to Local or Municipal bodies, or to special institutions, which may be responsible for whole or part of the pay.

Pay.—The rates of pay are as follows:—

1st	to	3rd	year	Rs. 450 per month.
4th	to	6th	,, ,,	500 ,,
7th	to	9th	year	Rs. 550 per month.
10th	to	12th	,, ,,	600 ,,
13th	to	15th	,, ,,	650 ,,
16th	to	18th	,, ,,	700 ,,
19th	to	21st	,, ,,	750 ,,
22nd	to	24th	,, ,,	800 ,,
25th	and	after	,,	850 ,,

also an overseas allowance of Rs. 100 per month to those below 12 years' service and Rs. 150 per month to those of 12 years' service and over. But no member can be confirmed in the 500-rupee grade unless she has passed an examination in such vernacular as the Provincial Committee shall prescribe. In addition furnished quarters are provided free of rent: or a house rent allowance to be determined by the Provincial Committee may be granted in lieu of it.

Members of the Service are permitted to engage in private practice provided it does not interfere with their official duties, and the Provincial Committee has the power to determine whether such duties are thus interfered with. Except in very special cases retirement is compulsory at the age of fifty-five. A member whose appointment is not confirmed, or who is dismissed, is granted an allowance sufficient to pay her passage to England.

Leave Rules.—(*a*) Casual Leave, which is occasional leave on full pay for a few days, and is not supposed to interrupt duty. (*b*) Privilege Leave, which is leave on full pay and is meant to provide a month's holiday in the year. It can be accumulated up to a limit of four months. (*c*) Furlough, at the rate of two months for each year of duty, including privilege leave and casual leave. First furlough is not granted till after four years of duty, and more than eight months furlough is not granted at one time. Study leave may also be granted up to twelve months during the whole service. (*d*) Sick leave, up to a maximum of two years. (*e*) Extraordinary leave at any time at the discretion of the Central Committee. When on furlough or sick leave the allowances are half the average monthly pay of the six months presence on duty immediately preceding the taking of the leave. There are no allowances during extraordinary leave. A Lady appointed in England receives a sum of £100 to cover her passage and incidental expenses. There are also allowances to cover the cost of journeys by rail and road.

There is also a Provident Fund, each member contributing monthly thereto ten per cent. of her salary, the Association contributing an equal amount, and each subscriber's account being granted interest on the amount standing to credit at the rate of 4 per cent. per annum, "or at such rate as the Central Committee can invest without risk to the funds of the Association."

The Member loses her contributions if she resigns (except on account of ill-health) before completing five years' service, or in the event of dismissal. On retirement after approved service the sum which has accumulated to the credit of the subscriber is handed over to her.

The Lady Hardinge Medical College:—The Lady Hardinge Medical College, Hospital, and Training School for Nurses and Compounders are intended to commemorate the visit of Her Imperial Majesty to India in 1911. The foundation stone was laid by Lady Hardinge on March 17th, 1914, and after her death three months later it was suggested by Her Imperial Majesty that the institution should serve as a memorial of its founder and be called by her name. The College was opened by Lord Hardinge in February 1916, and the Hospital by Lady Chelmsford in March 1917. The College is managed by a Governing Body, of which the President is the Director General of the I.M.S., and the members include the Chief Commissioner of Delhi, the Chief Engineer of Delhi, a representative of the Dufferin Fund Council, a representative elected by the All-India Association of Medical Women and a representative of the Educational Service. The Honorary Secretaries, who are also members of the Governing Body, are the Surgeon to His Excellency the Viceroy and the Deputy Secretary in the Department of Education and Health. The Deputy Accountant General, Central Revenues, acts as Honorary Treasurer.

The main object of the Institution is to provide complete courses of instruction to Indian women who wish to qualify for a University degree in medicine or to receive a full training as Nurses or Compounders.

An additional object is the provision of medical, surgical and obstetric treatment for women, having a due regard to *pardah* and caste customs. The patients are either treated in the Hospital Wards or are permitted to reside with their families in separate cottages built for the purpose.

SENIOR STAFF:

Principal and Professor of Gynæcology and Midwifery—Miss G. J. Campbell, M.D., Ch. B. (Glasg.), Women's Medical Service for India.

Vice-Principal and Professor of Surgery—Miss H. M. Franklin, M.B., B.S. (Lond.), W.M.S.

Professor of Medicine—Miss G. Stapleton, M.D. B.S. (Lond.), W.M.S.

Professor of Ophthalmology—Miss J. F. McIlroy, M.A, D.Sc., M.B., Ch.B. (Glasg.), D.P.H. (Edin.).

Professor of Pathology—Miss F. Mason, M.A., M.B., Ch. B., D.P.H. (St. Andrew's).

Professor of Anatomy—Miss M. C. Murphy, M.B. (Cal.), L.R.C.P. (Lond.), M.R.C.S. (Eng.), W.M.S.

Professor of Physiology—Mrs. Uffold, Hon. Schools Nat. Sci. (Oxon.).

Professor of Chemistry—Miss A. M. Bain, M.A., B.Sc. (Aberdeen).

Professor of Botany and Zoology—Miss M. L. Hett, B.Sc. (Lond.).

Professor of Physics and Mathematics—Miss P. M. Borthwick, B.Sc. (Lond.), M.Sc. (Bristol).

Lecturer in English—Mrs. Marsh, Hon. Schools, Classics (Oxon).

Warden and Secretary—Miss M. W. Jesson, Maths. Tripos (Cantab.).

The Training School for Nurses.—This is intended to give a thorough training in all branches of Nursing and in Midwifery. All particulars of courses of training and conditions of admission may be obtained from the Superintendent, Training-School for Nurses, Lady Hardinge Medical College Hospital for Women and Children, Delhi. *Superintendent*—Miss BONSOR.

The Training School for Compounders:—A limited number of candidates are taken for training. All particulars of training and conditions of admission may be obtained from Miss O. Crooke, M.P.S.

THE COUNTESS OF DUFFERIN'S FUND.

The National Association for Supplying Medical Aid by Women in India was founded by the Countess of Dufferin in 1886, the object being to open women's hospitals and women's wards in existing hospitals; to train women doctors, nurses and midwives in India; and to bring these out when necessary from Europe. An endowment fund of about 6 lakhs was obtained by public subscription. In addition Branches were formed in each Province, each Branch having its own funds and each having a number of Local Committees and Zenana Hospitals affiliated to it.

The Central Fund gives grants-in-aid to several Provincial Branches; it gives Scholarships to a number of women students at the Medical schools of Bombay, Calcutta, Madras and Delhi; it gives post-graduate scholarships for study in the United Kingdom. It has in the past brought from England a certain number of European medical women. It has assisted by grants-in-aid the building of a number of zenana hospitals in different parts of India. It has affiliated to it 13 Provincial Branches and a number of Local Committees.

The President is H.E. the Countess of Reading, C.I., G.B.E., The Hon. Secretary is Lt.-Colonel Carey Evans, M.C., I.M.S., and the Joint Secretary Dr. M. I. Balfour, W.M.S.

The Victoria Memorial Scholarships Fund was organised by Lady Curzon in 1903, in order to secure a certain amount of improvement in the practising dais of India. A sum of about 6 lakhs was obtained by public subscription, and centres were organised in each Province to carry out the objects of the Fund. Over 2,000 midwives have been trained in addition to large numbers who have been partially trained. Of late years the Fund has done much to pave the way for the registration and supervision of indigenous dais. It has also done much propaganda work.

LADY READING WOMEN OF INDIA FUND.

The Lady Reading Women of India Fund was opened by H.E. Lady Reading in 1922 with the object of assisting the most necessitous of the existing funds and establishing an Indian Nursing Association. Up to the present time the Fund has been used to send suitable Indian nurses to England for post-graduate training with the intention that they should return and take up administrative nursing posts in India. It has also been used to establish a

nursing hostel in Delhi for Indian nurses engaged in private nursing and it is hoped to extend this movement.

Amalgamation of Administration.—At a general meeting held in Simla in July 1923 it was decided that the administration of the Funds for the physical welfare of Indian women under the Presidency of the Viceroy's wife should be administered by a single committee and with identical rules. These funds are the Countess of Dufferin's Fund, Women's Medical Service for India, Victoria Memorial Scholarship Fund, Lady Chelmsford All-India Maternity League and Lady Reading Women of India Fund. The President of the Amalgamated Committee is H.E. the Countess of Reading and the Hon. and Joint Secretaries are respectively Lt.-Col. Carey Evans, I.M.S., Surgeon to the Viceroy and Dr. M. I. Balfour, C.M.O., W.M.S. The Hon. Treasurers are Sir Frederic Gauntlett and Colonel Daldy.

NURSING.

Whilst India cannot show the complete chain of efficiently-nursed hospitals which exists in England, there has been a great development of skilled nursing of recent years. This activity is principally centered in the Bengal, Madras, and Bombay Presidencies, where the chief hospitals in the Presidency towns are well nursed, and where large private staffs are maintained, available to the general public on payment of a prescribed scale of fees. These hospitals also act as training institutions, and turn out a yearly supply of fully trained nurses, both to meet their own demands and those of outside institutions and private agencies. In this way the supply of trained nurses, English, Anglo-Indian and Indian, is being steadily increased. In Bombay the organisation has gone a step farther, through the establishment of the Bombay Presidency Nursing Association, c-o St. George's Hospital, Bombay. This is composed of representatives of the various Nursing Associations in charge of individual hospitals, and works under the Government. The principle on which the relations of this Association with the Local Associations is governed is that there shall be central examination and control combined with complete individual autonomy in administration.

State Registration of Nurses for all India is much required. A meeting was held in Bombay in 1923 when Nurses from the Presidency met to discuss the question. It is desired that India should have its own State Register as in the United Kingdom, South Africa, New Zealand, Australia, Canada and Burma, and that the curricula and examinations should be brought into line with these countries. Government has proposed to establish a Provincial Register preparatory to an All-India Register.

Nursing Bodies.—The Honorary Secretary of the Calcutta Nursing Association is Mr. R. A. B. Reynolds, the Presidency General Hospital. The address of the Mayo Hospital Nursing Association is in Strand Road. In **Madras** there is the General Hospital, with a staff of 62 nurses, the Government Maternity Hospital, the Caste and Gosha Hospital at Kilpauk, the Royapetta Hospital and the Ophthalmic Hospital, also the Lady Ampthill Nurses' Institute and the South Indian Nursing Association (now amalgamated), President, Her Excellency Lady Willingdon, C.I., D.B.E. The Association has under its management—Hyde Park Nursing Home, Poonamallee Road, Kilpauk, Madras, and Nilgiri Nursing and Convalescent Home, Ootacamund, for Medical, Surgical and Maternity cases. Address—Western Castlet, Mount Road, Madras.

Bombay Presidency.—The Bombay Presidency was amongst the first in India to realise the value of nursing in connection with hospital work. The first steps were taken on the initiative of Mr. L. R. W. Forrest at St. George's Hospital, Bombay, where a regular nursing cadre for the hospital was established together with a small staff of nurses for private cases. This was followed by a similar movement at the J. J. and Allied Hospitals and afterwards spread to other hospitals in the Presidency. Ultimately, the Government laid down a definite principle with regard to the financial aid which they would give to such institutions, agreeing to contribute a sum equal to that raised from private sources. Afterwards, as the work grew, it was decided by Government that each nursing association attached to a hospital should have a definite constitution and consequently these bodies have all been registered as Associations under Act 21 of 1860. By degrees substantial endowments have been built up, although the Associations are still largely dependent upon annual subscriptions towards the maintenance of their work. The chief of these Associations are:—

- St. George's Hospital Nursing Association. Hon. Secretary: F. B. Thornely, Esq., St. George's Hospital, Bombay.
- J. J. Hospital Nursing Association. Hon. Secretary: W. Turner Green, Esq., Jamsetji Jijibhoy Hospital, Bombay.
- Goculdas Tejpal Hospital Nursing Association. Secretary: J. P. Brander, Esq., I.C.S., Old Custom House, Bombay.
- Cama Hospital Nursing Association. Hon. Secretary: H. C. B. Mitchell, Esq., Cama Hospital, Bombay.
- Sassoon Hospital Nursing Association, Hon. Secretary: Civil Surgeon, Sassoon Hospital, Poona.
- Karachi Civil Hospital Nursing Association. Civil Hospital, Karachi.
- Nasik Civil Hospital Nursing Association. Hon. Secretary: Civil Surgeon, Nasik Hospital, Nasik.
- Ahmedabad and Lely Memorial Nursing Association. Hon. Secretary: Civil Surgeon, Ahmedabad.
- Bijapur Civil Hospital Nursing Association. Hon. Secretary: Civil Surgeon, Bijapur.
- Belgaum Civil Hospital Nursing Association. Hon. Secretary: Civil Surgeon, Belgaum.

Ahmednagar Civil Hospital Nursing Association. Hon. Secretary: Civil Surgeon, Ahmednagar.

After further experience it was felt that it is undesirable to have a considerable number of detached and independent nursing associations, training and certifying nurses, without any common standard of entrance examination, or certification. It was therefore decided to establish the Bombay Presidency Nursing Association which came into existence in the year 1910.

The principle on which the Bombay Presidency Nursing Association works is a central system of examination, certification, registration and control. It is now the only nursing, examining, registering and certifying body in the Bombay Presidency. At the same time, the local associations retain entire charge of their local funds excepting Provident funds which have been transferred to the Central fund, and also entire control of the nurses when they are in their employment. Proposals are now before Government for absorbing the personnel of the local associations into a Presidency Nursing Association. This will not however affect the individuality of local associations which will continue to control their own funds and to exercise control over local establishments, subject in the latter case to such limitations as a revision of the nature in question will require.

The Association commenced its operations on the 1st April 1911. The institutions recognized under the by-laws for the training of nurses at present are—St. George's Hospital, J.J. Hospital, Cama and Albless Hospital, Bai Motlabai Hospital, Bombay; Huttesing and Premabai Civil Hospital, Victoria Jubilee and King Edward VII Hospital, Ahmedabad; Civil Hospital, Belgaum; Morarbhai Vrijbhukhandas Hospital, Surat; Karachi Civil Hospital, Karachi; Sassoon Hospital, Poona; State General Hospital, Baroda; and the following for the training of Midwives: M. V. Hospital, Civil Hospital, Surat; Victoria Jubilee and King Edward VII Hospital, Ahmedabad; Bai Motleebai Hospital, J. J. Hospital, Cama and Albless Hospital, St. George's Hospital, Bombay; Dufferin Hospital, Karachi; Sassoon Hospital, St. Margaret's Hospital, King Edward Memorial Hospital, Poona; Civil Hospital, Belgaum.

Provision for retiring allowances is made for all members on the basis of a Provident Fund and a Nursing Reserve has been established for employment in emergencies such as war, pestilence or public danger or calamity.

Address—The Secretary, Bombay Presidency Nursing Association, St. George's Hospital, Bombay.

Lady Minto's Indian Nursing Association.—In 1906 this Association was inaugurated, replacing the Punjab and Up-country Nursing Association for Europeans in India, which Society, established in 1892, had accomplished much useful work in this country. Owing, however, to lack of funds it was found impossible to continue its administration and to carry out the expansion of the work so urgently called for. The name of the helpers identified with the premier Association to whom the public must ever be indebted are the Hon. Lady Lyttleton, Lady Helen Munro Ferguson and Mrs. Cottrell, while Mrs. Sheppherd, by her indefatigable efforts, is truly entitled to be regarded as the pioneer of a trained nursing system throughout the greater part of India. The late Lady Curzon worked energetically to provide an enlarged Nursing organisation, but mainly owing to financial reasons, she was unable before she left India to bring the scheme to fruition. The Home Committee of the existing Association, recognising the need for expansion, consented to take over the present Association and approached Lady Minto before she left England in 1905 for co-operation towards this project, and after much consideration and discussion with the Government of India, Lieut.-Governors and Commissioners of Provinces, the present Association was established. An appeal by Lady Minto, addressed to the public both in England and India, was responded to most generously, and sufficient funds were collected to form an endowment fund, which has in spite of fluctuations increased a little with time. The assistance of a Government grant is much valued, as it enables Homes for the Sisters to be kept up in six Provinces in India and in Burma. At the request of the Home Committee the enlarged Association was renamed the "Lady Minto's Indian Nursing Association."

The duties of the Home Committee are, as before, largely concerned in dispatching—as required—suitably trained and carefully selected Nurses for service on the staff of the Association in India. Thus, Europeans who are members of this Association are enabled to obtain skilled nursing at moderate charges on a sliding scale of fees determined by the income of each patient. The boon of obtaining good nursing at moderate terms is much appreciated, the rates of subscriptions being really an insurance against illness.

Her Majesty the Queen is a Patron of the Association. Her Excellency the Countess of Reading is President of the Central Committee in India.

Hon. Secretary: Colonel T. J. Carey Evans, M.C., I.M.S.,

Hon Treasurer: W. J. Litster, Esq., O.B.E.

Chief Lady Superintendent: Miss F. A. Hodgson, Address—Central Committee, L.M.I. N.A., Viceregal Lodge, Simla, or Delhi.

Hon. Secretary, Home Committee: Lt.-Col. Sir Warren R. Crooke-Lawless, C.B., C.I.E., O.B.E., L L.D., House Governor, Osborne, Isle of Wight.

Secretary, Home Committee: Miss M. E. Ray, R.R.C., 54, Ashburnham Mansions, Chelsea.

Nurses' Organizations.—The Association of Nursing Superintendents of India is now amalgamated with the Trained Nurses' Association of India, and has the one set of officers. The Trained Nurses' Association of India and the Association of Nursing Superintendents of India are not Associations to employ or to supply nurses, but are organizations with a membership wholly of nurses with the avowed objects of improving and unifying nursing education, promoting *esprit de corps* among nurses, and upholding the

dignity and honour of the nursing profession. The Associations have a membership of 283, including nurses trained in ten or more different countries, Europeans, Americans, New Zealanders, Australians and Indians. The Association of Superintendents was started in 1905 as the Association of Nursing Superintendents of the United Provinces and the Punjab, but by the next year its membership had spread over the country to such an extent that the name was changed to include the whole of India. The Trained Nurses' Association was started in 1908, and a monthly Journal of Nursing began to be published by the two Associations in February, 1910. The Associations are affiliated with the International Council of Nurses.

President: Miss Hodgson, Viceregal Lodge, Delhi.

Hon. Secretary and Treasurer: Miss Griffin, Fahat Manzil, Nicholson Road, Delhi.

THE WOMAN SUFFRAGE MOVEMENT.

Within the abnormally short period of five years the Woman Suffrage movement has risen in India, swept through the country sympathetically and achieved the political enfranchisement of women in four of its most progressive Provinces and in four Indian States.

Three fundamental causes have led to this remarkable success: first, the deep veneration that is given by the Hindu and Muhammadan religions to the feminine aspect of life equally with the masculine as shown by the importance of goddesses, by the necessity for the presence of the wife at all ceremonies performed by a Brahman, by the idea of the sacred mystery of womanhood implied by the purdah, and by the general veneration of motherhood. Secondly, the time was psychological, for a new era was beginning for the Indian people by the introduction of a Scheme of Reforms in Indian government which was planned to give a basis of representative government on a much extended scale. The door was being opened to complete Self-government and only men were being invited to enter through it, although women compose half the people of the country and it had been by the joint efforts of men and women that the agitation for reform in the government had been made. The men and women of India were too awake and too just to allow this injustice to remain unredressed. Thirdly, the long and strenuous agitation for the vote by women in Britain and America and their recent victories had brought vividly to the consciousness of all educated Indian men and women the whole question of the inclusion of women in public life, and it was also a national and international necessity that Indian women should be given as high a status as women in other parts of the Empire.

Though the **Municipal franchise** had been granted to the women of the Bombay and Madras Presidencies over fifteen years ago it was so limited in numbers that it did not make a large impact on women's consciousness and indeed no protest was made when it was suddenly withdrawn from Madras women some years later. Over 1,700 women are qualified to vote for the Bombay Corporation and a fair percentage of these have polled at each election, and similarly in other Municipalities in that Presidency women have exercised their vote responsibly and intelligently. Since 1922 fifteen women have become Municipal Councillors and members of Local Government Boards, four of whom were *elected* by Bombay City voters, the others having been nominated.

It was the rise of the political agitation for Home Rule between 1914 and 1917 that women began to wake up to their position of exclusion by British law from any share in representative government. The internment of one of their own sex, Mrs. Besant, stimulated political activity and political self-consciousness amongst women to a very great extent. The moment for the ripe public expression of their feelings came when the Secretary of State for India came to India to investigate and study Indian affairs at first hand in 1917.

During the Hon. E. S. Montagu's visit only one Women's Deputation waited on him but it was representative of womanhood in all parts of India, and it brought to his notice the various reforms which women were specially desirous of recommending the Government to carry out.

The first claim for women suffrage for Indian women was made in the Address presented to Mr. Montagu at this historic **All-India Women's Deputation** which waited upon him in Madras on the 18th December 1917. The section referring to enfranchisement merits full quotation:

Our interests, as one half of the people, are directly affected by the demand in the united (Hindu-Muslim Reform) scheme (I. 3) that "the Members of the Council should be elected directly by the people on as broad a franchise as possible," and in the Memorandum (3) that "the franchise should be broadened and extended directly to the people." We pray that, when such a franchise is being drawn up, women may be recognized as "people," and that it may be worded in such terms as will not disqualify our sex, but allow our women the same opportunities of representation as our men. In agreeing with the demand of the abovementioned Memorandum that "a full measure of Local Self-Government should be immediately granted," we request that it shall include the representation of our women, a policy that has been admittedly successful for the past twenty years in Local Self-Government elsewhere in the British Empire. The precedent for including women in modern Indian political life has been a marked feature of the Indian National Congress, in which since its inception women have voted and been delegates and speakers, and which this year finds its climax in the election of a woman as its President. Thus the voice of India approves of its women being considered responsible and acknowledged citizens; and we urgently claim that, in the drawing up of all provisions regarding representation, our sex shall not be made a disqualification for the exercise of the franchise or for service in public life.

The year 1919 was devoted to converting the Government forces to the justice and expediency of Indian Woman Suffrage, but this proved a more difficult matter. It was a disappointment first that though the Secretary of State had given a sympathetic reply to the All India Women's Deputation yet when the Scheme of Reforms, drawn up by him and Lord Chelmsford as the outcome of his visit to India, was published no mention of women was made, though the widening of the electorate was one of the reforms suggested. When the Southborough Franchise Committee was formed to investigate the suggestions regarding the franchise in this Scheme, the women suffragists took every means to bring to the notice of the Committee all the evidence which showed the need for, and the country's support of, including women in the new franchise.

After the introduction of the **Government of India Bill** into Parliament in July 1919, a number of Indian deputations proceeded to London to give evidence before the Joint Select Committee of Members of both Houses of Parliament which had been appointed to place the Reforms on a workable basis. Mrs. Annie Besant, Mrs. Sarojini Naidu and Mrs. and Miss Herabai Tata were the women who were heard by the Committee in support of the extension of the franchise to women in India

The House of Commons decided that the question was one for Indians to answer for themselves and while retaining the sex disqualification in the Reform Bill they framed the Electoral Rules in such terms that if any Provincial Legislative Council should decide by a Resolution in favour of women's franchise, women should be put on the electoral register of that Province. This was the only provision regarding franchise matters which might be changed before a 10 years' time limit. Until after that period women are ineligible for election as Legislative Councillors.

Travancore, a very progressive Indian State was the first to grant the Legislative vote to women at the close of 1920, and it was promptly followed by the Indian State of Jhalawar. In the first session of the Legislative Councils in 1921 it is gratifying to record that a motion was tabled by Dewan Bahadur Krishnan Nair of Malabar that he would bring forward a Resolution in the **Madras** Legislative Council to remove the disqualification of sex existing in regard to the Legislative Council franchise. During the month that must legally intervene between the tabling of a Woman Suffrage motion and its introduction for Debate the Madras women under the leadership of the Women's Indian Association carried on all forms of public propaganda and canvassed the important members of the Council. The Debate took place on April 1st and after a short discussion, in which it was evident that opposition came only from the Muhammadan members, the debate itself became only an accumulation of appreciation of womanhood and an expression of faith in its future. When the division was taken, it resulted in the Resolution being carried by a majority of 34. Madras has thus the honour of being the first Province in British India to enfranchise its women, and it has done so ungrudgingly and unhesitatingly and in the broad spirit of the equality of the sexes, as it grants the vote to women on the same terms as it has been granted to men.

Mr. Trivedi brought forward a Woman Suffrage Resolution in the **Bombay** Legislative Council during the same session, but some irregularity in its wording caused it to be pronounced out of order. In June that subject was tabled again and championed by Rao Saheb Harilal Desaibhai Desai of Ahmedabad, Deputy President of the Council. As in Madras the intervening month was filled with suffrage activity by the women of the Presidency and was remarkable for a large joint meeting of Bombay city women at which 19 Women's Societies took part, and for a suffrage meeting of Marathi and Gujerati women in Poona when over 800 women showed the greatest enthusiasm for the movement.

The **Bombay** Council Debate on Woman Suffrage took three days and the subject was very fully discussed most by over 40 members. The result was satisfactory to the suffragists, the voting being 52 in favour, 25 against and 12 neutral. Thus Madras and Bombay Presidencies gave the lead to the other Provinces. In September, 1922, Mr. S. M. Bose, in the Bengal Council, moved a Woman Suffrage Resolution, which was debated for three days but finally defeated by 56 to 37 votes, a *bloc* of 40 Muhammadan members voting solidly against it.

Mr. Devaki Prasad Sinha's similar Resolution in the Behar and Orissa Legislative Council was defeated by only a 10 votes' majority.

These Debates proved so educational to their respective Provinces that the latter has since granted qualified women the Municipal vote, and women have also been included as voters in the new Calcutta Corporation Act.

In February 1923, a world suffrage record was made by the *unanimous* vote of the United Provinces Legislative Council in favour of Woman Suffrage.

The new Reform Bill for Burma has included the grant of woman suffrage to the qualified Burmese women, and further made provision for their election as Councillors if the Council passes a Resolution desiring their admission and if that Resolution is approved of by the Governor.

In April, 1922, the Mysore Legislative Council unanimously passed the Woman Suffrage Resolution but their desires have not been ratified by the Privy Council yet. The vote for the Representative Assembly of Mysore was granted to women in October, 1922.

There is little doubt that it will be only a few years at most before all the provinces of India will have granted woman suffrage, and the right to vote will advance the interests of women immensely along the lines, of education, health, housing, morality and social customs.

The Indian Native States of Cochin and Rajkot are the only places in India where the sex disqualification has been completely removed from the statute book. They have allowed women the right to stand for election for the Legislative Council as well as the right to vote for it, and

two women have been elected to the newly-formed Representative Council of Rajkot. In British India by the terms of the Reform Bill the Councils have no power to alter the disqualification of sex which remains against the rights to stand as candidates for election to the Councils This can only be changed by the vote of the British Parliament, and the gaining of this right remains as a further objective of the women suffragists. The Imperial Legislative Assembly and the Council of State have been accorded the power to grant women the franchise for their assemblies also by resolution, but only for those provinces which already have granted women the Legislative franchise. The Legislative Assembly has passed by a large majority a Resolution granting the Assembly franchise to the women of such Provinces. Accordingly in November 1923, women in India will vote for the first time for the elections of both Provincial Legislative Councillors and members of the Legislative Assembly.

The number of women enfranchised by the grant of the vote throughout India will not be more than a million under the present qualifications. Property and not literacy is the basis of the franchise, though the grant of the vote to every graduate of seven years' standing ensures that the best educated women of the country as well as those who have to shoulder the largest property responsibilities will be those who rightly will be the legislating influence on behalf of womanhood. As regards the custom of purdah prevailing in parts of India special provisions have been made in Municipal voting for purdah recording stations for purdah women in which a woman is returning officer and this has been found quite satisfactory and will be adopted also where desired in connection with Legislative Council elections.

Though the Women's Indian Association is the only defined Suffrage Society almost all other women's organisations have combined in special efforts for the gaining of municipal and legislative rights and the following ladies have identified themselves specially with the movement: Lady D. Tata, Lady A. Bose, Lady T. Sadasivaier, the Begum of Cambay, Mrs. Sarojini Naidu, Mrs. Jaiji Jehangir Petit, Mrs. Tata, Mrs. Wadia, Mrs. Jinarajadasa, Mrs. A. Besant, Mrs. M. E. Cousins, Mrs. Ranade, Mrs Srirangamma, Mrs. Chandrasekhara Iyer, Miss Sorabji, Mrs. Khedkar, Dr. Mistry, Dr. Muthulakshmi Ammal, Mrs. Palmer, Mrs. Kumudini Basu, etc.

Bombay Mill Profits.

In September 1922 a well-known authority made the following computation of the profits in the Bombay Textile Industry:—

For the year 1921, the profits are 15·39 crores, less 1·40 crores commission, less 1·77 crores depreciation. The net profits therefore would be 12·22 crores. We have given in dividends 6·41 crores or 33 per cent. on capital ; salaries and wages come to 7·82 crores; insurance 30 lakhs, interest on borrowed money about 80 lakhs. The net earning on paid up capital works out at about 63 per cent. The spinning mills which are now very few in number earned about 56 per cent. on capital and gave 28 per cent. in dividends. The weaving mills earned 63¼ per cent. on their capital and gave about 33⅓ per cent. in dividends. I give below the usual comparative statements since the year 1905 which show at a glance the progress of our industry during all these years. Our highest profit before the war for 1905, 3.47 crores.

Year.	Profit.	Less Commission lakhs.	Less Depreciation lakhs.	Spindles lakhs.	Looms.	Wages Crores.
		Rs.	Rs.			
1905	3·47 crores	47	65	25.60	28,000	2.01
1906	3·14 „	47	66.25	26.14	28,000	2.18
1907	1·85 „	36	67.7	26.13	32,000	2.17
1908	1·31 „	34	72	27.34	36,000	2.19
1909	1·21 „	30	74.62	28.00	39,200	2.29
1910	·60 „	26	75.50	28.04	41,000	2.56
1911	·52 „	24	77	28.90	42,500	2.56
1912	2·60 „	40	78.12	28.85	43,400	2.68
1913	1·82 „	29	79.75	29.25	45,250	2.47
1914	·89 „	25	83.15	30.09	49,000	2.87
1915	1·86 „	32	83.37	30.00	52,000	3.00
1916	3·12 „	42	84.62	30.00	53,205	3.18
1917	6·74 „	76	85.25	29.33	57,900	3.76
1918	4·97 „	61.50	84.82	28.82	59,102	4.02
1919	13·06 „	131	86.37	29.64	60,778	5.00
1920	16·53 „	153	170	29.64	60,634	6.72
1921	15·39 „	140	177	30.26	62,763	7·82
1922	7·27 „	85·40	132	31.17	65,521	8.19

Indians Overseas.

NUMBERS.—The total Indian population resident in the countries to which Indians mainly emigrate for purposes of settlement, according to the latest available returns, is as follows:—

Name of Country.	Indian population.	Date of Census.
British Empire.		
1. Ceylon	750,000 (according to the census of 1921 the Indian population on estates in Ceylon consisted of—Males.....257,808 Females ....239,300.)	1920
2. Straits Settlements	104,628	1921
3. Federated Malay States	305,219	1921
4. British Malaya	61,819	1921
5. Hong Kong	2,555	1911
6. Mauritius	264,527	1921
7. Seychelles	332	1911
8. Gibralter	50 (approximately)	1920
9. Nigeria	100 („)	1920
10. Kenya	22,822	1921
11. Uganda	3,500	1920
12. Nyasaland	407	1918
13. Zanzibar	12,841	1921
14. Tanganyika Territory	5,411	1921
15. Jamaica	18,401	1922
16. Trinidad	121,420	1921
17. British Guiana	124,938	1918
18. Fiji Islands	60,634	1921
19. Basutoland	179	1911
20. Swaziland	7	1911
21. Northern Rhodesia	56 (Asiatics)	1921
22. Southern Rhodesia	1,250 („)	1921
23. Canada	1,200	1920
24. Australia—		
Western Australia 300		
Southern Australia 200		
Victoria 400	2,000 (approximately)	1922
New South Wales 700		
Queensland 300		
Tasmania 100		
25. New Zealand	606	1921
26. Natal	141,336	1921
27. Transvaal	13,405	1921
28. Cape Colony	6,498	1921
29. Orange Free State	100	1921
30. Newfoundland		1921
Total for British Empire	2,030,241	
Foreign Countries.		
31. United States of America	3,175 (Asiatics)	1910
32. Madagascar	5,272 (Hindus)	1917
33. Reunion	2,194	1921
34. Dutch East Indies	832,667 (Orientals, chiefly Chinese & Arabs) (Say) 50,000 Indians.	
35. Surinam	34,957	1920
36. Mozambique	1,100 (Asiatics and half-castes)	Not known.
37. Persia	3,827	1922
Total for Foreign Countries	100,525	
Grand Total of Indians Overseas	2,130,766	

Origin of Indian Emigration.—Emigration is prohibited by the Hindu Shastras, and there is little evidence of any settlement of Indians overseas in early times except in Sumatra, Java and Ceylon. Emigration for purposes of labour dates from the beginning of the 19th century From 1800 A. D. onwards Indians crossed the Bay to the Straits Settlements to work on the sugar, spice, tapioca, and cocoanut plantations of Penang, and this intercourse was allowed to continue for long without regulation. The first officially recorded instance of genuine recruitment for labour emigration occurred in 1830, when a French merchant, named Joseph Argand, carried some 150 artizans to Bourbon. The abolition of slavery in British colonies in 1834 gave the first great impetus to the movement. The sugar planters of Mauritius at once turned to India as their best recruiting ground, and between 1834 and 1837 obtained at least 7,000 recruits from Calcutta. The Government of India at a very early stage realised the necessity of bringing such emigration under regulation. The Law Commission was appointed to investigate the case and to make recommendations for securing the well-being of emigrants. They advised that no legislation was required except in order to prevent undue advantage being taken of the simplicity and ignorance of emigrants by providing that a magistrate should satisfy himself that all contracts were entered into freely and understood by them and in order to secure that sufficient provision was made for their accommodation and sustenance during the voyage. A copy of every engagement was also to be transmitted to the Government under which the emigrants were to live. These recommendations were embodied in the first Emigration Act (V of 1837), which also provided that contracts should be determinable after 5 years.

History of Emigration.—Under the above Act emigration during 1837 was permitted to Mauritius, British Guiana and Australia (89 men, the first and last direct emigrants to Australia). In 1838 emigration was suspended owing to agitation in England regarding the abuses to which the system was liable, and a committee of enquiry reported in 1840 that emigrants were being entrapped by force or fraud, robbed of their wages and treated with brutality. In consequence, emigration was prohibited (Act XV of 1842) except to Mauritius, and there control was tightened. In Act XXI of 1844 emigration under still stricter regulation was allowed to Jamaica, British Guiana and Trinidad. Act XIII of 1847 removed the restrictions on emigration to Ceylon. The emancipation of slaves in the French colonies in 1849 gave rise to a system of emigration from French Indian ports to Réunion and Bourbon, which was largely based on crimping in British territory. This practice was checked by Act XXIV of 1852. In 1858 emigration was opened to St. Lucia, and in 1860 to St. Vincent, Natal and St. Kitts. In the latter year a more elaborate Act, based on a convention with the French Government was passed legalising and regulating emigration to Réunion Martinique, Guadeloupe, and French Guiana. Act XIII of 1864 marks an important stage in the history of emigration, since it elaborated and consolidated the whole system of control. It was itself amended in 1869 and 1870 in important respects with the object of preventing epidemics on emigrant vessels and improving sanitary conditions in settlements. In 1869 emigration was permitted to Grenada, and in 1872 to Surinam. Owing to the removal of the Straits Settlements from the control of the Government of India in 1867, emigration to that colony came under all the restrictions imposed by the Emigration Act and was only permitted from the port of Negapatam. Owing to the injury caused to the agricultural industries of the colony, these restrictions were removed in 1872, subject only to magisterial control of recruitment in India. In 1870 complaints reached the Government of India of gross abuses in the treatment of emigrants in British Guiana. A commission of enquiry was appointed, and their report led to important legislation in the colony for the protection of Indian immigrants, which was subsequently extended to Trinidad. Owing to similar complaints from Natal and Mauritius, commissions of enquiry were also instituted in both these colonies, and their reports in 1872 brought to light a number of points requiring amendment.

Recent Legislation.—In 1871 a fresh consolidating Act was passed (Act VII of 1871) by which the Acts regulating emigration to the French Colonies and two amending Acts to Act XIII of 1864 were incorporated in the general law. The question of revision of the law again came up for consideration in 1882, when several cases of kidnapping and other objectionable practices were reported to the Government of India. The opportunity was taken to depute two officials (Major Pitcher and Mr. Grierson) to ascertain, in the N. W. P. and in Bengal respectively, the way in which the system of recruitment actually worked, the respects in which it was open to improvement, and the attitude of the people towards emigration. Their reports were reviewed by the Government of India, and finally in 1883 the law was again recast and consolidated by Act XXI of that year. This Act specifies the countries to which emigration is lawful, but empowers the Governor General in Council to add to the list by notification, and also to prohibit emigration to any of the countries in the list on the ground of epidemic disease and or excessive mortality among emigrants in such country, or on the ground that proper measures have not been taken for the protection of emigrants, or that the agreements made with them in India are not duly enforced. This Act with certain amendments of no importance to the system of indentured emigration remained in force until 1908, when a fresh revision of the law was undertaken.

Under the Act of 1908 (XVII of 1908) the countries to which emigration was lawful were the British Colonies of Mauritius, Jamaica, British Guiana, Trinidad, St. Lucia, Grenada, St. Vincent, Natal, St. Kitts, Nevis, Fiji, the Seychelles, the Netherlands Colony of Dutch Guiana and the Danish Colony of St. Croix. Emigration to St. Lucia, Grenada, St. Vincent, St. Kitts, Nevis, the Seychelles and St. Croix ceased soon after the passing of the Act, the demand for fresh labour having died out,

Emigration to Natal was discontinued from the 1st July 1911 as the Government of India were satisfied that it was undesirable to continue to send Indian labour to that country. Emigration to the French Colonies of Reunion, Martinique and Guadeloupe had been suspended prior to the passing of the Act of 1908 on account of repeated complaints of the inadequate precautions taken for the proper treatment and repatriation of the immigrants.

The labour laws of the several Colonies provide for the protection and welfare of resident Indian labourers. The Government of India also occasionally depute to the colonies their officers to report on the condition of Indian labourers. The last inspection was made in the year 1913, when an officer of the Government of India, Mr. McNeill, I.C.S., and a non-official gentleman, Mr. Chimanlal, were deputed to visit 4 Colonies. In spite of all precautions certain social and moral evils had grown up in connection with the indentured system of emigration, and Indian public opinion has during the last decade been strongly opposed to it. The whole system was exhaustively examined by the Government of India in 1915 in the light of the report received from Messrs. McNeill and Chimanlal, and they arrived at the conclusion that the time had come when contract labour should be abolished. The Secretary of State for India accepted this policy and authorised the Government of India to announce the abolition of the indentured system and the announcement to this effect was made in 1916.

In 1922 a further step forward was taken in Act VII of 1922 which prohibited indentured emigration and all unskilled emigration, except to countries specially approved by the Legislature. Emigration to Ceylon and Malaya was brought under control, and the definition of "Emigrant" was extended to cover all persons "assisted" to depart from India.

References.—The following is a list of the most important reports on questions connected with Indian Emigration that have been published during recent years:—

1. Report of the International Commission appointed to enquire into the condition and treatment of British India immigrants in Réunion 1879.

2. Report on the system of recruiting coolies in the North Western Provinces and Oudh for the Colonies, 1883.

3. Major Pitcher and Mr. Grierson's report on the system of recruiting labourers in the North Western Provinces and Bengal for the Colonies, 1883.

4. Report of the Natal Indian Immigrants Commission, 1885-87.

5. Dr. Comin's report on the proposed resumption of Emigration to Réunion, Martinique and Guadeloupe, 1892.

6. Dr. Comin's report on Emigration from the East Indies to Surinam, 1893.

7. Mr. Muir-Mackenzie's report on Emigration to Réunion, 1894.

8. Mr. Muir-Mackenzie's report on the condition of Indian immigrants in Mauritius, 1895.

9. Report of the Commissioners appointed to enquire into the question of Indian Immigration, 1896.

10. Lord Sanderson's Commission's Report on Emigration from India to the Crown Colonies and Protectorates, 1910.

11. Report of the Indian Enquiry Commission South Africa, 1914.

12. Messrs. McNeill and Chimanlal's report on the condition of Indian Emigrants in the four British Colonies: Trinidad, British Guiana or Demerara, Jamaica and Fiji, and in the Dutch Colony of Surinam, 1914-15.

13. Marjoribank's and Marakkayar's report on Indian labour emigrating to Ceylon and Malaya, 1917.

14. South Africa Asiatic Enquiry Commission report, 1921.

15. Report by Right Hon. V. S. Shastri regarding his Dominion tour, 1923.

16. India and the Imperial Conference of 1923 compiled by Director of Public Information, Government of India.

Present Position.—Indian emigration questions have recently taken on a wider aspect. The status of Indians in the Empire generally is one in which the Indian public now take keen interest. It is no longer possible to deal with the treatment of Indian labour apart from other classes of Indian emigrants and travellers. In several colonies and dominions considerable Indian communities have sprung up, which although composed largely of the descendants of indentured labourers, are themselves free and lawfully domiciled citizens of the countries in which they are settled, but have not yet been placed on a footing of legal, social, political and economic equality with the rest of the population. The issues round which public interest at present centres are three:

(*a*) Control of emigration.

(*b*) Rights of Indians to admission to other parts of the Empire.

(*c*) Rights and disabilities of Indians domiciled overseas.

These questions may be considered separately.

Control of Emigration.—So far as unskilled labour is concerned, the Government of India have assumed absolute powers of control. The terms of section 10 of the Emigration Act of 1922 are as follows:—

"10. (1) Emigration, for the purpose of unskilled work, shall not be lawful except to such countries and on such terms and conditions as the Governor General in Council, by notification in the Gazette of India, may specify in this behalf.

"(2) No notification shall be made under sub-section (1) unless it has been laid in draft before both Chambers of the Indian Legislature and has been approved by a resolution of each Chamber, either without modification or addition, or with modifications and additions to which both Chambers agree, but, upon such approval being given, the notification may be issued in the form in which it has been so approved."

Under this law emigration has been legalised to Ceylon on the following conditions.

(1) The emigrant shall—

(*a*) have been recruited by a person licensed for that purpose by and responsible to an officer (hereinafter called the Emigration Commissioner) appointed by the Government of Ceylon, or

(*b*) have applied direct to the Emigration Commissioner for an assisted passage and have been accepted by him.

(2) The emigrant shall not, before leaving British India, have entered into a contract of service for a period exceeding one month.

(3) Within six months from the issue of this Notification, or within such further period as the Governor General in Council may by notification appoint, the Legislature of Ceylon shall have enacted that any contract of service for a period exceeding one month entered into by an emigrant shall be void.

(4) No part of the cost of his recruitment, subsistence during transport, or transport shall be recoverable from any emigrant and all expenses in this connection shall be defrayed from a common fund to be raised in such manner and managed by such agency as may appear suitable to the Colonial Government.

(5) The Government of Ceylon shall at any time when so desired by the Governor General in Council admit and give all facilities to an Agent appointed under section 7 of the Act.

(6) Within one year of his arrival in Ceylon any emigrant who has been assisted to emigrate at the cost of the common fund referred to in clause (4) shall, on satisfying the Agent appointed under section 7 of the Act that his return to his home is desirable either on the ground of the state of his health or on the ground that the work which he is required to do is unsuitable to his capacity, or that he has been unjustly treated by his employer, or for any other sufficient reason, be repatriated free of cost to the place of recruitment, and the costs of such repatriation shall be defrayed by the Government of Ceylon or the Ceylon Planters' Association.

(7) If at any time there is no Agent appointed under section 7 of the Act, the Government of Ceylon shall appoint a person to perform the duties of the Agent as set forth in clause (6).

(8) Within six months from the issue of this Notification, or within such further period as the Governor General in Council may by notification appoint, the Legislature of Ceylon shall have enacted that no payment made in India by a recruiter to an emigrant to enable him to pay off debts before emigrating shall be recoverable.

(9) The Government of Ceylon shall furnish such periodical reports and returns as may be required from time to time by the Government of India in respect of the welfare of persons emigrating to Ceylon in accordance with this Notification.

Similar conditions have been imposed in the case of Malaya. Emigration has also been permitted to Mauritius for a period of 1 year only with effect from May 1st 1923, and limited to a number not exceeding 1,500 labourers. The terms are more onerous than in the case of the nearer Colonies and the most important additional clauses are the following—

Any emigrant shall, if he desires to return to India at any time after two years from the date of his introduction to the Colony, be repatriated at the cost of the Government of Mauritius to the place of his recruitment.

Any emigrant shall at any time within the period of two years from the date of his introduction to the Colony, be entitled to be repatriated at the cost of the Government of Mauritius to the place of his recruitment if he satisfies the Agent appointed under section 7 of the Act that his return to his home is desirable either on the ground of the state of his health or on the ground that the work which he is required to do is unsuitable to his capacity or that he has been unjustly treated by his employer or for any other sufficient reason.

If any emigrant at any time within the period of two years from the date of his introduction to the Colony satisfies the Agent appointed under section 7 of the Act that he is unable to obtain a wage which will provide the cost of living for a man with a wife and three children and also a reasonable margin for savings, sickness and old age, he shall be entitled to be repatriated at the cost of the Government of Mauritius the place of his recruitment. The position now is that the Government of India has vested the Chambers of the Legislature with complete power to decide to what countries emigration shall be permitted and to regulate its conditions, and has bound itself to be guided in its policy by Indian public opinion. Skilled labour is of course more able to take care of itself and, subject to certain necessary safeguards, is at liberty to emigrate to any country in the world.

Admission of Indians to Other Parts of the Empire.—On the motion of the Government of India this question was discussed at the Imperial War Conferences, 1917 and 1918, and the policy accepted by the self-governing dominions and the British Government was embodied in the following resolutions:—

'(1) It is an inherent function of the Governments of the several communities of the British Commonwealth including India, that each should enjoy complete control of the composition of its own population by means of restriction on immigration from any of the other communities.

"(2) British citizens domiciled in any British country, including India, should be admitted into any other British country for visits, for the purpose of pleasure or commerce, including temporary residence for the purpose of education; such right shall not extend to a visit or temporary residence for labour purposes or to permanent settlement.

"(3) Indians already permanently domiciled in the other British countries should be allowed to bring in their wives and minor children on condition: (*a*) That not more than one wife and her children shall be admitted for each such Indian; and (*b*) that each individual so

admitted shall be certified by the Government of India as being the lawful wife or child of such Indian."

In virtue of the first paragraph of this resolution the self-governing dominions have adopted various restrictions on immigration, which, without expressly differentiating against Indians are in practice used in order to check Indian immigration, the objections to which are stated to be not racial or political but economic. Australia prohibits the entry of any person who fails to pass a dictation test of not less than 50 words in any prescribed language. New Zealand prohibits the entry of any person who has not received in advance a permit from the Dominion Government which is refused to any person regarded as unsuitable to settle in the country. South Africa prohibits the entry of any person deemed by the Minister of the Interior on economic grounds or on account of his standard or habits of life to be unsuited to the requirements of the Union. Canada prohibits the landing of any person who has come to the Dominion otherwise than by continuous journey from the country of which he is a native and unless he possesses in his own right 250 dollars. Newfoundland imposes no restrictions. All the self-governing Dominions have adopted special exemptions in favour of students, tourists and merchants visiting the countries for the temporary purposes of commerce, pleasure, or education. India on its side has assumed power to regulate the admission of immigrants from any other part of the Empire or foreign countries, by means of passports. A bill has also been introduced by a non-official member and passed in the Legislative Assembly empowering the Government of India to make rules "for the purpose of securing that persons not being of Indian origin, domiciled in any British possession, shall have no greater rights and privileges as regards entry into and residence in British India, than are accorded by the law and administration of such possession to persons of Indian domicile." This bill has still to pass the Council of State and to receive the assent of the Governor-General before it becomes law. With regard to the Crown colonies and protectorates, the attitude of the Indian Government is that there is no justification for placing any restrictions on the immigration of British Indians, which are not placed on other classes of British subjects, and this principle has in practice been observed by the Colonial Office except in the case of Kenya colony where as a result of the decision of the British Government referred to below restrictions, which will specially affect Indian immigrants, have been sanctioned in principle and will shortly be introduced.

Rights and Disabilities of Indians Lawfully Domiciled Overseas.—The policy of the Empire is summed up in the resolution of the Imperial Conference, 1921, which was recorded in the following terms:—

"This Conference reaffirms that each Community of the British Commonwealth should enjoy complete control over the composition of its own population by restricting immigration from any of the other communities, but recognises that there is incongruity between the position of India, as an equal member of the Empire, and the existence of disabilities upon British Indians lawfully domiciled in some parts of the Empire, and this Conference, therefore, is of opinion that in the interests of the solidarity of the Commonwealth it is desirable that the rights of such Indians to citizenship should be recognised."

"The representatives of South Africa regret their inability to accept this resolution in view of the exceptional circumstances of the greater part of the Union. The representatives of India while appreciating the acceptance of this resolution, nevertheless feel bound to record their profound concern at the position of Indians in South Africa and hope that by negotiations between India and South Africa a way can be found as soon as may be to reach a more satisfactory position."

The Right Hon'ble Srinivasa Shastri visited the Dominions of Australia, Canada, and New Zealand in the course of 1922 as the emissary of the Government of India to assist them in giving effect to this resolution. The main object of his mission was to appeal to the Governments and public of Canada and Australia fully to enfranchise qualified domiciled Indians. In Australia, Indians resident in Queensland and Western Australia have neither the provincial nor the federal franchise. In Canada, Indians do not enjoy the Dominion franchise, and in British Columbia, are also excluded from the provincial franchise, while successful in securing a more sympathetic atmosphere towards Indians, he failed to bring about any modification in the existing electoral laws.

The question of giving effect to this resolution of 1921 was raised by the Indian representatives at the Imperial Conference, 1923. Their proposal was as follows:—

"Let the Dominion Governments who have an Indian population, let His Majesty's Government in the areas under their direct control, such as Kenya, Uganda, Fiji and other places where there are Indians resident, appoint Committees to confer with a Committee which the Government of India will send from India and explore the avenues of how best and how soonest the principle of equality implicit in the 1921 Resolution may be implemented."

This proposal was favourably received by the Dominion Premiers, excluding General Smuts; and by the Secretary of State for the Colonies who cordially agreed that there should be full consultation and discussions between him and a Committee appointed by the Government of India upon all questions affecting British Indians domiciled in British Colonies and protectorates and mandated territories.

Summary of Present Position.—Outside Australia, N. Zealand and Canada the position stands as follows:—

(1) **South Africa.**—The main grievances of Indians, which led to a passive resistance movement headed by Mr. Gandhi, were settled by the compromise embodied in the Indians Relief Act, 1914, and by the guarantee known as the Smuts-Gandhi agreement. The substance of this agreement is embodied in the following extracts from letters:

(i) Mr. Gorges, Secretary for the Interior, to Mr. Gandhi, June 30th, 1914: "With regard to the administration of existing laws, the Minister desires me to say that it always has been, and will continue to be, the desire of the Government to see that they are administered in a just manner and with due regard to vested rights."

(ii) Mr. Gandhi to Mr. Gorges, July 7th, 1914:

"By vested rights I understand the right of an Indian and his successors to live and trade in the township in which he was living and trading, no matter how often he shifts his residence or business from place to place in the same township."

This has been officially interpreted to mean "that the vested rights of those Indians who were then living and trading in townships, whether in contravention of the law or not, should be respected."

In 1920 an Asiatic Enquiry Commission was appointed to investigate the grievances of Indians regarding their rights to trade and hold land in the Union. Their main recommendations were as follows:—

(1) Law 3 of 1885 (Transvaal), the Gold Law of the Transvaal (Act No. 35 of 1908) and Act No. 37 of 1919 should not be repealed.

(2) There should be no compulsory repatriation of Asiatics; but

(3) Voluntary repatriation should be encouraged.

(4) There should be no compulsory segregation of Asiatics; but

(5) A system of voluntary separation should be introduced under which municipalities should have the right, subject to certain conditions—

(*a*) to lay out residential areas for Asiatics;

(*b*) to set aside certain streets or portions of the town for Asiatic traders to which existing license holders should gradually be attracted.

(6) These areas should be selected and allocated by a board of independent persons in consultation with the Municipal Council and Asiatic community.

(7) In Natal the right of Asiatics to acquire and own land for farming or agricultural purposes, outside townships, should be confined to the coast belt, say, 20 to 30 miles inland.

(8) A uniform "License Law" applicable to all the Provinces of the Union should, if possible, be enacted. If that is impracticable, the law relating to the issue of Trade Licenses in the Cape Province, the Transvaal and Natal should be assimilated in a comprehensive consolidating Act of Parliament providing, *inter alia*:—

(*a*) That the granting of all licenses to trade (not being liquor licenses) shall be entrusted to municipal bodies within the area of their jurisdiction; outside those areas, to divisional Councils in the Cape Province, and in the other Provinces to special Licensing Officers appointed by the Administrator.

(*b*) The grounds upon which an application for the grant of a new license may be refused.

(*c*) That the reasons for the refusal to grant any license shall be recorded, together with any evidence tendered for or against the application.

(*d*) That, in the case of the refusal of a license on the ground that the applicant is not a fit and proper person to hold the same or to carry on the proposed business, there shall be a final appeal to a Special Appeal Board, appointed by the Administrator.

(*e*) That municipal bodies shall have the right to prohibit the license holder, or any other person, from residing in any shop, store or other place of business.

(9) There should be no relaxation in the enforcement of the Immigration Laws, and more active steps should be taken to deal with prohibited immigrants who have evaded the provisions of those laws.

(10) The administration of the Asiatic policy of the Government should be placed in the hands of one official, under whose charge would come all administrative functions, together with the official records relating to Asiatics. This officer should also be entrusted with the duty of securing full statistics regarding Asiatics in the Union and of the arrivals in and departures from South Africa. Details of all applications for trade licenses, and transactions in connection with the purchase of land and property made by Asiatics throughout the Union, should be sent to him in order to ensure the enforcement of the provisions of Section 8 of Act 22 of 1913.

On the other hand, he should keep in close touch with the various sections of the Indian community, see that the laws are applied in a just manner, give a ready ear to any complaints or grievances and generally safe-guard their interests.

No action has been taken by the Union Government to give effect to these proposals except with regard to voluntary repatriation. 7,430 Indians have returned to India from South Africa during the last 4 years of whom probably a large proportion have abandoned their South African domicile and accepted free repatriation under the official scheme. It is understood that the remaining recommendations still form the subject of negotiation with the Government of India.

Present Position.—Indians enjoy both the political and municipal franchise only in the Cape Province and the municipal franchise only in Natal. In the remaining two provinces they are not enfranchised. They are subjected to differential treatment in the matter of trading licenses, specially in the Transvaal. Their immigration into the Union is barred and severe restrictions exist on inter-provincial migration. In the Transvaal they are not allowed to acquire immovable property outside locations and on the Witwatersrand they are subject to the restrictions of the Gold Law.

The anti-Asiatic party have made several efforts, especially in Natal, further to curtail the rights of Indians. Some of these are merely irritating social disabilities, such as railway regulations debarring Indians from travelling in any other carriages except those

reserved for them, and similar rules restricting their use of tramways at Durban, and excluding them from race courses and betting club rooms. Examples of recent anti-Asiatic legislation of major importance are:

(*a*) The Natal Rural Dealers Licensing Ordinance, transferring the power of granting trading licenses from the Licensing Officer to an elected Licensing Board, on which Indians may not sit.

(*b*) The Durban Land Alienation Ordinance. This Ordinance, which enables Municipalities in selling land to assign it for particular communities, and to that extent to secure segregation, has been allowed on condition that Asiatics are given reasonable opportunity for acquiring adequate residential sites.

Anti-Asiatic feeling in South Africa does not appear to be diminishing, and a bill for the segregation of Asiatics is now threatened. It seems unlikely that the Union Government will be able in the near future to relieve Indians of any of the important disabilities under which they are now labouring.

(2) **Kenya Colony.**—The grievances of Indians domiciled in this Colony are fully set forth in the published despatch of the Government of India, dated October 21st, 1920. The controversy centred round the following points:—

(*a*) FRANCHISE.—Indians have not the elective franchise. The Government of India proposed that there should be a common electoral roll and a common franchise on a reasonable property basis *plus* an educational test, without racial discrimination, for all British subjects.

(*b*) SEGREGATION.—Professor Simpson who was sent to East Africa to report on Sanitary matters, recommended segregation on sanitary grounds. The Government of India objected, firstly, that it was impracticable; secondly, that it was commercially inconvenient; and thirdly, that Indians are in practice unfairly treated in the allocation of sites.

(*c*) THE HIGHLANDS.—Lord Elgin decided in 1908 that as a matter of administrative convenience grants of land in the upland area should not be made to Indians. The whole area has now been given out, and the Government of India claim that there is no land left to which Lord Elgin's decision applies. This decision has now, however, been extended so as to prohibit the transfer of land in the uplands to non-Europeans.

(*d*) IMMIGRATION—Suggestions have been put forward for restricting Asiatic immigration into Kenya. The Government of India claim that there is no case for restricting Indian immigration and that such restrictions would be in principle indefensible.

THE SETTLEMENT.—The decisions of the British Government were contained in a White Paper presented to Parliament in July 1923. It was held that the guiding principle should be that "the interests of the African native must be paramount," and in light of this it was decided:—

(*a*) FRANCHISE.—A communal franchise was adopted with 11 seats for elected Europeans, 5 elected Indians, one nominated Arab, one missionary representing the Africans, and a nominated official majority. One Indian is also appointed on the Governor's Executive Council.

(*b*) SEGREGATION.—The policy of segregation as between Europeans and Asiatics is abandoned.

(*c*) THE HIGHLANDS.—The existing practice is maintained both as regards initial grants of land and transfers. A similar reservation in the low lands is offered to Indians.

(*d*) IMMIGRATION.—Racial discrimination in immigration regulations is rejected. But in the economic interests of the Africans, further control over immigration is necessary. Some arrangement is required for securing a strictly impartial examination of applications for entry into Kenya. The Governors of Kenya and Uganda have been instructed to submit joint proposals for legislation.

The Government of India reviewed these decisions in a resolution published on August 18th, 1923, and recorded "their deep regret that His Majesty's Government did not feel justified in giving greater effect to the recommendations made by them" and reserved liberty to reopen the case on a suitable opportunity. They stated their intention of making representations regarding the action to be taken to implement these decisions, particularly in the matter of the Immigration regulations.

(3) **Fiji and British Guiana.**—In certain respects Indians in these colonies are under disabilities. In Fiji, for instance, they are practically excluded from both the political and the municipal franchise. But the Indian population in these colonies belong almost entirely to the labouring classes and their grievances are mainly economic. The wages in Fiji are said to be unduly low, and the recent poll tax of £1 on every adult is regarded as a heavy burden. Wages in both Fiji and British Guiana are to a large extent dependent on the sugar market, which is at present buoyant. It will be possible to form a more accurate opinion of the position when the reports of the deputations sent to both colonies by the Government of India in 1922 are published.

(4) **Other Parts of the Empire.**—In the course of the year trouble occurred in Tanganyika territory in connection with a trade licensing and other measures imposed for revenue purposes. Indians were compelled to maintain their accounts in Swahili or English, and were subjected to somewhat heavy licensing fees. Agitation, accompanied by passive resistance occurred, but was not successful in its object. In Ceylon, Mauritius, and Malaya, the position of Indians has on the whole been satisfactory, and matters have gone smoothly. The Government of India have now appointed their own Agents in Ceylon and Malaya. In Ceylon the Colonial Government have published the results of a careful enquiry into the rates of wages of Indians on estates in relation to the cost of living.

Indians in Great Britain.

More than sixty years have gone by since the Parsi community, in the persons of the late Dadabhai Naoroji and other members of the firm of Cama & Co., led the way in the sojourn of Indians in England for business purposes. This lead it has since maintained, though there are both Hindu and Mahommedan business men firmly established there. Nor are the professions unrepresented, for there are in London and elsewhere practising barristers, solicitors and medical men of Indian birth. Two Indians have sat in the House of Commons, and a third was elected in 1922 as a Labour member. An Indian has served since 1910 on the Judicial Committee of the Privy Council, and others are to be appointed. Three Indians are on the Secretary of State's Council; and in 1919 another in the person of Lord Sinha led the way as the first Indian to be raised to the peerage and to be appointed a member of the Home Government. The early years of the present century saw the gathering of a new Indian element in permanent residence—that of retired officials and business men, or people of independent means who from preference or in order to have their children educated in England, leave the land of their birth and seldom if ever visit it again. Further, the stream of Indian summer visitors includes wealthy people who come regularly. There is an Indian Social Club, founded in 1912, with Sir M. M. Bhownaggree as president, which arranges for dinners and other functions to celebrate Indian festivals or to honour Indian visitors of special distinction. Sectionally, however, the only Indian community to be fully organised is that of the Parsis. They have an incorporated and well-endowed Parsi Association of Europe, and have established "Zoroastrian House" (168, Cromwell-road, S.W. 5) as a communal centre.

The Students.

Under normal conditions it is the student community which constitutes the greatly preponderating element and creates an Indian problem. Its numbers multiplied ten or twelvefold in the quarter of a century before the war. After a very considerable temporary check caused by the Great War the number rapidly expanded from 1919 in spite of pressure in college accommodation. In addition to the ordinary graduate or under-graduate student, there are some youths of good family, including heirs of Native States, admitted into our public schools, such as Eton and Harrow. There are over 300 Indians at the Inns of Court. Since the war there has been a welcome increase in the number of technical and industrial students. Altogether including technical and medical students, there are some 1,500 young Indians in London, Edinburgh, Cambridge, Oxford, Glasgow, Manchester, Birmingham, Leeds, Sheffield, Liverpool and a few other centres.

The Advisers.

It is well known that until a few years ago the young Indians, apart from inadequately supported unofficial effort and the chance of coming under the influence of English friends of their families, were practically left to their own devices. But in April 1909 Lord Morley, created for their benefit a Bureau of Information and appointed Dr. (now Sir) T. W. Arnold to the charge of it under the title of Educational Adviser. The Bureau was located at 21, Cromwell Road, together with the National Indian Association and the Northbrook Society, which were thus given spacious quarters for their social work among the young men. (For Burmese students distinct club accommodation is provided, partly by subventions from Indian revenues, in the commodious Albion House, St. Peter's Square, Hammersmith, W. 6.) In India provincial advisory committees exist to help and advise intending students. The work of the Bureau rapidly expanded, and in consequence Lord Crewe in 1912 re-organised the arrangements under the general charge of a Secretary for Indian students, Mr. (now Sir) C. E. Mallet who resigned at the close of 1916. He was succeeded by Dr. Arnold under the designation of Educational Adviser for Indian Students to the Secretary of State. Mr. N. C. Sen followed Dr. Arnold as Local Adviser in London. At Oxford, the Oriental Delegacy, and at Cambridge, the Inter. Collegiate Committee for Indian students have been instituted to deal with Oriental students generally; whilst Local Advisers for Indian students have been appointed at Manchester, Edinburgh and Glasgow.

These arrangements underwent far reaching revision in the autumn of 1920 in connection with the setting up, under the Act of the previous year of a High Commissionership for India in the United Kingdom. The "agency work" Sir William Meyer, took over from the Secretary of State included that connected with Indian students. Sir T. W. Arnold accepted an appointment long pressed upon him as Professor of Arabic at the School of Oriental Studies, and the High Commissioner appointed Mr. N. C. Sen and Dr. Thomas Quayle as Joint Secretaries for the Indian Students' Department. The administrative work hitherto divided between the India Office and 21, Cromwell Road was consolidated at the offices of the High Commissioner in Grosvenor Gardens, S. W 1, thereby obviating a good deal of duplication of files and papers.

The whole situation was investigated by a committee of inquiry which sat in 1921 under the chairmanship of Lord Lytton. Arrangements had been made for the Committee to continue their investigations in India in the cold weather of 1921-22, but were abandoned in consequence of the refusal of the Legislative Assembly to vote the necessary grant. This largely accounts for the somewhat tentative form of the recommendations of the unanimous report published in October 1922. The opinion is expressed that the only permanent solution of the problem is to be found in the development of education in India, and attention is invited to the diminution of the number of Indian students proceeding abroad that would result from giving effect to recommendations made for such development by previous commissions, and by the establishment

of an Indian Bar, which is now under investigation by a Committee. But it is held that it should be possible to secure admission both to British universities and, subject to certain reservations, to the works of manufacturing firms in Great Britain, for all Indian students competent to profit by the facilities afforded, provided that some machinery exists to ensure their distribution to the places best suited to their requirements.

The students have hosts of non-official friends and helpers and the report suggested that there should be a conference of representatives of all organisation interested in the social and intellectual welfare of young Indians in Great Britain to discuss the best means for co-ordinating their efforts. Under the presidency of Lord Hawke and the chairmanship of Lord Carmichael, an Indian Gymkhana Club in 1921 acquired its own sports ground at Osterley, the total cost of purchase and equipment being estimated at £15,000. Generous gifts were made by some Ruling Princes and others, particularly the Maharaja of Patiala, but further help is required. The cricket eleven of the Club has an excellent record in matches at Lords and the Oval and with suburban clubs.

A notable development of 1920 was the opening of the "Red Triangle" Shakespeare Hut in Bloomsbury, off Gower Street, as a union and hostel for Indian and Ceylonese students up to the number of 500. The hostel is Indian both in conception and control, the general secretary, Mr. P. A. Runganadhan, being responsible not to the National Council of Y. M. C. A.'s in London but to the Indian National Council in Calcutta. While the organization has a definitely moral and spiritual, as well as a social purpose, it is not a proselytizing agency. Permanent premises have been found in Gower Street, where four freehold houses have been purchased and adapted.

Lately there has been considerable growth of the number of Indian girls and women studying in Great Britain, and at least one is reading at the Inns of Court. But it is chiefly for medical or teaching training that Indian ladies go to England.

Appointments to the Indian Services.

In the following pages summarised information is given as to Indian appointments made by the Secretary of State for India in Council in various services. The information is extracted from the third edition (published in April, 1922) of a Memorandum on the subject issued by the India Office. Fuller information can be obtained from that pamphlet or from the annual "India Office List", but it is advisable for enquirers, if they wish to have the fullest and most accurate information obtainable, to apply for it to the Department concerned.

Indian Civil Service.

Nature of Duties.—These may be either on the executive side or the judicial side, and are generally known to candidates. Reference may be made, if desired, to the Public Services Commission Report, Annexure X., paragraph 1, page 161, and to the Reforms Report, Chapter 11, in particular paragraphs 326 and 327.

Method of Entry and Qualifications.—There is an Annual Open Competitive Examination, the written work commencing in August, while a *viva voce* test is held in July. For the Open Competition to be held in 1923 the age limits will be 21—24 on the 1st August of the year of competition. From the year 1924 onwards the age limits will be 21—23 on the 1st August of the year of competition.

Application.—Forms of application and particulars from the Secretary, Civil Service Commission, 6, Burlington Gardens, London, W 1.

Probation in the United Kingdom.—A proportion of the younger candidates selected on the result of the Open Competitions to be held in 1923 will be required to undergo two years' probation, the others will undergo one year; for candidates selected on the results of the Open Competitions in 1924 and subsequent years the probationary course will be two years. Probationers of European domicile receive an allowance of 300*l.* per annum, while those of Indian domicile receive 350*l.* per annum. Free passage to India is provided.

Indianisation.—The policy of Government is to introduce into the ranks of the Indian Civil Service an increasing proportion of Indians. It has at present been laid down that the maximum to be attained probably in 1929, of posts to be filled by Indians (or Burmans) is 48 per cent. this being an all-round figure intended to cover the total Indian recruitment from all sources, including promotion from the Provincial Service and appointments of practising lawyers in India, and also of candidates selected after a separate competitive examination held in India.

Pay.—A time-scale has been introduced. The highest posts open to the Service include Governorships of Provinces, memberships of the Executive Councils, Judgeships in the Indian High Courts, &c. In addition to pay, a duty allowance of Rs. 150 per mensem is drawn by officers holding judicial appointments classed as superior. The qualification for overseas pay is normally non-Indian domicile. Above the time-scale are appointments such as Commissioners, Members of Boards of Revenue, Chief Secretaries, and District and Sessions Judgeships on salaries ranging from Rs. 3,000 to Rs. 3,750 per mensem.

Pension.—An annuity of 1,000 *l.* is earned after 25 years' service, of which 21 years must be "active service." In addition a 4 per cent. deduction is made from the salaries of officers and is funded for their benefit. Compulsory retirement normally takes place after 35 years' service. Officers invalided from the service are entitled, if their total active service is less than four years, to a gratuity of 500*l.*, and if the total active service is more than four years to an annuity varying from 150*l.* to 900*l.* according to length of service.

The Indian Civil Service Family Pension Regulations admit of pensions, towards which the Government contributes, for widows, varying from 250*l.* to 300*l.* a year, to which a temporary war bonus is now added, and also for children at various rates. The contributions, which are compulsory, vary according to the circumstances of each case.

Indian Police Service (Higher Branch).

The appointments made in London are to the higher branch only and are roughly comparable with those of commissioned officers in the Army. The Service is intended for the work of supervision and contains only so many officers as are required to fill the "Superintendentships" of districts and posts of equivalent or higher standing and to supply a leave and training reserve of "Assistant Superintendents."

Method of Entry and Qualifications.—There is an annual Open Competitive Examination, for which candidates must be above 19 and under 21 years of age on the 1st August 1923 or subsequent years. The usual practice is for selected candidates to go straight to a Police Training School in India, and there is a requirement that they should provide themselves with uniform, horse and saddlery. Towards the cost of the first the India Office contributes a grant of 30*l.*, and towards the cost of horse and saddlery Local Governments are authorised to make a grant of a sum not exceeding Rs. 600. Passage to India is provided by the India Office.

Indianisation.—The maximum percentage of posts intended to be allotted to Indians (or Burmans) is fixed at 33 per cent. generally. As appointments are not at present being filled in any definite ratio, it is impossible to say when this percentage will be arrived at.

Pay.—A time-scale has been introduced. In this distinction is made between a "junior scale" and a "senior scale". All officers enter on the "junior scale," but when they attain certain post of higher responsibility they receive an extra allowance of Rs. 150 a month and are classed as coming under the "senior scale". The "junior scale" and the "senior scale" in this way overlap.

At the head of the time-scale are certain posts of which the salary is independent of the length of service of the officer who holds it. These are posts of Inspector-General and Commissioner of Police, of which the salaries may vary from Rs. 1,800 to Rs. 3,000 a month, and of Deputy Inspector-General, of which the salary is fixed at Rs. 1,750 a month rising by annual increments of Rs. 100 a month to Rs. 2,150 a month.

Indian Educational Service.

There are two main branches of the Service, the teaching and the inspecting; the former includes Principalships and Professorships in Government Colleges and Headmasterships of certain High Schools; the latter consists of the principal Inspectorships of Schools. Officers may be transferred from one branch to the other. There are also some specialists' posts.

Method of Entry and Qualifications.—Appointments are made by nomination by the Secretary of State for India on the recommendation of a Selection Committee. The main qualifications are a University degree in Honours and teaching experience. Knowledge of educational methods, linguistic talent and capacity for organisation are also taken into account. The normal age limits are from 23 to 30 years of age, but exceptions are sometimes made as regards the higher limit.

Number of Appointments.—There is no regular annual recruitment as in the case of the Indian Civil Service. Appointments are made at varying intervals as vacancies occur. It is not possible to say how many appointments are likely to be made from the United Kingdom in any year. Vacancies are also filled by the appointment of Indians in India in pursuance of the recommendations of the Public Services Commission. For the first two years of his service a candidate selected is on probation in India, and is required within that period to pass an examination in a vernacular language. A free first-class passage to India is provided, and in certain circumstances a free return passage at the end of the period of probation.

Indianisation.—The maximum percentage of posts intended to be allotted to Indians (or Burmans) is at present fixed at 50 per cent. It is expected that this percentage will soon be reached.

Indian Service of Engineers.

Assistant Executive Engineers.—Nature of Duties.—These consist of the construction and maintenance of the various public works undertaken by the State in India, *viz.*, railways, irrigation works, and buildings and roads.

Method of Entry and Qualifications.—Appointments are made on the recommendation of a Selection Committee. European candidates must have served in His Majesty's Forces for at least one year, or have been prevented on adequate grounds from so serving; they must have been born on or after 2nd August 1896 and on or before 1st August 1900. Indian candidates must have attained the age of 21 and not attained the age of 24 years on 1st July 1922, except that in the case of an Indian who has rendered service in His Majesty's Forces during the war the same maximum age limit as for Europeans will apply. Every candidate must either (1) have obtained one of certain recognised University degrees or other distinctions in Civil Engineering, or (2) have passed Sections A and B of the Associate Membership Examination of the Institution of Civil Engineers, or been exempted by the Institution, from such examination, or (3) produce evidence (*a*) of having received a general education high enough to fit him to receive proper professional training and to become a member of the Civil Engineering profession; (*b*) of technical education (University or otherwise) in Civil Engineering; and (*c*) of practical training and experience in Civil Engineering as a civilian and in military or quasi-military service. Candidates with insufficient practical experience may be required, to undergo, after arrival in India, such period of probation as may be decided upon. All selected candidates receive a free passage to India.

Indianisation.—It has been decided that, for the present, 50 per cent. of the superior posts in India and 33⅓ per cent. of those in Burma shall be allotted to men recruited in India.

Pay.—The pay of the various ranks of the Department is at present as follows:—

Superintending Engineers.—Rs. 1,750 rising by annual increments of Rs. 100 a month to Rs. 2,150 a month.

Chief Engineers.—Rs. 2,750 rising by annual increments of Rs. 125 a month to Rs. 3,000 a month.

Indian State Railways, Superior Revenue Establishment.

Assistant Traffic Superintendents.—Appointments are made on the recommendation of a Selection Committee. It is not known when any further recruitment in England will take place; the maximum limit of age is 25 years. Candidates must either (*a*) have had not less than two years' practical experience on a British, Colonial or military railway together with evidence of a sound general education (a reduction of the full period may be allowed in the case of men who have served in His Majesty's Forces, in which case a period of additional training in this country may be required); (*b*) possess a degree or diploma of any teaching University in the United Kingdom, granted after not less than three years' study, or a technical diploma or certificate recognised by the Secretary of State; or (*c*) produce evidence of having entered with reasonable prospect of success upon the course leading to such degree or diploma and of having been prevented from continuing it by joining His Majesty's Forces.

Indianisation.—It is intended that as soon as possible 50 per cent. of the vacancies occurring shall be filled by recruitment in India.

Indian Forest Service.

The Forest Department deals with the formation of forest reserves, the demarcation and detailed survey of forest areas, their protection against fire, &c., sylviculture and the exploitation of forests.

Selected candidates are nominated as probationers after interview by a Selection Committee. Should there be more candidates qualified than vacancies to be filled they may be required to pass a competitive examination. Candidates must be not less than 19 but under 22 years of age on the 1st January.

Candidates must hold an honours degree of a British University in a branch of Natural Science, or have passed the Final Bachelor of Science Examination in Pure Science at a Scottish University, and must possess a fair knowledge of French or German. They are also required to pass a medical examination.

Probation.—The normal period of probation is two years, which will be spent at Cambridge, Edinburgh, or Oxford University. Instruction will also be given during the vacations either in the United Kingdom or on the Continent. An allowance of 300*l.* and 350*l.* per annum is made to probationers of European and Indian domicile respectively, and free passage is provided to India.

Indianisation.—A maximum of 40 per cent. of posts in India is intended to be filled by direct recruitment of Indians, and 25 per cent. of posts in Burma by direct recruitment of Burmans and other indigenous races of that province. The maximum percentage of posts to be filled by promotion from the Provincial Forest Service is 12½ per cent.

Indian Agricultural Service.

Some officers of this Service hold administrative posts (those of Deputy Director of Agriculture) while others, hold research and teaching posts in the agricultural colleges. The latter include Agricultural Chemists, Economic Botanists, also Professors of Agriculture, Chemistry and the like. The majority of the officers are employed in the various provinces.

Method of Entry and Qualifications.—Candidates are selected after interview, &c., weight being given to the possession of a University degree in honours in Science, a degree or diploma in Agriculture, or other like distinction. For administrative posts some practical experience of farming is required. Candidates must as a rule be not less than 23 nor more than 30 years of age. Certain concessions are granted in respect of war service.

Probation.—Candidates usually undergo a course of training in India, and are appointed to posts as vacancies occur.

Indianisation—A maximum of 50 per cent. of posts in India, is intended to be filled by direct recruitment of Indians, and 50 per cent. of posts in Burma by direct recruitment of Burmans or members of other indigenous races of Burma. These percentages will be worked up to as qualified candidates become available.

Indian Civil Veterinary Department.

The officers of the Indian Civil Veterinary Department perform or supervise all official veterinary work in India, other than that of the Army.

The work of the Department includes—

(*a*) **Educational work in veterinary colleges;**
(*b*) **Horse and mule breeding;**
(*c*) **Cattle disease and cattle breeding.**

Appointments to this Department are made, as vacancies occur, by the Secretary of State for India. Candidates must not (except on special grounds to be approved by the Secretary of State) be over 30 years of age but this does not apply to candidates who have served for at least one year during the war in His Majesty's Forces, or who have been discharged, after less than one year's service, on account of wounds for sickness resulting from such service and must possess a diploma from the Royal College of Veterinary Surgeons. Evidence of a knowledge of bacteriology, and of capacity for carrying out original research, will be specially taken into account in estimating the claims of candidates. Good health, a sound constitution, and active habits are essential, and candidates must be certified by the Medical Board of the India Office to be physically fit for service in India.

Pay will be as follows:—On arrival in India Rs. 500 a month, rising by Rs. 50 each year to Rs. 1,200, which rate will continue from the beginning of the 16th to the end of the 20th year of service; after the beginning of the 21st year Rs. 1,500 a month.

Ecclesiastical Establishments (Church of England).

Appointments of Chaplains on Probation are made from time to time by the Secretary of State for India, as vacancies occur. Candidates for these appointments must be Priests who are between the ages of twenty-seven and thirty-four years, and have been for three years altogether in Holy Orders. Applications for nominations should be submitted to the Indian Chaplaincies Board of the Church of England. (Chairman Rev. Canon B. K. Cunningham, M.A., O.B.E., Chaplain to His Majesty the King, Westcott House, Cambridge.)

A Chaplain serves on probation for two years (*a*); if confirmed in his appointment at the end of that period, he will be admitted as a Junior Chaplain.

The salaries of Chaplains are:—

For the first year	..600 per mensem.
„ second year	..625 „
„ third year	..650 „
„ fourth and subsequent years	..700 rising by annual increments of Rs. 25 to Rs. 800 per mensem in the ninth year.
For the tenth and subsequent years	..850 rising by annual increments of Rs. 50 to Rs. 1,250 in the eighteenth year
„ Nineteenth and subsequent years	..1,350 per mensem.

The retiring pay of Chaplains is regulated by the following scale:—

	Per annum. £ s. d.
After 23 years' service, with an actual residence in India of 20 years	480 0 0
On Medical Certificate.	
After 19 years' actual residence in India, including the period probation	480 0 0
After 13 years' ditto	250 0 0
After 10 years' ditto	160 0 0

Ecclesiastical Establishments (Church of Scotland).

The appointments of Chaplains of the Church of Scotland on probation are made from time to time by the Secretary of State for India, according as vacancies occur. Candidates for these appointments must have been licensed for three years and be under thirty-four years of age. Applications for nominations should be submitted to the General Assembly's Committee on Indian Churches along with testimonials based on a personal knowledge of the candidate's qualifications. Chaplains serve on probation for two years (*a*); if confirmed in their appointment at the end of that period, they will be admitted as Junior Chaplains.

The salaries of Chaplains are:—

For the first year	..Rs. 600 per mensem rising by annual increments of Rs. 25 to Rs. 800 in the ninth year.
For the tenth year	..Rs. 850 per mensem rising by annual increments of Rs. 50 to Rs. 1,250 in the eighteenth years and thereafter Rs. 1,300.

The retiring pay of Chaplains is regulated by the following scale:—

	Per annum. £ s. d.
After 23 years' service, with an actual residence in India of 20 years	480 0 0
On Medical Certificate.	
After 19 years' actual residence in India, including the period of probation	480 0 0
After 13 years' ditto	250 0 0
After 10 years' ditto	160 0 0

Indian Geological Survey.

The Geological Survey Department is at present constituted as follows:—

	Monthly Salary. Rs.
1 Director	3,000.
6 Superintendents	From Rs. 1,500 to Rs. 2,000.
22 Assistant Superintendents	From Rs. 550 to Rs. 1,450.
1 Chemist	550 rising to Rs. 1,450 per mensem.

Appointments to the Department are made by the Secretary of State for India. The age of candidates should not exceed 25. Besides a good general education, a sound education in geology is essential: a University degree and a knowledge of French or German will be regarded as important qualifications; and certificates of a high moral character will be required. Candidates must also have had one or two years' practical training in mines, or in technical laboratories, as may be required by the Government of India. First appointments are probationary for two years.

India Office.

Vacancies in the clerical establishment of the Secretary of State for India are filled from among the successful candidates at the General Examinations (Class I, and Second Division), which are held from time to time by the Civil Service Commissioners for appointments in the Home Civil Service. The Examination for Class I. Clerkships is the same as the open Competitive Examination for the Civil Service of India. Further particulars may be obtained upon application to the Secretary, Civil Service Commission, Burlington Gardens, London, W.

Telegraph Department.

There are not at present any vacancies in the Superior Establishment of the Indian Telegraph Department, and it is considered unnecessary for the present to recruit any Assistant Superintendents from the United Kingdom. The arrangements for the future recruiting of the Department have not been finally settled.

Queen Alexandra's Military Nursing Service for India.

The Nursing establishment is for duty with British officers and soldiers, and at present consists of:—

4 Lady Superintendents.
16 Senior Nursing Sisters.
71 Nursing Sisters.

The numbers in these grades are subject to alteration.

Nursing Sisters at the time of appointment must be over 27 and under 32 years of age. Candidates for the Service must have had at least three years' preliminary training and service combined in the wards of a British general hospital or hospitals of not less than 100 beds in which adult male patients receive medical and surgical treatment, and in which a staff of Nursing Sisters is maintained.

The duration of a term of service, for all grades of lady nurses, is five years. A lady nurse who has been pronounced by a Medical Board to be physically fit for further service in India, may be permitted to re-engage for a second and third term at the option of the Government, and again for a fourth term, or until the age of compulsory retirement, if in all respects efficient and if specially recommended by the Commander-in-Chief in India. But a lady nurse will not under any circumstances be permitted to remain in the service in the grade of Lady Superintendent beyond the age of 55 years, or in either of the other grades beyond the age of 50 years.

Rates of Pay.

(In addition to free quarters, fuel, light, and punkah-pullers.)

	Rs. per mensem.
Chief Lady Superintendent (including allowance of Rs. 100)	750 ,,
Lady Superintendent ..	450 ,,
Lady Superintendent, if not provided with free quarters, etc.	520 ,,
Senior Nursing Sister after five years in grade.. ..	350 ,,
Senior Nursing Sister on promotion	325 ,,
Nursing Sister after 11 years in service	300 ,,
Nursing Sister after 5 years in service	275 ,,
Nursing Sister on appointment	250 ,,

Royal Indian Marine.

All first appointments of executive officers in the Royal Indian Marine are made by the Secretary of State for India.

The limits of age for appointment to the junior executive rank, that of Sub-Lieutenant, are 17 and 22 years, and no candidate will be appointed who does not possess the full ordinary Board of Trade certificate of a Second Mate; certificates for foreign-going *steamships* will not be accepted.

PAY AND ALLOWANCES.

The present establishment of officers of the Royal Indian Marine and their allowances are as follows:—

	Grade pay.	Per mensem Rs.
33	Nine Captains ..	900
	Eleven Commanders ..	800
	The remainder (13) ..	700
72	Lieutenants of 14 years' seniority (Lieut.-Commanders of 6 years' seniority) ..	625
	Lieutenants of 12 years' seniority (Lieut.-Commanders of 4 years' seniority) ..	600
	Lieutenants of 10 years' seniority (Lieut.-Commanders of 2 years' seniority) ..	575
	Lieutenants of 8 years' seniority (Lieut.-Commanders)	550
	Lieutenants of 6 years' seniority	450
	Lieutenants of 4 years' seniority	400
	Lieutenants under 4 years' seniority	300
	Sub-Lieutenants	250
	Cadets (without certificate) .	200

Total 105

In addition, 3 Commanders and 7 Lieutenants are at present employed in the Marine Survey of India.

A certain number of Shore, Port, and Marine Survey appointments are usually reserved for officers of the Royal Indian Marine. The numbers so reserved and the allowances attached (in addition to pay of grade), are as follows:—

	Allowances per mensem. Rs.
4 Shore appointments ..	100—1,000
16 Port appointments	320— 870 per diem.*
11 Marine Survey appointments	4—20

The sanctioned establishment of the Engineers' branch of the Marine numbers 82, of whom at present two are Engineer Captains, Eight Engineer Commanders and the remainder Engineer Lieutenant Commanders, Engineer Lieutenants and Engineer Sub-Lieutenants.

The Indian Medical Service.

The Medical Service under the control of the Government of India consists of some 803 medical men recruited in England by competitive examination; and has as its primary duty the care of the Indian troops and of the British officers and their families, attached to them. But in the course of rather more than a century and a half other duties and responsibilities have accrued to it, so that there are in addition the provision of medical aid to Civil Servants and their families, the administration of the civil hospitals of the large towns, and the supervision of the numerous small dispensaries provided either by the Government or private charity for the inhabitants of the larger villages. Moreover, the Service provides for the sanitary control of large areas, dealing with the sanitation of towns, protection of water supplies and the prevention of epidemic disease. It is also represented in the Native States by the Residency Surgeon, and in Persia by the Medical Officers to the British Consulates. The Jail Department is also administered in great part by Indian Medical Officers, generally in the dual capacity of Medical Officer and Superintendent; and up to quite recently the Officers in the Mints have been recruited from members of the medical profession. Lastly, the Service provides the men who are engaged in original research on diseases of tropical importance at the Bacteriological Laboratories which have arisen in India during the last fifteen years; and others who as Professors at the large medical schools have had the task of creating an indigenous medical profession which will make permanent throughout the Indian Empire the civilising influence of Western Medicine.

Method of Entry.—Entrance into the Service is determined on the results of competitive examinations held twice a year in London, the Regulations regarding which, and the rates of pay, rules for promotion and pension relating thereto, may be obtained on application to the Military Secretary at the India Office. Candidates must be natural-born subjects of His Majesty, of European or East Indian descent, of sound bodily health, and, in the opinion of the Secretary of State for India in Council, in all respects suitable to hold commissions in the Indian Medical Service. They may be married or unmarried. They must possess, under the Medical Acts in force at the time of their appointment, a qualification registrable in Great Britain and Ireland. No candidate will be permitted to compete more than three times. Candidates for the January examination in each year must be between 21 and 28 years of age on the 1st February in that year, and candidates for the July examination must be between 21 and 28 years of age on the 1st August.

Public Services Commission.

On January 25, 1923, the intention of Government to appoint a Royal Commission on the Services in India was announced in the Legislative Assembly. On the following day Mr. Seshgiri Aiyar moved the adjournment of the House to consider the announcement, and was strongly supported among others by Sir Deva Prasad Sarvadhikary, Dr. Gour and Mr. Jamnadas Dwarkadas. A remarkable feature of the debate was the unanimity between the Indian and the European elected members. Both Mr. Spence and Sir Montagu Webb condemned the Commission. The only non-official supporters of the Commission who spoke were Colonel Gidney and Khan Bahadur Zahiruddin Ahmed. In justifying the appointment of the Commission Sir Malcolm claimed that it had the support not of an "ultra-conservative Government and a reactionary Secretary of State" but that of Mr. Montagu. He went carefully through the reasons which had led to the appointment of the Commission, and concluded that a very thorough investigation by a fair and independent body was essential to adjust the various questions, some of them conflicting, that had arisen with regard to the services. "The Indian public can safely banish any suspicion," concluded Sir Malcolm Hailey, "that this inquiry has been dictated by unworthy motives, that its sole object is to retard the Indianisation of the services—to me an unthinkable suggestion; or that its sole or main purpose is to satisfy the existing members of the Services." The motion for adjournment was nevertheless carried. Later on, in the course of the discussion on Demands for Grants the provision of Rs. 3 lakhs for the Royal Commission was cut out by the Assembly, but by a very narrow majority in spite of Government opposition. The item has since been restored.

The terms of reference, announced in March, 1923, are as follows:—

Having regard to the necessity for maintaining a standard of administration in conformity with the responsibilities of the Crown for the Government of India, and to the declared policy of Parliament in respect of the increasing association of Indians in every branch of the administration and in view of the experience now gained of the operation of the system of government established by the Government of India Act in respect of the superior Civil Services in India, to inquire into:—

(1) The organization and general conditions of service, financial and otherwise, of those Services.

(2) The possibility of transferring immediately or gradually any of their present duties and functions to services constituted on a provincial basis.

(3) The recruitment of Europeans and Indians respectively, for which provision should be made under the Constitution established by the said Act and the best methods of ensuring and maintaining such recruitment; and to make recommendations.

Considerable delay occurred in announcing the personnel, and it was not until June that it was declared to be:—Lord Lee (Chairman); Sir Reginald Craddock, Sir Cyril Jackson, Sir Chimanlal Setalvad, Sir Muhammad Habib-ul-lah, Mr. Hari Kishan Kaul, Mr. David Petrie, Mr. Bhupendranath Basu, and Professor Reginald Coupland.

The Commission went on tour in India taking evidence during the cold weather of 1923-24

The Press.

The newspaper Press in India is an essentially English institution and was introduced soon after the task of organising the administration was seriously taken in hand by the English in Bengal. In 1773 was passed the Regulating Act creating the Governor-Generalship and the Supreme Court in Bengal and within seven years at the end of the same decade, the first newspaper was started in Calcutta by an Englishman in January 1780. Exactly a century and a third has elapsed since, not a very long period certainly, a period almost measured by the life of a single newspaper, *The Times*, which came into existence only five years later in 1785; but then the period of British supremacy is not much longer, having commenced at Plassey, only twenty-three years earlier. Bombay followed Calcutta closely, and Madras did not lag much behind. In 1789 the first Bombay newspaper appeared, *The Bombay Herald*, followed next year by *The Bombay Courier*, a paper now represented by *The Times of India* with which it was amalgamated in 1861. In Bombay the advent of the press may be said to have followed the British occupation of the island much later than was the case in Calcutta. In Calcutta the English were on sufferance before Plassey, but in Bombay they were absolute masters after 1665, and it is somewhat strange that no Englishman should have thought of starting a newspaper during all those hundred and twenty-five years before the actual advent of *The Herald*.

The first newspaper was called *The Bengal Gazette* which is better known from the name of its founder as *Hicky's Gazette* or *Journal*. Hicky like most pioneers had to suffer for his enterprising spirit, though the fault was entirely his own, as he made his paper a medium of publishing gross scandal, and he and his journal disappeared from public view in 1782. Several journals rapidly followed Hicky's, though they did not fortunately copy its bad example. *The Indian Gazette* had a career of over half a century, when in 1833 it was merged into the *Bengal Harkaru*, which came into existence only a little later, and both are now represented by *The Indian Daily News* with which they were amalgamated in 1866. No fewer than five papers followed in as many years, the *Bengal Gazette* of 1780, and one of these, *The Calcutta Gazette*, started in February 1784, under the avowed patronage of Government, flourishes still as the official gazette of the Bengal Government.

In 1821 a syndicate of European merchants and officials commenced the publication of *John Bull in the East*, a daily paper which was intended to reflect Tory opinion in India and set an example to the Press generally in the matter of moderation and restraint. The name of this journal was altered to *The Englishman* by the famous Stocqueler in 1836.

From its commencement the press was jealously watched by the authorities, who put serious restraints upon its independence and pursued a policy of discouragement and rigorous control. Government objected to news of apparently the most trivial character affecting its servants. From 1791 to 1799 several editors were deported to Europe without trial and on short notice, whilst several more were censured and had to apologise. At the commencement of the rule of Wellesley Government promulgated stringent rules for the public press and instituted an official censor to whom everything was to be submitted before publication, the penalty for offending against these rules to be immediate deportation. These regulations continued in force till the time of the Marquis of Hastings who in 1818 abolished the censorship and substituted milder rules.

This change proved beneficial to the status of the press, for henceforward self-respecting and able men began slowly but steadily to join the ranks of journalism, which had till then been considered a low profession. Silk Buckingham, one of the ablest and best known of Anglo-Indian journalists of those days, availed himself of this comparative freedom to criticise the authorities, and under the short administration of Adam, a civilian who temporarily occupied Hastings' place, he was deported under rules specially passed. But Lord Amherst and still more Lord William Bentinck were persons of broad and liberal views, and under them the press was left practically free, though there existed certain regulations which were not enforced, though Lord Clare, who was Governor of Bombay from 1831 to 1835, once strongly but in vain urged the latter to enforce them. Metcalfe who succeeded for a brief period Bentinck, removed even these regulations, and brought about what is called the emancipation of the press in India in 1835, which was the beginning of a new era in the history of the Indian press. Among papers that came into being, was the *Bombay Times* which was started towards the close of 1838 by the leading merchants of Bombay, and which in 1861 changed its name to the *Times of India*. *The Bombay Gazette*, founded in 1791 ceased publication in 1914.

The liberal spirit in which Lord Hastings had begun to deal with the press led not only to the improvement in the tone and status of the Anglo-Indian press, but also to the rise of the Native or Indian Press. The first newspaper in any Indian language was the *Samachar Durpan* started by the famous Serampore Missionaries Ward, Carey and Marshman in 1818 in Bengali, and it received encouragement from Hastings who allowed it to circulate through the post office at one-fourth the usual rates. This was followed in 1822 by a purely native paper in Bombay called the *Bombay Samachar* which still exists, and thus was laid the foundation of the Native Indian Press which at the present day is by far the largest part of the press in India, numbering over 650 papers.

From 1835 to the Mutiny the press spread to other cities like Delhi, Agra, Gwalior, and even Lahore, whereas formerly it was chiefly confined to the Presidency towns. During

the Mutiny its freedom had to be temporarily controlled by the Gagging Act which Canning passed in June 1857 on account of the license of a very few papers, and owing still more to the fears of its circulating intelligence which might be prejudicial to public interests. The Act was passed only for a year at the end of which the press was once more free.

On India passing to the Crown in 1858, an era of prosperity and progress opened for the whole country in which the press participated. There were 19 Anglo-Indian papers at the beginning of this period in 1858 and 25 Native papers and the circulation of all was very small. The number of the former did not show a great rise in the next generation, but the rise in influence and also circulation was satisfactory. Famous journalists like Robert Knight, James Maclean and Hurris Mookerji flourished in this generation. The *Civil and Military Gazette* was originally published in Simla as a weekly paper, the first issue being dated June 22nd, 1872. Prior to and in the days of the Mutiny the most famous paper in Northern India was the *Mofussilite*, originally published at Meerut, but afterwards at Agra and then at Ambala. After a lively existence for a few years in Simla the *Civil and Military Gazette* acquired and incorporated the *Mofussilite*, and in 1876 the office of the paper was transferred from Simla to Lahore, and the *Gazette* began to be published daily.

INDIAN PRESS LAW.

Before 1835 all printing of books and papers was subject to licence by the Governor-General in Council, and the licences were issued or refused at the discretion of Government. Act XI of 1835 repealed the old Regulations and merely required registration of the printer and made a few minor requirements. That Act was replaced in 1867 by the present Press and Registration of Books Act, and, except for an Act which was in force for one year during the Mutiny, there was no further legislation directly affecting the Press until 1878 when the Vernacular Press Act was passed. That Act was repealed during the Viceroyalty of Lord Ripon in 1882. From that date until 1907 Government made no attempt to interfere directly with the liberty of the Press, the growth of sedition being dealt with in other ways by the passing in 1898 of section 124A of the Penal Code in its present form, which had been originally enacted in 1870, and by the introduction into the Penal Code of section 153A and into the Criminal Procedure Code of section 108. There were a certain number of prosecutions under those sections up to 1907, but the dissemination of sedition through the Press continued. In 1908 the Newspaper (Incitement to Offences) Act was passed which dealt with papers inciting to murder or to acts of violence. This Act failed to have the desired effect.

The Indian Press Act, 1910, was a measure of wider scope. the main object of which was to ensure that the Indian press generally should be kept within the limits of legitimate discussion.

The Act deals, not only with incitements to murder and acts of violence, but also with other specified classes of published matter, including any words or signs tending to seduce soldiers or sailors from their allegiance or duty, to bring into hatred or contempt the British Government, any Native Prince, or any section of His Majesty's subjects in India, or to intimidate public servants or private individuals.

The different sections of the Act have in view (i) Control over presses and means of publication; (ii) control over publishers of newspapers; (iii) control over the importation into British India and the transmission by the post of objectionable matter; (iv) the suppression of seditious or objectionable newspapers, books, or other documents wherever found.

Repeal of Press Legislation.—By the autumn of 1917 the Government of India had begun to consider the desirability of modifying at least one section of the Press Act to which great exception had been taken on account of the wide powers that it gave. Finally, after more than once consulting Local Governments, a Committee was appointed in February 1921 after a debate in the Legislative Assembly, to examine the Press and Registration of Books Act, 1867, and the Indian Press Act, 1910, and report what modifications were required in the existing law. That Committee made an unanimous report in July 1921, recommending:—

(1) The Press Act should be repealed.

(2) The Newspapers Incitements to Offences Act should be repealed.

(3) The Press and Registration of Books Act and the Post Office Act should be amended where necessary to meet the conclusion noted below: (*a*). The name of the editor should be inscribed on every issue of a newspaper and the editor should be subject to the same liabilities as the printer and publisher, as regards criminal and civil responsibilities; (*b*) any person registering under the Press and Registration of Books Act should be a major as defined by the Indian Majority Act; (*c*) local Governments should retain the power of confiscating openly seditious leaflets, subject to the owner of the press or any other person aggrieved being able to protest before a court and challenge the seizure of such document, in which case the local Government ordering the confiscation should be called upon to prove the seditious character of the documents. The powers conferred by Sections 13 to 15 of the Press Act should be retained. Customs and Postal officers being empowered to seize seditious literature within the meaning of Section 124A of the I. P. C. subject to review on the part of the local Government and challenge by any persons interested in the courts; (*e*) any person challenging the orders of Government should do so in the local High Court; (*f*) the term of imprisonment prescribed in Sections 12, 13, 14 and 15 of the Press and Registration of Books Act should be reduced to six months; (*g*) the provisions of Section 16 of the Press Act should be reproduced in the Press and Registration of Books Act.

Effect was given to these recommendations during the year 1922.

Press Association of India.—At the end of 1915 this Association was formed in Bombay. According to the articles of constitution "Its objects shall be to protect the press of the country by all lawful means from arbitrary laws and their administration, from all attempts of the Legislature to encroach on its liberty or of the executive authorities to interfere with the free exercise of their calling by journalists and press proprietors, and for all other purposes of mutual help and protection which may be deemed advisable from time to time." Members pay a minimum subscription of Rs. 10 annually. The affairs of the Association are managed by a Council.

Number of Printing Presses at Work, and Number of Newspapers, Periodicals, and Books Published.

Province.	Printing Presses.	Newspapers.	Periodicals.	Books.	
				In English or other European Languages.	In Indian Languages (Vernacular and Classical) or in more than one Language.
Madras	875	(a)277	664	418	1,975
Bombay	612	186	829	163	1,361
Bengal	852	145	211	533	1,885
United Provinces	537	121	264	223	1,826
Punjab	263	116	161	185	1,063
Burma	212	62	100	14	200
Bihar and Orissa	143	27	35	108	701
Central Provinces and Berar ..	111	47	4	21	95
Assam	41	13	9	3	20
North-West Frontier Province ..	24	1	1	....	....
Ajmer-Merwara	16	4	3	6	53
Coorg	2	....	....	....	....
Delhi	74	18	16	16	227
Total, 1919-20 ..	3,795	1,017	2,297	1,690	10,105
Totals .. 1919-20 ..	3,371	941	2,152	2,090	9,162
1918-19 ..	3,146	883	2,049	2,092	9,687
1917-18 ..	3,155	838	1,997	1,916	10,772
1916-17 ..	3,101	805	1,900	1,919	11,140
1915-16 ..	3,237	857	2,027	1,541	10,658
1914-15 ..	3,102	847	2,938	1,602	11,477
1913-14 ..	3,020	827	2,848	1,477	10,712
1912-13 ..	2,828	673	2,305	1,602	9,051
1911-12 ..	2,780	656	2,268	1,596	9,988

(a) For calendar year.

Newspapers and News Agencies registered under the Press Rules and arranged alphabetically according to Station where they are published and situated.

NOTE.—*News Agencies are distinguished by an asterisk.*

Stations.	Title in full.	Day of going to Press.
Agra	Agra Akbbar	
	Jain Path Pradarshak	
	Sanadhyab Karak	
Ahmedabad	Gujarati Punch	Sundays.
	Political Bhomiyo	Thursdays.
	Praja Bandhu	Saturdays.
	Navajivan	....
	Young India	....
Ajmer	Navin Bajsthan	....
Akola, Berar	Praja Paksha	Saturdays.
Akyab	Arakan News	Tuesdays and Fridays.
Aligarh	Aligarh Institute Gazette ..	Wednesdays.
Allahabad	Abhyudaya	....
	Associated Press	....
	Bhavishya	....
	Hindustan Review	On first of every month.
	Democrat	....
	Leader	Daily, except Mondays.
	Navayug	....
	Pioneer	Daily.
	Reuter's Telegram Company, Ld.	....
Allahabad Katra ..	Stri Dharam Shikshak	Monthly.
Amraoti	Bharat	Wednesdays.
	Udaya	....
Amritsar	Daily Vakil	Daily.
	Akali to Pardesi	....
	Punjab Press Bureau	....
	Gurumukhi Daily Khalsa ..	....
	Gurumukhi Daily Pardesi Khalsa	....
	Dard	Daily.
Amroha	Ittihad	Saturdays.
Asansol	Ratnakar	Sundays.
Bagalkot..	Navina Bharat	....
Bagerhat	Jagaran	Sundays.
Bangalore	Daily Post	Daily.
	Kasim-ul-Akhbar	Mondays and Thursdays.
	Truth	Mondays and Thursdays.
Barisal	Barisal Hitaishi	Sundays.

Stations.	Title in full.	Day of going to Press.
Baroda	Jagriti	Weekly.
	Shree Sayaji Vijaya	Thursdays.
Bassein, Burma.. ..	Bassein News	Tuesdays and Fridays.
Beawar	Vyaparik Daily Report	....
Belgaum	Belgaum Samachar	Mondays.
	Chaitanya	....
Benares City	Awazal Khalk	Every Wednesday.
	Bharat Jiwan	Sundays.
	Hindi Kesari	Wednesdays.
	Kashi Temperance Samachar ..	Monthly.
	Mahamandal Magazine	Monthly.
	Trishul	....
Bhavnagar	Daily Market Report	....
	Jain	Saturdays.
	Jainhasan	Tuesdays.
Bijapur	Karnatak Vaibhav	Saturdays.
Bombay	Advocate of India	Daily.
	Akhbar-i-Islam	Daily.
	Akhbar-i-Soudagar	Daily, except on Sundays.
	Associated Press	.....
	Balaram Sporting News	.....
	Bharat	.....
	Bombay Chronicle	Daily.
	Bombay Samachar	Daily.
	Breul Co's. Market Report ..	.....
	Catholic Examiner	Saturdays.
	Commercial Sporting News ..	.....
	Dnyana Prakash	.....
	Evening News of India	Daily.
	Gujarati	Saturdays.
	Hindusthan and Akhbar-i-Sodagar.	.....
	Indian Daily Mail	Daily.
	Indian Industries and Power ..	On the 15th of each month.
	Indian Social Reformer	Saturdays.
	Indu Prakash	Daily, except Sundays.
	Jam-e-Jamshed	Daily, except Saturday.
	Kaiser-i-Hind	Saturdays.
	Khilafat Daily	.....
	Khilafat Bulletin	.....
	Lakhpati Sporting News ..	.....
	Lokmanya	Daily, except Tuesday.
	Mufide Rozgar	Sundays.
	Muslim Herald	Daily.
	Nawa Kal	.....

Stations.	Title in full.	Day of going to Press.
Bombay—*contd.*	Nyayadarshak	.....
	Nusrat	.....
	O Amigo do Goano	Fridays.
	O Anglo-Lusitano	Saturdays.
	Rastra Sewak	.....
	Rast Goftar, Parsi and Praja Mitra	Daily.
	Railway Times	Fridays.
	Reuter's Indian Journal	Daily.
	Reuter's Telegram Company, Ltd.	.....
	Rushimukh	.....
	Saifee Racing Chronicle	.....
	Sandesh	Weekly.
	Sanj Vartaman	Daily, except Sundays
	Shri Venkateshwar Samachar ..	Fridays.
	Soorya	.....
	Sports Bulletin	.....
	Sudhakar	Saturdays.
	Times of India	Daily. †
	Times of India Illustrated Weekly.	Sundays.
	Voice of India	.....
Bowringpet	Kolar Gold Fields News	Tuesdays.
Budaon	Akhbar Zulqarnain	6th, 13th, 20th and 27th of every month.
Calangute, Goa).. ..	A Voz do Povo	Saturdays.
Calcutta	Advocate	Daily.
	Alkamal	.....
	Amrita Bazar Patrika	Daily.
	Ananda Bazar Patrika	.....
	Asrijadid	.....
	Associated Press	.....
	Bangabasi	Wednesdays.
	Basumati	Daily.
	Bengalee	Daily, except Sundays.
	Bhagavan Gandhi..	.....
	Bharata Mitra	Thursdays.
	Bureau-de-World's News ..	.....
	Business World	Monthly.
	Calcutta Samachar	Daily.
	Capital	Thursdays.
	Catholic Herald of India	Tuesdays.
	Collegian	Bi-monthly.
	Commerce	.....
	Dowejadid	.....

† With *The Times of India* there are published every Wednesday Supplement of *Indian Motoring* and every Friday a separate *Indian Engineering Supplement.*

Stations.	Title in full.	Day of going to Press.
Calcutta—*contd.* ..	Empire (Calcutta Evening News).	Daily, except Sundays.
	Englishman	Daily.
	Guardian	Fridays.
	Hindu Patriot	Daily, except Saturdays.
	Hindusthan	.....
	Hitabadi	Wednesdays.
	Indian and Eastern Engineer ..	14th of each month.
	Indian Daily News	Daily, except Sundays.
	Indian Engineering	Thursdays.
	Indian Express	Once a month.
	Indian Mirror	Daily.
	Indian News Agency	.....
	Indian Planters' Gazette ..	Saturdays.
	Industry	Monthly
	Inqilab-i-Zamana	.....
	Liberty	.....
	Market Intelligence	Daily.
	Mussalman	Thursdays.
	Navayug	.....
	Nayak	Daily.
	Prakash	.....
	Railways	15th and last day of every month.
	Rayat Bhandu	.....
	Reuter's Telegram Company, Limited.	.....
	Sanjibani	Wednesdays.
	Samay	Wednesdays.
	Samyavadi	Daily.
	Servant	.....
	Statesman	Daily.
	Swatantra	.....
	Swaraj	.....
	Telegraph	.....
	United Press Syndicate *	.....
	Vishwamitra	Daily.
	Vyapar	.....
	Young Men of India	Monthly.
	World Peace	.....
	Zamana	.....
Calicut	Kerala Sanchari	Wednesdays.
	Malabar Journal	.....
	Manorama	Tuesdays and Fridays.
	Mitavadi	Daily.
	West Coast Reformer	Sundays and Thursdays.
	West Coast Spectator	Wednesdays and Saturdays.

Stations.	Title in full.	Day of going to Press.
Cawnpore	Azad	Wednesdays.
	Cawnpore Journal	Daily.
	Daily Vartaman	.....
	Hindi Daily and Weekly Paper ..	.....
	Hurriat	.....
	Prabha	Monthly.
	Pratap	Saturdays.
	Prabha	.....
	Reuter's Telegram Company, Limited.	.....
	Zamana	25th day of every month.
Chandernagore	Probartak	Bi-monthly.
Chindwara	Lokmitra	.....
Chinsurah	Education Gazette	Tuesdays.
Chittagong	Jyoti	Wednesdays.
Cochin	Cochin Argus	Saturdays.
	Cochin News Agency	.....
	Malabar Herald	Saturdays.
Cochin Mattancherry ..	Malabar Islam	.....
Cocanada	Ravi	Thursdays.
Colombo	Ceylon Catholic Messenger ..	Tuesdays and Fridays.
	Ceylon Daily News	Daily.
	Ceylonese	Daily.
	Ceylon Independent	Daily.
	Ceylon Morning Leader	Daily.
	Ceylon Observer	Daily.
	Dinakara Prakasa	Mondays, Tuesdays, Thursdays and Saturdays.
	Dinamina	Daily, except Sundays.
	Dravida Mitran	Wednesdays and Saturdays.
	Gnanartha Pradipaya	Mondays and Thursdays.
	Islam Mittiran	Wednesdays and Saturdays.
	Lakmina	Daily except Sundays.
	People	Daily.
	Sarasavi Sandaresa	Tuesdays and Fridays.
	Times of Ceylon	Daily.
Dantal	Nihar	Mondays.
Cuttack	Utkal Deepica	Fridays.
	Indian Sunday Journal	Monthly.
Dacca	Dacca Gazette	Mondays.
	Dacca Prakash	Sundays.
	Herald	Daily.

Stations.	Title in full.	Day of going to Press.
Darjeeling	Darjeeling Visitor and Advertiser.	Mondays.
Delhi	Alaman	.....
	Arjun	.....
	Asia	.....
	Associated Press	.....
	Daily Congress	.....
	Daily Raiyat	Daily.
	General News Agency and Book Depot.	Daily.
	General News Bilimaran	.....
	Indian News Agency	.....
	Maheswari (Hindi)	Weekly.
	Mail Trading	Monthly
	Morning Post	Daily, except Sundays
	National News Agency	.....
	Quam	Weekly.
	Sabha	.....
	Taj	.....
	Tamadun	Monthly.
	Vijaya	Saturdays.
	Weekly Hindi Paper	.....
	Weekly Moballig	.....
Dharwar	Dharwarvritt	Wednesdays.
	Karnatakavritta and Dhanan̄jaya	Tuesdays.
	Karm Veer	.....
	Raja Hansa	Daily.
	Vijayia	.....
Dhulia	Khandesh Vaibhav	Fridays.
Dibrugarh	Times of Assam	Fridays.
Gaya	Bihar Advocate and Kayastha Messenger.	Sundays.
Gorakhpur	Swadesh	....
Guntur	Deshabhimani	Daily.
Howrah	Bisva Duta	Daily.
Hyderabad, Deccan	Musheer-i-Deccan	Daily.
	Sahifa-i-Rozana	Daily.
	Usman Gazette	Daily.
Hyderabad, Sind ..	Bharatvasi	Daily.
	Hindu	....
	Musafir	Saturdays.
	Sind Journal	Wednesdays.
	Sind Mail	Daily.
	Sindvasi	Daily.

Stations.	Title in full.	Day of going to Press.
Jaffna	Ceylon Patriot and Weekly Advertiser.	Tuesdays.
	Jaffna Catholic Guardian.. ..	Saturday Mornings.
	Sitbia Veda Pathukavalan ..	Fortnightly.
	Vasavilan Jaffna Native Opinion	Fortnightly.
Jaffna (Vannarponnai) ..	Hindu Organ	Wednesdays
Jalgaon (Khandesh) ..	Pragatik	....
Jhansi	Free India Sahis	....
Jubbulpore	India Sunday School Journal ..	Third Thursday of every month.
	Karmaveer	....
	Taj	....
Karachi	Alwahid	....
	Bharat	....
	Daily Gazette	Daily.
	New Times	Daily.
	Parsi Sansar	Saturdays.
	Reuter's Telegram Company, Limited.	....
	Rozana Biupar	Daily.
	Sind Observer	Wednesdays and Saturdays.
	Sind Sudhar	Saturdays.
Karanpur, Dehra Dun ..	Mazahir-i-Jadid	Monthly.
Karai Kudi	Dhana Vysia Ootran	....
Khulna	Khulna Basi	Saturdays.
Kolhapur City	Vidyavilas	Fridays.
Kottayam	Kerala Varathil	Tuesdays and Fridays.
	Malayala Manora n	Wednesdays and Saturdays.
	Nazrani Deepika	Tuesdays.
Kumta	Kanara News	....
	Kanara Leader	....
Lahore	Akalj	....
	Akhbar-i-Am	Daily.
	Associated Press *	....
	Bande Mataram	....
	Civil and Military Gazette ..	Daily (Sundays excepted).
	Congress Publicity Bureau ..	....
	Daily Milap	....
	Daily Updeshak..	....
	Daily Urdu Iltifag	....
	Daily Urdu Sidaquat	....
	Daily Zamindar	....
	Desh	Daily.

Stations.	Title in full.	Day of going to Press.
Lahore—*contd.* ..	Haq	Fridays.
	Kesari	....
	Liberal	Sundays.
	Muslim Outlook	....
	Nation	....
	Palgham-i-Sulah	Sundays and Wednesdays.
	Paisa Akhbar	Daily.
	Panth	....
	Pratap	....
	Rajput Gazette	1st, 8th, 16th and 24th of every month.
	Reuter's Telegram Company, Limited.	....
	Scientific World	....
	Siyasat	....
	Sudarshan	....
	Tribune	Daily, except Sundays.
	Urdu Daily Railway	Daily.
	Watan	Thursdays.
Larkana	Khairkhah	Saturdays.
	Larkana Gazette	Fridays.
Lucknow	Advocate	Wednesdays and Saturdays.
	Anand	Thursdays.
	Daily Hamdam	Daily
	Hindusthani	....
	Indian Daily Telegraph	Daily.
	Indian Witness	Wednesdays.
	Kaukab-i-Hind	Wednesdays.
	Lucknow Times	....
	Muslim Gazette	Tuesdays.
	Oudh Akhbar	Daily, except Sundays.
Madras	Al-Mazmun	On the first of every month.
	Andhra Patrika	Tuesdays.
	Anglo-Indian	Thursdays.
	Associated Press	.....
	Azadhind	....
	Catholic Leader	....
	Daily Express	Daily, except Saturdays.
	Desabaktan	Daily.
	Indian Railway Journal	15th of every month.
	Jarida-i-Rozgar	Saturdays.
	Justice	Daily.
	Law Times	Saturdays.
	Madras Mail	Daily.
	Madras Times	Daily.

Stations.	Title in full.	Day of going to Press.
Madras—*contd.* ..	Muhammadan	Mondays and Thursdays.
	Mukhbir-i-Deccan	Wednesdays.
	Nyayadipika	..
	New India	Daily.
	Reuter's Telegram Company, Limited.	.....
	Shamshul Akhbar	Mondays.
	Swadesa Mitran	Daily.
	Swarajya	....
Madura	South Indian Mail	Mondays.
Mandalay	Upper Burma Gazette	Daily.
Margao (Goa) ..	A Terra	Wednesdays and Saturdays.
	Noticias	Mondays.
	Ultramar	Mondays and Fridays.
Mattancheri	Chakravarthi	Saturdays.
Meerut	Roznama	Qaum.
Mhow	Satyarth Patrika	Thursdays.
Mirpurkhas	Mirpurkhas Gazette	Wednesdays.
Mirpur City	Khichri Samachar	Saturdays.
Moulmein	Moulmein Advertiser	Daily.
Mount Road, Madras ..	Hindu	Daily, except Sundays.
Mussoorie	Mussoorie Times	Thursdays.
Muttra	Jain Gazette	Mondays.
Muvattupuzha	Kerala Dheepika	Saturdays.
Mymensingh	Charu Mihir	Tuesdays.
Nagercoil	Travancore Times	Tuesdays.
Nagpur	Desha-Sewak	Mondays.
	Hitavada Maharashtra	.....
	Marwadi	Tuesdays.
	Pranavir Samaj Sewak	.....
	Sankalpa	Daily.
	Sankalpa Mahal	Fridays.
	Young Patriot	Sundays.
Naini Tal	Naini Tal Gazette	Wednesdays.
Nova Goa	Diario de Noite	Daily.
	Heraldo	Daily, except Mondays
	O'Debate	Mondays.
	O'Heraldo	Daily, except Sundays and holidays.
Ootacamund ..	South of India Observer and Nilgiri News.	Daily issue except Sundays.
	Nilgiri Times	.....

Stations.	Title in full.	Day of going to Press
Orai	Utsah	Thursdays.
Pandharpur	Pandhari Mitra	Sundays.
Panjim, Goa	O'Crente	Saturdays.
Parur	Uttara Tharaka	Saturdays.
Patna	Behar Herald	Saturdays.
	Express	Daily.
	Searchlight	Saturdays
Pen	Kolaba Samachar	Fridays.
Peshawar	Peshawar Daily News	Daily.
Poona	Deccan Herald	Daily.
	Dnyana Prakash	Daily, except Mondays.
	Kesari	Tuesdays.
	Lokasangraha	Daily.
	Mahratta	Sundays.
	Motee Sporting News War Cry ..	Sundays.
Poona City	Satyagrahee	.....
Quadian (*via* Batala) ..	Alfazl	.....
Quetta	Baluchistan Gazette	Wednesdays and Saturdays.
	Baluchistan Herald Daily Bulletin.	Daily.
	Quetta News War Bulletin ..	Daily.
Quilon	Desabhimani	.....
	Malayali	Wednesdays and Saturdays.
	Kathiawar Opinion	.....
Rajkot	Kathiawar Times	Wednesdays and Sundays.
Rampur (Kathiawar) ..	Saurashtra	.....
Rangoon	Associated Press*	.....
	Burma Sunday Times	.....
	Chinese Daily News	.....
	Free Burma	.....
	New Burma	.....
	New Light of Burma	.....
	Rangoon Daily News	.....
	Rangoon Evening Post	.....
	Rangoon Gazette	Daily, except Mondays.
	Rangoon Times	Daily, except Sundays.
	Rangoon Mail	Saturdays.
	The Sun	.....
Ratnagiri	Bakool	Saturdays.
	Satya Shodhak	Sundays.
Rawalpindi	Frontier Bulletin	.....
	Shanti	.....

Stations.	Title in full.	Day of going to Press.
Samastipur..	Vigilant	.....
Satara	Shubha Suchaka	Fridays.
Satara City..	Prakash	Wednesdays.
Secundcrabad ..	Hyderabad Bulletin	Daily.
	Notice Sheet	Daily.
Shahjahanpur	Sarpunch	Daily.
Sholapur	Kalpataru	Sundays.
	Navajug	Tuesdays
	Sholapur Samachar	.....
Silchar	Surma	Sundays.
Simla	Associated Press*	.....
	Indian News Agency*	.....
	Indian War Cry	27th of each month.
	Reuter's Telegram Company, Limited. *	.....
Sukkur	Sindhi	Saturdays.
Surat	Deshi Mitra	Thursdays.
	Deshodaya	Tuesdays.
	Gujrat Mittra and Gujarat Darpan	Saturdays.
	Jain Mitra	Wednesdays.
	Navayuga Weekly	.....
	Peoples' Business Gifts	Monthly.
	Praja Pokar	Wednesdays.
	Samachar	.....
	Satyaug	.....
	Surat Akhbar	Sundays.
Sylhet	Paridarsaka	Wednesdays.
Tinnevelly	Kalpaka	Monthly.
Trichur	Lokaprakasam	Mondays.
Tiruvalla	Kerala Kahalam	.....
	Kerala Taraka	Wednesdays.
Trivandrum	Bharata Kesari	Bi-Weekly.
	Triva drum Daily News	Daily.
	Western Star	Tuesdays, Thursdays and Saturdays.
Vizagapatam	Andhra Advocate	Fridays.
Wai	Modavritta	Mondays.
	Vrittasar	Mondays.
Wardha	Rajasthan Kesari	.....
Yeotmal	Lokamat	.....

Societies: Literary, Scientific and Social.

AGRICULTURAL AND HORTICULTURAL SOCIETY OF INDIA (Calcutta).—Founded 1820. Annual subscription Rs. 32. Entrance fee Rs. 8. *Secretary*, S. Percy-Lancaster, F.L.S., F.R.H.S., 1, Alipore Road, Alipore.

AGRI-HORTICULTURAL SOCIETY OF BURMA.—*Superintendent*, R. E. Cooper, Esq., F.R.H.S.; *Secretary*, Maung Pon, Esq., Agri-Horticultural Gardens, Kandawglay, Rangoon.

AGRI-HORTICULTURAL SOCIETY OF MADRAS.—Established 1835. Quarterly subscription for members in Class A Rs. 7, in Class B Rs. 3. *Patron*, H. E. the Rt. Hon. Lord Willingdon; *Chairman*, The Hon. Mr W. W. Phillips, I.C.S.; *Hon. Secretary*, Dr. F. H. Gravely, D.Sc., F.A.S.B., Teynampett, S. W., Madras.

ANTHROPOLOGICAL SOCIETY OF BOMBAY.—Founded 1886, to promote the prosecution of Anthropological research in India; to correspond with Anthropological Societies throughout the world; to hold monthly meetings for reading and discussing papers; and to publish a journal containing the transactions of the Society. Annual subscription Rs. 10. *Secretary*, Shams-ul-Ulma Dr. Jivanji Jamshedji Modi, B.A., Ph.D., C.I.E., Town Hall, Bombay.

ASIATIC SOCIETY OF BENGAL (Calcutta).—*President*, Dr. N. Annandale, C.I.E., D.Sc., C.M.Z.S., F.L.S., F.A.S.B., F.R.S.E.; *General Secretary*, Johan Van Manen. *Address*: 1, Part Street, Calcutta.

BENARES MATHEMATICAL SOCIETY.—Founded in 1918 for the encouragement and promotion of research in the various branches of Pure and Applied Mathematics, and in the History of Mathematics. It conducts a journal "The Proceedings of the Benares Mathematical Society" in which original papers on Mathematics are published and maintains a library. There are about 60 members from all parts of India. Admission fee Rs. 10. Annual subscription Rs. 12 (resident members) and Rs. 5 (non-resident members). *Patron*: Sir William Marris, K.C.S.I., K.C.I.E.; *Life President*, Dr. Ganesh Prasad, M.A.(Cantab), D. Sc.; *Secretary*, Prof. Gorakh Prasad, M. SC.; *Treasurer*, Prof. Syamacharan De, M.A.

BHANDARKAR ORIENTAL RESEARCH INSTITUTE, POONA.—The Institute was inaugurated on the 6th of July 1917, the 80th birthday of Sir R. G. Bhandarkar, at the hands of H. E. Lord Willingdon, who became its first President. Its objects are to provide an up-to-date Oriental Library, to train students in the methods of research and to act as an information bureau on all points connected with Oriental Studies. Sir R. G. Bhandarkar has already bequeathed to the Institute his valuable private library of Oriental books. Since the 1st of April 1918 the Government of Bombay have transferred to the Institute the unique collection of manuscripts at the Deccan College together with a maintenance grant of Rs. 3,000 a year. Government have likewise entrusted to the Institute for the next five years the sole administration of the Budget grant of Rs. 12,000 a year on account of publication. The Institute has undertaken to edit the *Mahabharata* critically at the request of the Chief of Aundh who has promised a grant of Rs. 6,000 annually for that purpose. Grants have also been promised by the University of Bombay, and the Governments of Burma and Mysore. The Institute has started a journal called "Annals of the Bhandarkar Institute" published twice a year. The Institute also held under its auspices the First Oriental Conference on the 5th, 6th and 7th of November 1919, under the patronage of H. E. Sir George Lloyd and the presidency of Sir R. G. Bhandarkar. Owing to the liberal donation of Rs. 25,000 from the Tatas for the building of a Hall for the accommodation of Persian Mss. and books the Persian Manuscript Department has been opened. Two big side halls, costing about Rs. 95,000 for the use of the libraries of the Institute, have been completed. Minimum membership dues Rs. 10 a year or Rs. 100 compounded for life. *Secretary*, Dr. V. G. Paranjpe, M.A., LL.B., D. Litt. (Paris).

BOMBAY ART SOCIETY.—Founded 1888, to promote and encourage Art by exhibitions of Pictures and Applied Arts, and to assist in the establishment and maintenance of a permanent gallery for pictures and other works of Art. Annual exhibition usually held every January. Annual subscription Rs. 10; Life member Rs. 100. *Secretary*, S. V. Bhandarkar, Bandra, Bombay.

BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY.—Founded 1804, to investigate and encourage Oriental Arts, Sciences and Literature. Annual subscription Rs. 60. *Secretary*, Dr. E. A. Parker, M.A., Ph. D., Town Hall, Bombay.

BOMBAY NATURAL HISTORY SOCIETY.—Founded 1883, to promote the study of Natural History in all its branches. The Society has a membership of about 1,700 and a museum with a representative collection of the different vertebrates and invertebrates found in the Indian Empire and Ceylon. In 1921 the Society was entrusted with the management of the Natural History Section of the Prince of Wales Museum, and a great part of the Society's collections have been transferred to that Museum. Under the auspices of the Government of India, Burma and Ceylon, the British Museum, the Zoological Society of London, the Royal Society and numerous private subscriptions, the society undertook, on a vast scale, a survey of the Mammals of India. A Journal is published quarterly which contains articles on different natural history subjects as well as descriptions of new species and local lists of different orders. In the more recent numbers, serial articles on game birds, common snakes, and common butterflies have been appearing. Annual subscription Rs. 25. Entrance fee Rs. 20. *Patron*, H. R. H. the Prince of Wales; *President*, H. E. Sir George Lloyd, G.C.I.E.; *Vice-Presidents*, The Hon. Sir Norman Macleod and H. H.

the Maharao of Cutch, G.C.S.I.; *Honorary Secretary*, R. A. Spence, M.L.A., F.Z.S.; *Acting Curator*, S. H. Prater, C.M.Z.S. Offices: 6, Apollo Street, Bombay.

BRITISH AND FOREIGN BIBLE SOCIETY.—Since 1811 the British and Foreign Bible Society has been at work in this country It has 6 Auxiliaries in India and an Agency in Burma. The first Auxiliary was established in Calcutta, in 1811, then followed the Bombay Auxiliary in 1813, the Madras Auxiliary in 1820, the North India Auxiliary in 1845, the Punjab Auxiliary in 1863. the Bangalore Auxiliary in 1875, while the Burma Agency was founded in 1899. The Bible or some portion of it is now to be had in nearly 100 different Indian languages and dialects and the circulation throughout India and Burma reached nearly 1 million copies in 1922. The Bibles, Testaments, and Portions in the various vernaculars are sold at rates which the very poorest can pay, and at considerable loss to the Society. Grants of English Scriptures are made to Students who pass University examinations, as under:—

The New Testament and Psalms to Matriculates.

The Bible to Graduates.

Last year over 8,000 volumes were so distributed. Portions of Scriptures in the important vernaculars have been prepared in raised type for the use of the Blind and large grants of money are annually given to the different Missions, to enable them to carry on Colportage and Bible Women's work. Besides the British and Foreign Bible Society, there is Bible work carried on in India, and Burma in a much smaller way by the Bible Translation Society—which is connected with the Baptist Missionary Society—the National Bible Society of Scotland the American Bible Society and the Tranquebar Tamil Bible Society.

The following table shows the growth in the British & Foreign Bible Society's work during the past few years in India and Burma:—

CIRCULATION OF THE B.F.B.S. IN INDIA.

Auxiliaries.	1922.	1921.	1920.	1919.	1918.
Calcutta	111,579	196,991	177,963	207,634	182,436
Bombay	181,388	286,134	416,061	313,272	230,499
Madras	249,679	336,028	312,484	322,630	290,650
Bangalore	35,866	45,097	67,482	66,114	Not to hand.
North India	160,941	290,873	458,204	297,809	213,460
Punjab	71,369	61,149	104,595	109,774	98,296
Burma	68,306	99,909	117,968	124,170	101,003
Total copies of Scriptures ..	8,79,128	1,316,181	1,654,757	1,441,403	1,116,344

These returns do not include the copies which any Auxiliary has supplied to London or to other Auxiliaries and agencies during the year.

BRITISH MEDICAL ASSOCIATION (Bombay Branch).—Founded 1886, to promote Medical and the Allied Sciences and the maintenance of the honour and interests of the Medical Profession. *Secretary*, Dr. D. R. Bardi, Bombay.

BOMBAY MEDICAL UNION.—Founded 1883 to promote friendly intercourse and exchange of views and experiences between its members and to maintain the interest and status of the medical profession in Bombay. The entrance fee for Resident members Rs. 5, monthly subscription Rs. 2. Absent members Re. 1, and non-resident members yearly subscription Rs. 5. *President*, Dr. M. D. Gilder; *Vice-Presidents*, Dr. S. J. Meherhomji and Dr. F. R. Parakh; *Hon. Librarians*, Dr. K. Ellis and J.E. Spencer; *Hon. Treasurer*, B. P. Sabawalla; *Hon. Secretaries*, R. D. Mody and S. P. Kapadia, 123, Esplanade Road, Bombay.

BOMBAY SANITARY ASSOCIATION.—Founded to create an educated public opinion with regard to sanitary matters in general; (*b*) to diffuse the knowledge of sanitation and hygiene generally, and of the prevention of the spread of disease amongst all classes of people by means of lectures, leaflets and practical demonstrations and, if possible, by holding classes and examinations; (*c*) to promote sanitary science by giving prizes, rewards or medals to those who may by diligent application add to our knowledge in sanitary science by original research or otherwise; (*d*) to arrange for homely talk or simple practical lectures for mothers and girls in the various localities and different chawls, provided the people in such localities or chawls give facilities. The Sanitary Institute Building in Princess Street, which has lately been built by the Association, at a cost of nearly Rs. 1,00,000 the foundation stone of which was laid by Lady Willingdon in March, 1914, and opened in March, 1915, is a large and handsome structure with a large Lecture Hall, Library, Museum, etc., and also provides accommodation for King George V. Anti-Tuberculosis League Dispensary and Museum and the Office of the Assistant Health Officer C and D Wards and the Vaccination Station and Eye Dispensary. *Hon. Secretary*,

Dr. J. E. Sandilands, M.D., D.P.H., Executive Health Officer, Bombay.

EUROPEAN ASSOCIATION.—The European Association was established in 1883 under the title of the European and Anglo-Indian Defence Association and was re-established in 1912 under the title of the European Defence Association, but the present title was adopted in 1913. The Association has for its objects the general protection of European interests and the promotion of European welfare. The Association numbers 8,261. The Head Offices are at 40, Chowringhee, Calcutta. *President*, Mr. H. W. Carr *General Secretary*, Lt.-Col. J. D. Crawford, D S.O., M.C.; *Asstt. Secretary*, Miss L. I. Lloyd.

BRANCHES OF THE EUROPEAN ASSOCIATION.

ASSAM VALLEY, DIBRUGARH.—*Chairman*, Mr. L. A. Roffey: *Hon. Secretary*, Mr. A. L. Allum.

BIHAR, MOZUFFERPORE.—*Chairman*, Mr. P. Kennedy; *Hon. Secretary*, Mr. J. M. Wilson.

MONGHYR (Sub-Branch).—*Chairman*, Mr. J. C. Aguilar; *Secretary*, Mr. C. H. C. Havelock.

BOMBAY.—*Chairman*, Mr. J. Addyman, J.P., M.L.C.; *Secretary*, Miss M. M. Brown.

BURMA, RANGOON.—*Chairman*, Mr. J. W. Richardson; *Hon. Secretary*, Mr. R. Thompson Stoneham.

DARJEELING.—*Chairman*, Mr. E. A. Scarth; *Hon. Secretary*, Mr. Kenneth Mackenzie.

DELHI.—*Chairman*, Mr. H. H. Yule; *Hon. Secretary*, Mr. R. Macpherson.

DOOARS, JALPAIGURI.—*Chairman*, Mr. H. B. Bradant Smith; *Hon. Secretary*, Mr. J. A. Polewhale.

MADRAS.—*Chairman*, Mr. H. P. E. Rae; *Joint Hon. Secretaries*, Messrs. A. D. Charles and P. Holt.

PUNJAB, LAHORE.—*Chairman*, Mr. Owen Roberts; *Secretary*, Mr. L. E. Banfield.

RAJPUTANA, AJMER.—*Chairman*, Mr. W. S. Fraser; *Hon. Secretary*, Mr. L. N. Lloyd.

SIND, KARACHI.—*Chairman*, Mr. W. D. Young; *Hon. Secretary*, Mr. E. J. McNulty.

SURMA VALLEY, SILCHAR.—*Chairman*, Mr. A. F. Stewart; *Hon. Secretary*, Mr. J. C. Henderson.

UNITED PROVINCES, CAWNPORE.—*Chairman*, Mr. S. H. Taylor; *Hon. Secretary*, Mr. J. G. Ryan.

INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE (Calcutta).—*Honorary Secretary*, Prof. C. V. Raman, M.A., D. Sc., 210, Bow Bazar Street, Calcutta.

INDIAN LIBERAL CLUB.—Started on 30th March 1917, to promote a systematic study of politics in general and Indian politics in particular, to organise free and well informed discussions on current political topics as well as on abstract questions to provide facility for collecting information on questions arising, or necessary to be raised, in the Imperial and Provincial Legislative Councils and to form and maintain a library.
Office : Servants of India Society, Sandhurst Road. *Secretaries*, Mr. J. R. Gharpure, B.A., LL.B., and Mr. C. S. Deole, B.A.

INDIAN ECONOMIC SOCIETY (BOMBAY).—Started in 1915, with the object of affording facilities for an accurate and scientific study of economics, for the formation and dissemination of current economic ideas and for collecting first-hand information regarding the industry and commerce of the country with a view to the removal of difficulties in the way of their promotion and development. The Society arranges periodical discussions and publishes pamphlets and it holds weekly Marathi Class in Economics. The Society also publishes a quarterly journal entitled "The Journal of the Indian Economic Society." Subscription, a minimum of Rs. 6 a year. *President*, Mr. J. B. Petit; *Secretaries*, Mr. C. S. Deole of the Servants of India Society. Mr. H. S. Spencer, Mr. M. D. Altekar. *Office*—Servants of India Society's Home, Sandhurst Road, Girgaon, Bombay.

INDIAN MATHEMATICAL SOCIETY—Founded in 1907 for the advancement of Mathematical studies in India. It conducts a bi-monthly journal in which papers on mathematical subjects are published and maintains a library with current mathematical periodicals in all languages and new books on the subject. The library is located in the Fergusson College, Poona, whence the journals and books are circulated to members by post. The journal of the Society is published in Madras. There are about 200 members from all parts of India. *President*, Balakram, I.C.S., District Judge, Bijapur; *Secretaries*, Prof. P. V. Seshu Aiyer, Madras, and Prof. M. T. Naraniengar, Bangalore; *Librarian*, Prof. V. B. Naik, Poona.

INDIAN SOCIETY OF ORIENTAL ART (Calcutta.) —*President*, Sir Charles H. Kesteven; *Vice-President*, Mr. O. C. Gangoly; *Joint Hon. Secretaries*, C. W. E. Cotton, and G. N. Tagore; *Assistant Secretary*, P. Chatterjee. *Office* :—Suite, 12, Samavaya Mansions, Calcutta.

INDIA SUNDAY SCHOOL UNION.—The India Sunday School Union is a large interdenominational Society having as its object the further establishment and strengthening of Sunday Schools throughout the Indian Empire. The union embraces a considerable number of auxiliaries, which are generally associated with particular language areas. Both in the local Unions and in the Central organisation, help is given by missionaries and Indian workers of almost all denominations. Approximately 750,000 Sunday Schools scholars and teachers and 13,944 Sunday schools are connected with the Union, speaking 45 vernaculars.

The I. S. S. U. was founded in Allahabad in 1876, and in its most recent developments is coalescing with the work that has been hitherto carried on under the direct auspices of the World's Sunday School Association. Yearly examinations are held for both teachers and scholars in thousands of centres, for which medals, prizes, scripture awards, and certificates are granted to successful candidates. Upwards of 276,000 candidates have been examined in six months' Bible study since 1896, successful candidates being awarded Certificates, Bibles and Testaments and Silver medals. Notes on the daily portions of the International Bible Reading Association are published by the I. S. S. U. in English and 14 vernacular editions of the S.S Lesson Expositions are published in various vernaculars. In addition

there is a large publication of literature dealing with all phases of chief study and moral and religious training. The monthly publication of the Union is the *India Sunday School Journal*, edited by Rev. T. H. Sheriff, Jubbulpore. The Teachers' Training Department is under the care of Mr. E. A. Annett, Keswick Cottage, Coonoor.

General Secretary of the Union, the Rev. A. G. Atkins (on furlough) : in charge till Feb. 1924, Rev. E. L. King, 46, Victoria Road, Jubbulpore.

President: Bishop J.W. Robinson, D.D., Bombay.

Treasurer: The Rev. W. B. Alexander, Jubbulpore.

INSTITUTION OF ENGINEERS (INDIA).—The organisation of the Institution commenced in 1919 and it was inaugurated by H. E. Lord Chelmsford early in 1921. Its object is to promote and advance the science, practice and business of engineering in India on the same lines as are adopted by the Institutions of Civil, Mechanical and Electrical Engineers in the United Kingdom. The standard of qualification is the same. Membership is divided into three classes, *viz.*, Members, Associate Members and Associates, and there is an additional class for students. *President*, A. C. Coubrough, C.B.E., *Secretary*, F. Powell Williams. *Offices.*—D. 5, Clive Buildings, P. O. Box 669, Calcutta.

MADRAS FINE ARTS SOCIETY.—*Patron*:—H. E. the Rt. Hon. Lord Willingdon; *President*:—(Vacant). *Secretary*:—F. G. Butler, I.C.S., High Court, Madras.

MADRAS LITERARY SOCIETY AND AUXILIARY OF THE ROYAL ASIATIC SOCIETY.—*Secretary*, Lewis J. MacIver, I.C.S., The Secretariat, Madras.

NATIONAL HORSE BREEDING AND SHOW SOCIETY OF INDIA.—Formed in 1923. Objects: To form a national body of public opinion on horse-breeding matters; to encourage and promote horse breeding in India; to protect and promote the interests of horse breeders and to give them every encouragement; to improve and standardise the various types of horses bred in India; to prepare an Indian stud book; and to promote uniformity in all matters connected with horse shows in India. *President*:—Major-General W. B. James. *Secretary*: Major D. Vanrenen, Renala Estate, Dist. Montgomery (Punjab).

NATIONAL INDIAN ASSOCIATION:—Founded in 1870. Its objects are:—(*a*) To extend in England, knowledge of India, and interest in the people of that country. (*b*) To co-operate with all efforts made for advancing Education and Social Reform in India. (*c*) To promote friendly intercourse between English people and the people of India. In all the proceedings of the Association the principle of non-interference in religion and avoidance of political controversy is strictly maintained. It has branches in Bombay, Madras, Ahmedabad, Nagpur, Calcutta, Rangpur, Poona & Lahore. *Hon. Secretary*, Miss Beck, 21, Cromwell Road, London. Publication, *The Indian Magazine and Review*, a monthly Journal which chronicles the doings of the Association in England and in India, and takes note of movements for educational and social progress. It publishes articles about the East to interest Western readers, and articles about the West to interest readers in the East.

LIFE MEMBERS.—Ten Guineas. Annual Subscriptions: Members one Guinea; County Members, Ten shillings; Associates Students), Seven shillings and Six pence.

PHILATELIC SOCIETY OF INDIA.—Formed March 1897; Annual subscription Rs. 15. *Secretary*: Jno. Godinho, 15, Burrow's Street, Bombay.

PHOTOGRAPHIC SOCIETY OF INDIA (Calcutta).—Annual subscription Rs. 24 (Town Members) and Rs. 12 (Mofussil members). Entrance fee Rs. 20 and Rs. 10. The Society distributes a monthly journal to members, and undertakes developing, printing and enlarging work. There are excellent workrooms, apparatus and reading rooms at the Society's Headquarters at 40, Chowringhee Road, Calcutta. *Hon. Secretary*: S. G. Bearcock, 40, Chowringhee Road, Calcutta.

POONA SEVA SADAN SOCIETY.—This Institution was started in 1909 by Mrs. Ramabai Ranade, Mr. G. K. Devadhar and a few other ladies and gentlemen in Poona and registered in 1917. It is now working independently, though for a part of the intervening period it was conducted as a branch of the Bombay Seva Sadan. Its main object is to make women self-reliant and to train them for missionary work undertaking educational and medical activities for their sisters and brethren, especially the former in backward areas and working on a non-sectarian basis. The instruction is free except for the Music Classes and for Special Classes in English, etc. There are eight different departments sub-divided into 53 classes. Arrangements are made for training Nurses and Midwives and Sub-Assistant Surgeons at the Sassoon Hospital, Poona, and a hostel is maintained for the former and another for those attending the Sub-assistant Surgeon's Class. The number in these two hostels was 56 in August 1922. Besides there is a full-fledged Training College named after Bai Motlibai Wadia with 138 students for being trained as Mistresses for Vernacular schools. This College is probably the only college in India maintained by a non-official, non-Christian missionary body teaching the full course. The results of the Certificate Examinations held last year under the authority of the local Government Training College for Women were as follows: III year 9, II year 11, and I year 21, thus working up the percentage of 60. The total number of certificates granted so far is 205. The Practising School for little girls attached to the Training College has now ten classes with 260 students reading up to the Marathi VI Standard, English being taught in the top three standards. Primary Classes for grown up women teaching up to the Marathi V Standard are attended by 175 women. It is here that poor women are recruited for the work of teacher, nurse, midwife, or doctor. Special classes for teaching English, First Aid, Home Nursing were attended by 72 students; the Music Classes by 152 students, and the Workroom Classes for teaching Sewing, Embroidery, Hosiery and Weaving by 180 students. Thus the total number of pupils is 1,031 to-day,

There are two branches of the Society started at Satara and Baramati named after Lady Vithaldas Thakersey, the wife of the greatest helper of the Society so far, the late Sir Vithaldas D. Thakersey. Thus the total number of women and girls including 150 duplications on the rolls at these various Centres of the Society is nearly 1,095. There are four hostels, two of which are located at the headquarters and the other two in the Raste's Peth and the Somwar Peth for Nurses, etc., under training at the Sassoon Hospital. The number of resident students is above 190 in these four hostels. In connection with the medical branch a Committee has been formed in England, which will enable the Society to send fully qualified Nurses there to undergo further training. There is an active Infant Welfare centre and ante-natal clinics with the average daily attendance of 50 excluding expectant mothers. The Society is extending its medical activities by undertaking, with the help of two charitable Trusts in Bombay, to work out the scheme of Maternity, Infant Welfare, Child welfare and General nursing for the women and children of the Bhatia Community. Miss C. B. Pooviaih, B.A., is Secretary of the Scheme, under Mr. G. K. Devadhar, the organiser of the scheme. Now Her Excellency the Hon'ble Lady Lloyd is the Honorary Patroness along with Lady Willingdon, Lady Sydenham and Lady Chelmsford. The institution is largely dependent upon public contributions and Government assistance. The annual expenditure roughly comes up now to Rs. 85,000, *President*: Mrs. Ramabai Ranade; *Honorary Organiser and General Secretary*: Mr. Gopal Krishna Devadhar, M.A.; *Local Secretary and Treasurer*: Mrs. Yamunabai Bhat; *Lady Superintendent and Secretary for Development and Collections*: Mrs. Janakibai Bhat; *Hon. Secretary, Nursing Committee*: Rao Bahadur Dr. P. V. Shikkhare, L.M. &S. *Hon. Secretary, Infant Welfare Centre*: Dr. N. L. Ranade, B.A., M.B.B.S.

PRESS-OWNERS' ASSOCIATION, Bombay—Started on 30th April 1919 to promote the interests of the printing and litho presses and allied trades, to bring about harmony and co-operation among press owners and proprietors and to take such steps as may be necessary in furtherance of the above objects.

Office:—Servants of India Society, Sandhurst Road, Bombay 4.
President:—Shet Pandurang Javjee.
Secretaries:—Mr. C. S. Deole, B.A. and Manilal C. Modi.

RANGOON LITERARY SOCIETY.—*President*: The Hon. Mr. Maung Kin. *Hon. Secretary*: Mr. M. Hunter, C.I.E., 17, York Road.

ROYAL SOCIETY OF ARTS, INDIAN SECTION.—This Society was founded in London in 1754. Its recently published history by Sir Henry Trueman Wood, late Secretary of the Society, gives the following account of the Indian Section. In 1857, a proposition was made by Mr. Hyde Clarke, who wrote to the Council suggesting that "a special section be formed for India, another for Australia, one for English, America and so on." It was suggested that the Indian Section should meet once a fortnight for the reading of papers. Nothing came of the suggestion until ten years later when Mr. Hyde Clarke returned to England, and in 1868 he renewed his proposal, but only proposing the formation of a committee which should organise conferences on Indian subjects. This time the suggestion was taken up more warmly. Mr. Hyde Clarke himself was placed on the Council, and the Indian Conferences, which soon developed into the Indian Section, were started. "The Indian Section thus established became a most important department of the Society. It has had great results in India by spreading information as to the directions which the development of Indian manufactures and Indian products could most usefully take, and in England by giving similar information as to the industrial resources and progress of India itself. The Section has received great help from the Indian press and it has in return been of service to the Indian press in supplying useful information to it. It has been of great value to the Society itself as the means by which many members have been added to its list, so that in fact, thanks to a very large extent to the work of the Indian Section and of the allied section for the Colonies, a large proportion of the present number of members come from the dependencies of the Empire abroad." *Secretary of the Society*: G. K. Menzies, M.A.; *Secretary of the Indian and Dominions and Colonies Sections*: S. Digby, C.I.E., 18, John Street, Adelphi, London, W. C. 2.

SERVANTS OF INDIA SOCIETY.—The Servants of India Society which was founded by the late Mr. Gopal Krishna Gokhale; C.I.E., in 1905, has its Head-quarters in Poona and its objects are ".to train national missionaries for the service of India and to promote by all constitutional means the true interests of the Indian people." Its government is vested in the First member or President and a Council. On the death of Mr. Gokhale in February, 1915, the Hon'ble (now the Right Hon'ble) Mr. V. S. Srinivasa Sastri was elected President. He has again been re-elected for a further term of three years. Besides the headquarters, it has at present four branches, *viz.*, (1) in Bombay, (2) in Madras, (3) in the United Provinces, (4) in the Central Provinces. Moreover, it has several additional centres of its activities under the Branches such as, Calicut, Mangalore. Lucknow, and Cuttack in Orissa. Each Branch consists of ordinary members, members under training and permanent assistants who work under the direction of a Senior Member. The branches engage both in propagandist and active work of political, educational, social, agricultural and philanthropic character in which they secure the help of a large number of voluntary workers, both men and women. A fair idea of the work of a branch can be had from a brief description of the operations of the Bombay Branch whose members have so far undertaken activities in various fields. (1) Social purity like the Holika Sammelan of Bombay, (2) Social reform organization under the auspices of the National Social Conference, (3) rousing public opinion about

elementary education, (4) promotion of the cause of elevation and education of Indian women by building up institutions like thePoona Seva Sadan, with 1,095 (including duplications of about 150) women and girl pupils in nearly 53 classes of its 8 departments and four hostels in the city. Mr. G. K. Devadhar, M.A., is its Hon. Organiser and General Secretary. (5) Social Service as carried out by the Social Service League of Bombay of which Mr. N. M. Joshi, B.A., is the Honorary General Secretary,(6) spread of co-operative movement among the agriculturists, compositors in the city of Poona and mill-hands in Bombay. The co-operative societies, as at Hadapsar and other villages around Poona, started for the benefit of these poor people, number over 35 with a total membership of over 1,800, capital of nearly three lakhs and a total turn-over of five lakhs per year. Nineteen of these societies which are in Bombay for poor labouring classes are so conducted as to free their members entirely from their chronic indebtedness. Their membership consists of sweepers, scavengers, mill-hands numbering above 550 and debts amounting to nearly three lakhs of rupees have been cleared off. Moreover, educational work was organized by starting a Co-operative Quarterly and by starting a Co-operative Secretaries' Training Class in Bombay for 60 Secretaries from the various districts for three years. These are now transferred to the Central Co-operative Institute, Bombay, of which Mr. G. K. Devadhar is now the Vice-President. These three experiments on such a scale were the first of their kind in India, (7) relief work connected with wide-spread calamities by organizing the Plague Relief Committee of Poona, which succeeded in making inoculation popular in the Deccan, the Salumbra Fire Relief Committee which arranged for the Relief to sufferers for five years and by undertaking a scheme of non-official relief during the famines of 1907-08 and 1914 in the United Provinces, the famine in Gujarat and Kathiawar of 1911-12 and the famine of 1913 in the district of Ahmednagar, and that of 1918-1919 in Gujerat and the Deccan; and in 1920 in Orissa near Puri, (8) Influenza relief was well organized by members of these associations in Bombay and Poona. Since the outbreak of the Malabar Rebellion in August 1921 the members of the Society organised the work of relief which was administered with the help of outside organisations like the Poona Seva Sadan, the Y.M.C.A., etc., and in collecting funds from all over the country especially Bombay. Thus from all over the country substantial help to the extent of nearly Rs. 3,50,000 was collected. For the first six months about 19 camps with nearly 27,000 men, women and children of all castes and creeds were maintained very efficiently and during the later six months thousands of Hindu and Moplah families were supported in their villages in the disturbed and the destroyed parts of the district of Malabar. This work was closed in the beginning of October 1922. Mr. G. K. Devadhar as Vice-President of the Malabar Central Relief Committee directed the work on behalf of the Servants of India Society. (9) organizing public opinion on the question of Indians in South Africa, (10) its political work is conducted strictly on constitutional lines and thus it was able to start District Congress Committees in several wards of the city of Bombay. These conducted a political quarterly, (11) it has started in Bombay an organisation called the Indian Economic Society with a view to promoting the study of Indian economics on right lines and also conducted a vernacular class. Mr. C. S. Deole, B.A., is one of the Hon. Secretaries. (12) A new association called the Liberal Club has been started to carry on political propaganda. Besides, the Society was engaged in conducting a scheme of welfare work to supply cheap grain, cheap cloth and cheap credit at Jamshedpur, which may be resumed again by the Branch getting it worked on behalf of one of its organisations. One of its Members has started a Gujarati ladies' organisation called the Bhagini Samaj for work among women in Gujarat and Kathiawar. Mr. A. V. Thakkar has started in the District of Panch Mahals in Gujarat a missionfor the Bhils for the improvement of the Bhil population and it is called the *Bhil Seva Mandal*. Quite recently the United Provinces Branch organised a band of volunteers who rendered assistance, in a manner that called forth general approbation, to the pilgrims at the Kumbha Mela in Hardwar and Allahabad, the ladies of the Poona Seva Sadan assisting in this work. The Society engages in journalistic work also, having in its control the *Hitavada*, an English weekly in Nagpur, the *Dnyan Prakash*, a Marathi daily and Weekly in Poona, and the *Star of Utkal*, an English weekly at Cuttack. The Society has been conducting, with Mr. Vaze as editor, an English weekly called *The Servant of India*. The U. P. Branch had in addition undertaken the publication of pamphlets on public questions and has sent out three such publications together with a large quantity of leaflets. This Branch has taken lead in organising the *Boy Scout Movement* all over the province through the local Seva Samitis. The Madras Branch engages itself principally with co-operative organisation, publishing in three languages Co-operative Bulletin, Co-operative Industrial Societies and the Social Service League activities in the city of Madras.

The expenses incurred by the Central Home of the Society in Poona and its four branches exceed Rs. 65,000 a year and this amount is made up by contributions from Indians, rich as well as poor. The present number of workers enlisted by the Society is about 30, most of whom are University men of considerable standing. Besides, there is a large number of devoted associates and other helpers—men as well as women—connected with the institutions started by the members of this society.

President.—The Right Hon'ble Mr. V. S. Srinivasa Sastri, B.A., L.T., Royapetta, Madras, Senior Member, Madras Branch, Mr. Gopal Krishna Devdhar, M.A., Vice-President of the Society and the Senior Mem-

ber, Bombay Branch, Mr. Natesh Appaji Dravid, M.A., M.L.C., Senior Member, Central Provinces Branch, Mr. Hirdayanath Kunzru, B.A., B. Sc., M.L.C., Senior Member, Upper India Branch, Mr. A. V. Patwardhan, B.A., Senior Member, Business Branch, Poona, Messrs. Joshi, Kunzru and Thakkar together with the senior members of Branches constitute the Council of the Society with the Hon'ble Mr. Sastri as its President. Mr. Anant Vinayak Patwardan is the Secretary of the Council and also of the Society. Six young men, nearly all graduates, who were admitted last year on probation, were this year enrolled as members under training. In June 1923, one more member was admitted as member under training and two young men, one an M. A. and another a B.A., L.T. to probation.

SEVA SADAN.—The Seva Sadan Society was started on the 11th of July, 1908, by the late Mr. B. M. Malabari. It is the pioneer Indian ladies' society for training Indian sisters ministrant and serving (through them) the poor, the sick and the distressed. The society has a habitation in Gamdevi, Bombay.

The Society maintains the following institutions for training its probationers and for doing its other work. 1. A home for the Homeless. 2. An Industrial Home with various departments. 3. A Dispensary for Women and Children. 4. Ashrams. 5. Free educational classes and a Library and Reading-room. 6. Home-Classes in the quarters of the poor, and normal classes for training Marathi women for the teacher's profession. All these are for the benefit of poor women. *Secretary*, Miss B. A. Engineer, M.B.E. M.A., LL.B.; *President*, Mrs. Ramabai Ranade, *Hon. Gen. Secretary*, the Hon. Mr. Lalubhai Samaldas, C.I.E., *Treasurers*, Sister Sushilabai and the Hon'ble Mr. Lalubhai Samaldas; *Trustees*, the Hon. Sir G. K. Parekh and the Hon. Mr. Lalubhai Samaldas, C.I.E.

CONSUMPTIVES' HOME SOCIETY.—This Society was started by the late Mr. B. M. Malabari and Mr. Dayaram Gidulmal on the 1st of June 1909. It was registered under Act XXI of 1860. Mr. Malabari secured a large grant of land in a Himalayan pine forest in Dharampur (Simla Hills) from H. H. the Maharaja of Patiala, for a Sanitorium for Consumptives. His Highness also gave a donation of Rs. one lakh In 1911 by special permission the Sanatorium was named "The King Edward VII Sanatorium." The Sanitorium has its special water works known as the Lady Hardinge Water Works, presented by the late Sir Chinubhai Madhavlal, Bart., of Ahmedabad. The Sanitarium has a Guest House: The Noshirwan Adul Guest House for visitors to Darampore. It has accommodation for 75 patients including the special Punjab Block built from a grant of the Punjab Government and reserved for European patients. Most of the blocks and cottages are built by Parsis. The Sanatarium has its own dairy and is called the Bai Pirojbai R. H. Patrick Dairy. The Recreation Hall is called "The Sir Bhupinder Singh Recreation Hall" after the name of the Maharaja of Patiala. Mr. Malabari collected an Endowment Fund of about Rs. 67,000 lodged with the Treasurer, Charitable Endowments, under Act VI of 1890. Nearly Rs. 1,80,000 have been spent on laying out the sites, buildings, etc., and the current annual expenditure is about Rs. 36,000. The Senior and Junior Medical Officers are in charge of the Sanitarium. The Office of this Society is situated at the Seva Sadan Buildings, Gamdevi, Bombay. Mr. S. P. Wadia is the Hon. Secretary and Sir G. K. Parekh is the Hon. Treasurer.

SOCIETY FOR THE PROMOTION OF NATIONAL EDUCATION.—This Society stands for an Indian education for Indian boys and girls, its general policy being embodied in "Principles of Education" by Dr. Annie Besant. *Treasurer and Registrar*:—D. K. Telang, Adyar, Madras.

SOCIETY FOR THE PROTECTION OF CHILDREN IN WESTERN INDIA.—*Office and Refuge:* Girgaon Back Road, Bombay.

Founded.—To prevent the public and private wrongs of children and the corruption of their morals; to take action for the enforcement of the laws for their protection, and, if necessary, to suggest new laws or amendments of the existing laws; to provide and maintain an organisation for these objects; and to do all other lawful things incidental or conducive to the attainment of the foregoing objects. Subscription for annual membership, Rs. 10; for Life Membership, Rs. 100.

Honorary Secretaries: Mr. Mahomedbhoy Currimbhoy, Mr. N. V. Mandlik, B.A., LL.B., Mr. R. P. Masani, M.A.

WOMEN'S INDIAN ASSOCIATION.—This Association was started in Adyar, Madras, in 1917, with aims of service to women similar to those of the Seva Sadan in Bombay. In four years it has been able to start branches in 48 different towns and it has now 2,700 members. It establishes classes, meeting places, and regular lecture programmes for women in each of these branches. Each branch is autonomous and works according to the need of the locality. Classes are held to teach the vernaculars, English, needle-work—plain and fancy-first-aid, rattan-work and music. Weekly lectures are given on subjects of general interest relating to women, such as health, education, religion, civic responsibilities, woman suffrage, etc. Though started entirely as an educational institution, the movement for the Reform Bill proved that a most necessary part of work for the advancement of women was propaganda in support of woman suffrage. Accordingly the gaining of the vote for women was added to the objects of the Association and the Association specialises on woman suffrage and the removal of sex disqualification from all franchises and candidatureship for local boards, municipal and legislative councils. Valuable work along these lines has been done by the Association as this is the only woman suffrage organisation in India. The Association publishes a monthly magazine, *Stri-Dharma* in English with Tamil and Telugu articles. (Rs. 4 to non-members, Rs. 2 to members). It is an all-India Association. Its largest branch is in Bombay, its greatest number of branches in South India, but yearly additional branches are

being started in other provinces, and there are flourishing branches as far north as Gwalior and Lashkar. The prospects of rapid growth of the Association are very bright as it has been found that women everywhere welcome the self-development which the establishment of these branches brings.

Objects :—

To present to women their responsibility as daughters of India.

To help them to realise that the future of India lies largely in their hands, for as wives and mothers they have the task of training and guiding and forming the character of the future rulers of India.

To secure for women the vote for Municipal and Legislative Councils as it is or may be granted to men.

To secure for women the right to be elected as members on all Municipal and Legislative Councils.

To band women into groups for the purpose of self-development, education, and the definite service of others.

Headquarters : Adyar, Madras. *President*—Dr. Annie Besant. *Vice-President:*—Mrs. Jinarajadasa. *Joint Hon. General Secretary*—Mrs. M. E. Cousins, B. Mus. *Hon. Treasurer*—Mrs. Mahadeva Shastri.

YOUNG WOMEN'S CHRISTIAN ASSOCIATION OF INDIA, BURMA AND CEYLON.—This Association founded in the year 1875 was organised nationally in 1896. The aim of the Association is to promote the physical, intellectual, social and spiritual welfare of young women and girls in India, European, Anglo-Indian and Indian. This is done by the establishment of local branches in different centres. At present they number 154 including city student, and vernacular branches. The Associations in big cities have a large membership including all classes of the community. The needs of girls are met by physical drill, recreation, clubs and classes, lectures, commercial classes, Bible Study and devotional meetings, and meetings for social intercourse. Boarding Homes, some of them holding as many as 70 girls, are established where there is a demand for them and the Association, at present, owns 29 including 8 holiday homes in the hills. These hostels accommodate working girls, teachers, nurses, students and apprentices. Residents are charged according to their salaries, though all equally receive the benefits of a comfortable home, good food and wholesome surroundings. The holiday homes provide cheap holidays in healthy surroundings and also accommodate girls who work in the hills during the hot season.

Travellers' aid work is done in the large ports, especially Colombo, and a large number of transient guests and visitors are accommodated in the Homes in these centres. The Association also runs employment bureaux through the agency of which many girls find positions. The Commercial schools train girls for office and business life. These larger Associations are manned by a staff of trained secretaries, some of whom come from Great Britain, America, Australia, New Zealand and Canada. The others are found and trained in India. In many of the smaller branches where the work is of a simpler nature, it is carried on by voluntary workers who render faithful service year by year. The majority of the Indian branches are also carried on in this way. The Student Department is affiliated to the World's Student Christian Federation and has 43 branches in the various Schools and Colleges. The Vernacular Department carries on work in co-operation with the various missionary societies in 5 different languages. In November 1920, a Training School for secretaries recruited in India, Burma and Ceylon, was opened in Calcutta with a strong staff (resident and non-resident) of lecturers on the Bible, Christian Doctrine, Economics, Religious Psychology and Pedagogy, History and current movements in India, Association Administration, Hygiene and Recreation.

The Association, which is affiliated to the World's Committee of the Young Women's Christian Association, is international and inter-denominational. Full membership is confined to members of the Christian Church, but Associate membership is open to any girl or woman of good character no matter what her religion may be. The National Headquarters are situated in Calcutta and business is conducted by the National Committee which has a representative membership in all parts of India, also in Burma and Ceylon.

The Patroness of the Association is H. E. Lady Reading.

Copies of the annual reports and other printed matter can be obtained from the National Office which is at 5, Russell Street, Calcutta. The Official Organ of the Association is the "Woman's Outlook in India," an illustrated monthly magazine, which supplies women living in India with a good review at the price of Rs. 2-0-0 post free per annum.

YOUNG MEN'S CHRISTIAN ASSOCIATION.—This Association, which was founded by the late Sir George Williams on June 6, 1844, seeks to unite those young men who, regarding Jesus Christ as their God and Saviour according to the Holy Scriptures, desire to be His disciples, in their doctrine and in their life, and to associate their efforts for the extension of His kingdom among young men. The above is known as the "Paris Basis" and it is world-wide. It was adopted at the first World's Convention in Paris in 1855 and re-affirmed at the Jubilee World's Convention in Paris in 1905. The Triennial National Convention of Y. M. C. A.'s of India, Burma and Ceylon adopted this in November 1920. The aim of the Association is through its religious, social, educational, and physical work to answer the fourfold—spiritual, social, mental and physical—needs of young men, and its policy is one of intense loyalty to the Church.

There are, as a rule, two classes of members. Any young man who subscribes personally to the "Paris Basis" may be an active or voting member and any young man of good character may be an associate.

The Young Men's Christian Association though relatively new to India, is spreading rapidly. The local Associations are autonomous and governed by local Boards of Directors. These Associations in convention elect a National Council of European and Indian laymen, who are responsible for the

supervision and expansion of all forms of the Association work. Both the National Council and the local Associations employ specially trained full time Secretaries. Seventy-one out of 131 Secretaries are Indians and are supported from funds raised in India and Ceylon. The remaining Secretaries are supported by the Associations of North America, Australasia, and Great Britain, but their work is directed by committees in India, to whom their services are loaned. The first paid Secretary came to India over thirty years ago, in response to an appeal from Madras. Soon afterwards the National Council was organised, and has become increasingly an indigenous institution.

There are now approximately 250 Associations with 12,000 members. Of these about one-eighth are Europeans and seven-eighths are Indians, of whom over two-thirds are non-Christians. The following Associations own one or more buildings which serve as the local headquarters:—Allahabad, 3; Bangalore, 3; Alleppey, 1; Bombay, 4; Calcutta, 6; Calicut, 2; Coimbatore, 1; Colombo, 1; Galle, 1; Hyderabad, 2; Jubbulpore, 2; Kandy, 1; Karachi, 2; Kunnamkulam, 1; Kottayam, 1; Lahore, 2; Madras, 4; Maymyo, 1; Nagpur, 2; Naini Tal, 1; Palamcottah, 1; Poona, 2; Rangoon, 4; Secunderabad, 1; Simla, 1; Ootacamund, 1; Wellington, 1; Delhi, 1; Dinapore, 1; Ferozepore, 1; Jaffna, 1; Jhansi, 1; Madura, 1; Murree, 3; Midnapore, 1; Poona, 2; Risalpur, 1.

In addition to buildings owned by the Association, bungalows have been rented to serve as headquarters in the following stations:—Colombo, 4; Hyderabad, 1; Jamalpur, 1; Jubbulpore, 1; Lahore, 2; Lucknow, 1; Madras, 1; Multan, 1; Poona, 1; Rangoon, 1; Kirkee, 1; Matale, 1; Maymyo, 1; Nowshera, 1.

The Association also has rent-free quarters in stations as follows:—

Bombay, 1; Darasamand, 1; Delhi, 2; Ferozepore, 2; Jhansi, 1; Jullunder, 1; Karachi, 1; Kohat, 4; Lahore, 1; Lucknow, 1; Madras, 1; Nowshera, 1; Secunderabad, 2; Trichinopoly, 2; Trivandrum, 1.

The departments of the National Council are Student, Rural, Literary, Architectural, Publication, Physical, British Army, Indian Army, Revenue, Publicity, Lecture, Business, Religious Work. The Student Christian Association is an independent movement affiliated to the National Council and has branches in more than two score colleges. The Rural Department is organising village Y. M. C. A.'s and co-operative credit societies and promoting cottage industries in over 50 centres. The Literary Department of which Dr. J. N. Farquhar is Senior Secretary, endeavours to promote a proper and sympathetic understanding of the non-Christian religions and show their relationship to Christianity. At the beginning of the war there were but three Army Associations and five Army Secretaries in the whole of India. In 1922 Association privileges were provided for British and Indian Troops in 37 cantonments under the direction of seventy Secretaries and Assistants. In addition to organising school boys' Y. M. C. A.'s the High School Department arranges for holiday camps for boys and High School teachers. The National Council employs its own architects who plan and construct its buildings, hostels, and playgrounds. The Physical Department specialises on physical education and is promoting the playground movement.

The "Association Press" is the Publication Department. A monthly magazine, the YOUNG MEN OF INDIA, is issued, and many books and pamphlets, both on Association subjects and on those of more general interest. Some of the latter, *e.g.*, the Heritage of India Series, have been issued in conjunction with the Oxford Press.

The Headquarters of the National Council is 5, Russell Street, Calcutta. The officers are:—

Patron:—His Excellency Lord Reading, Viceroy and Governor-General of India.

Chairman:—K. Mathan, Esq., (Mysore Civil Service).

Chairman of Executive:—The Hon'ble Mr. Justice W. E. Greaves, Bar.-at-Law.

Treasurer:—W. L. Carey, Esq., M.L.C., I.C.S., 1, Council House Street, Calcutta.

General Secretaries:—K. T. Paul and Dr. S. K. Datta.

The Bombay Association now possesses four well-equipped buildings:—Wodehouse Road, Lamington Road, Rebsch Street, and Reynolds Road. The President is the Hon'ble Sir Norman Macleod, and the General Secretary is Mr. Donald Munro. In connection with each building there is a well managed hostel, one for Anglo-Indian apprentices, one for Indian students, one primarily for European business men, and one for Indians. The Elton Hockey Tournament and the Condor Tennis Tournament are held annually under the auspices of the Bombay Association.

ASSOCIATION OF BRITISH UNIVERSITY WOMEN IN INDIA.

The Association of British University Women in India was established in 1913. Its objects are:—

(1) To facilitate intercommunication and co-operation between women belonging to the universities of the United Kingdom, resident in India.

(2) To provide a means of keeping in touch with the universities of the United Kingdom, by communication with the Federation of University Women, and otherwise as may seem expedient.

(3) To act as an organisation which shall afford opportunity for the expression of united opinion and for concerted action by university women on matters especially affecting them.

Membership is open only to those women who hold degrees in any university in the United Kingdom, or hold Oxford or Cambridge Honours Certificates; but Associate Membership is open to women who have studied at a British University for two years and each Branch may admit as Honorary Members, women who have advanced the higher education and interests of women.

The Association of British University Women has four branches. The addresses of the Honorary Secretaries are as follows:—

Hon. General Secretary:—Miss M. W. Jesson, Lady Hardinge College, Delhi.

Hony. Local Secretaries.

Bombay ..Mrs. E. F. Hingeley, Pratt's Buildings, Hughes Road.
Calcutta ..Miss Alton c/o Messrs. Leslie and Hinds, Solicitors, 6, Hastings St., Calcutta.
Delhi and Punjab. Miss Harrison, Queen Mary's College, Lahore.
United Provinces. Mrs. Daniels, Tehri Kothi, Lucknow.

The Delhi Branch came into existence in 1918. The United Provinces Branch is somewhat scattered. The Calcutta and Bombay Branches are influential, and have repeatedly intervened with good effect to educate public opinion with regard to subjects affecting women. They have, for instance, made investigations on behalf of the Education Department, Government of India, the Calcutta University Commission, etc. They have been the means of introducing women on to University Senates and Municipalities. The Calcutta Branch carried through an important exhibition of Food Products with the double object of discovering:—

(1) What were the exact resources of the country.

(2) How firms and individuals could be induced to develop these resources, to find substitutes for imported goods and to improve existing methods of preparation of indigenous food products. The Bombay Branch has done good work in connection with the formation of the Social Purity Committee and has through a special sub-committee, organised public meeting for women on subjects affecting their interests about which legislation was being or had been recently enacted.

Valuable part of the work of the Association has been the establishment of **Women's Employment Bureaux** in Calcutta and Bombay. The work of mobilising women has been difficult in every country, not for want of goodwill on women's part but for want of machinery and organisation. The Association of University Women realised that, as the only body of educated Englishwomen in this country, it was called upon to provide the necessary organisation. Bureaux were formed and were the means of (1) helping many employers to get into touch with the available reserve of women labour; (2) showing trained women where their services were most needed and (3) training inexperienced workers who had nothing but their goodwill to offer. The Bureaux have been remarkably successful. The Bombay Bureaux was eventually merged into the employment Bureaux established by the Women's Council.

As a means of promoting friendships between women from various parts of the United Kingdom, with widely differing tastes and interests and spheres of life in India, and as an instrument for affording opportunities for usefulness to educated women, the Association of University Women has a useful function to perform.

Federation of Indian University Women.

The Federation of Indian University Women was founded in Calcutta in July 1920. The effort was an outcome of the discovery that to find a common factor and co-operate upon that basis, was our best chance of achievement in a world which needed the work of women. The women of Great Britain made this discovery during the war when the British Universities Mission to America helped solve a large political problem, and the International Federation of University Women has embodied the memory of that discovery in a Federation which aimed at including all the Universities of the world. It is in fact a League of Nations, in which the University is the unit. Most of the countries of Europe, America, Canada, China and Japan belong to this International Body. The Federation of Indian University Women is the Indian unit.

In the International Federation there are opportunities for better understanding and world-friendship, for admittance to the privileges of the International Federation, plans for the foundation of scholarships, for the care of students going to foreign countries, for the exchange of Lectureships, and other privileges and in short the benefit of all attempts made to better the position of women.

The aims and object of the Indian Federation are (1) To act as an organisation which shall afford opportunity for the expression of united opinion and for concerted action by University Women. (2) To facilitate intercourse and co-operation between University Women and maintain their interest in, and connection with, academic life. (3) To encourage post-graduate study, and to stimulate the interest of women in public life. The annual subscription is Rs. 2.

Membership is open to graduates of Indian Universities only: but a limited number (five in Calcutta) of women of other Universities may be admitted as Associate Members. During the one year of its existence, the Indian Federation has collected over 200 members, and has Branches in Bombay, Calcutta and Orissa. Other Branches are in process of formation.

The aim of the Federation is to have Branches eventually in all Indian University Towns—Members in Districts belonging to the nearest branch.

OFFICE-BEARERS FOR 1921-22.

Bombay—*President* ..Miss Mistri, L. M. & S.
Secretary ..Mrs. G. B. Doctor, Coover Mansions, Harvey Road, Grant Road P.O.
Calcutta—*President* ..Mrs. P. Chaudhuri.
Secretary ..Miss Chatterjee, 2, Wood Street, Calcutta.
Orissa—*Secretary* ..Miss C. Roy, Ravenshaw Girls' School, Cuttack.

PRINCIPAL CLUBS IN INDIA.

Name of Club.	Established	Club-house.	Subscription.			Secretary.
			Ent.	Annual	Monthly.	
			Rs.	Rs.	Rs.	
ABBOTTABAD	..	Abbottabad, N. W. F. Provinces.	16	..	10	Lt. A. G. Mayhew.
ADYAR ..	1890	Madras	75	12	6	S. E. Sewell.
AGRA ..	1863	Agra Cantonment ..	75	..	12	Capt. A. Catling.
AHMEDNAGAR	1889	.....	50	..	11	Capt. J. Mahoney.
AIJAL	1893	Lushai Hills, E. B. & Assam.	32	..	20	C. H. Bell.
AJMERE ..	1883	Kaiser Bagh	100	180	15	Lt. P. W. Grant.
AKOLA ..	1870	Berar	100	12	15	G. F. Squire.
ALLAHABAD ..	1868	Allahabad	100	10	12	Major H. F. Playne.
AMRAOTI ..	..	.....	100	6	7	W. A. Forbes.
AMRITSAR ..	1894	Amritsar	20	..	7	A. C. Leale.
BANGALORE, UNITED SERVICE.	1868	38, Residency Road ..	..	..	9	.....
BAREILLY ..	1883	Municipal Gardens ..	50	..	9	Lt.-Col. J. S. M. Harcourt.
BARISAL ..	1864	Backergunj, Barisal ..	32	..	13	M. B. Horn.
BARRACKPUR ..	1850	Grand Trunk Road, S. Riverside.	48	..	10	S. A. Fairweather.
BASSEIN	1881	Fytche Street, Bassein, Burma.	50	..	11	J. S. Forrest.
BELGAUM	1884	Close to Race Course ..	50	..	13	Lt.-Col. L. V. Bond.
BENARES	..	.....	20	..	16	D. Pilditch.
BENGAL	1827	33, Chowringhee Road, Calcutta.	500	25	16	Col. W. Wealleus.
BENGAL UNITED SERVICE.	1845	29, Chowringhee Road.	150	20	14	T. S. Sterling.
BOMBAY	1862	Esplanade Road ..	300	12	8	W. F. Murdoch.
BOMBAY GYMKHANA ..	..	.....	75	12	7	M. Innes Ker and W. Blake.
BYCULLA ..	1833	Bellasis Road, Bombay	350	12	10	J. E. Jackson, C.I.E.
CALCUTTA ..	1907	241, Lower Circular Road.	200	120	10	Major R. J. Vyner.
CAWNPORE ..	1844	Cawnpore	100	..	10	H. R. Macpherson.
CHAMBA ..	1891	Dalhousie, Punjab ..	15	..	7	W. L. Stevenson.
CHITTAGONG ..	1878	Pioneer Hill, Chittagong.	75	12	10	W. P. Shepherd-Barron.
CLUB OF CENTRAL INDIA.	1885	Mhow	50	..	10½	Capt. A. W. Buchanan.
CLUB OF WESTERN INDIA.	1865	Elphinstone Road, Poona.	200	12	10	H. A. Bleach.
COCHIN ..	1876	.....	100	18	10	W. Grant.
COCONADA ..	1856	Coconada	70	..	10	S. A. Cheesman.
COIMBATORE ..	1868	Coimbatore	50	9	10	S. O'M. Deane.
COONOOR ..	1894	Coonoor, Nilgiris ..	100	12	8	Major R. E. Webb, O.B.E.
DACCA ..	1864	Dacca	50	..	14	J. A. Stein.
DARJEELING ..	1868	Auckland Road ..	100	12	7½	A. A. Price.
DELHI ..	1898	Ludlow Castle, Delhi ..	120	15	15	F. C. A. Thompson.

Name of Club.	Established.	Club-house.	Subscription.			Secretary.
			Ent.	Annual	Monthly.	
			Rs.	Rs.	Rs.	
HIMALAYA	1841	Mussoorie	100	5	12	W. Bell.
JHANSI	1887	Next to Public Gardens, Jhansi.	75	..	12	J. Mackinnon Goulding.
MADRAS	1831	Mount Road, Madras..	250	20	8	Capt. W. B. F. Davidson (on leave); A.F. Davis (Actg.).
MADRAS COSMOPOLITAN.	1873	Mount Road	150	24	15	Sir M. C. T. Muthiah Chetty.
MALABAR	1864	Beach Road, Calicut..	100	12	10	P. J. L. Cole.
MAYMYO	1901	.....	100	12	10	Lt.-Col. R. Money.
MOOLTAN	1892	Mooltan	50	..	14	Major H. V. Reynolds, I.A.
NAINITAL	1864	.....	100	12	10	Lt.-Col. J. de Gray, O.B.E., F.R.G.S. (Grey.)
OOTACAMUND ..	1840	Ootacamund, Nilgiri Hills.	150	12	10	S. E. Langmore.
ORIENT	..	Chowpaty, Bombay ..	150	72	6	Vasantrao Anandrao Dabholkar, O. B. E. and F. E. Sharp.
PEGU	1871	Prome Road, Rangoon	150	12	12	Francis H. Tod.
PESHAWAR .. .	1883	Peshawar	50	..	10	Major E. E. Hills.
PUNJAB	1879	Upper Mall, Lahore ..	150	15	12	A. R. Ross-Redding.
QUETTA	1879	Quetta..	120	..	18	Major B. Leicester.
RANGOON GYMKHANA..	1874	Halpin Rd., Rangoon.	75	6	7	W. B. Clover.
RANGOON BOAT CLUB..	..	Royal Lakes, Rangoon	48	..	3	C. M. W. de Facieu.
RAJPUTANA	1880	Mount Abu	50	..	8	A. D. Ashdown.
ROYAL BOMBAY YACHT CLUB.	1880	Apollo Bunder ..	350	18	10	Capt. F. E. Henderson.
ROYAL CALCUTTA TURF CLUB.	1861	40, Theatre Road ..	500	25	..	Capt. A. Howard.
ROYAL WESTERN INDIA GOLF CLUB.	..	Nasik	75	15	12	W. J. Jenkins.
SATURDAY .. .	..	7, Wood Street, Calcutta.	75	12	10	R. E. Bradley.
SECUNDERAB'AD ..	1883	Secunderabad(Deccan)	100	..	8	Lt.-Col. W. C. Clark, D.S.O.
SHILLONG	1878	Northbrook Road, Shillong.	100	12	20	C. H. Holder, O.B.E.
SIALKOT	..	Sialkot, Punjab ..	32	..	19	Major H. H. Leeson, R.A.M.C.
SIND	1871	Karachi	300	12	10	H. G. Houghton.
TRICHINOPOLY ..	1869	Cantonment	90	12	12	U. H. M. Bowden.
TUTICORIN	1885	Tuticorin	50	..	12	W. A. C. Havelock.
UNITED SERVICE CLUB.	1866	Simla	200	12	..	Major L. B. Grant.
UNITED SERVICE CLUB, LUCKNOW.	1861	Chutter Manzil Palace.	100	12	12	E. Mendell.
UPPER BURMA ..	1889	Fort Dufferin, Mandalay.	50	12	10	Major C. H. S. Deane, I.A.
WESTERN INDIA TURF.	..	Bombay and Poona ..	50	15	..	Major J. E. Hughes.
WILLINGDON SPORTS	1917	Clerk Road, Bombay..	300	120	7½	C. H. Bull.
WHEELER	1863	The Mall, Meerut ..	50	..	10	Capt. Colin West.

The Church.

In the ordinary acceptance of the term there is no established Church in India. An Ecclesiastical Establishment is maintained for providing religious ministrations, primarily, to British troops, secondarily to the European civil officials of Government and their families. Seven out of the eleven **Anglican Bishops** in India are officers of the Establishment, though their episcopal jurisdiction far transcends the limits of the Ecclesiastical Establishment. The stipends of the three Presidency Bishops are paid entirely by Government, and they hold an official status which is clearly defined. The Bishops of Lahore, Lucknow, Nagpur and Rangoon draw from Government the stipends of Senior Chaplains only but their episcopal rank and territorial titles are officially recognised. The Bishops of Chota Nagpur, Tinnevelly-Madura, Travancore-Cochin, Dornakal and Assam are not on the establishment. The new Bishopric of Assam was created in 1915. In its relations with Government it is subordinate to the see of Calcutta. But the maintenance of the Bishopric is met entirely from voluntary funds.

The ecclesiastical establishment includes four denominations—Anglican, Scottish, Roman and Wesleyan. Of these, the first two enjoy a distinctive position, in that the Chaplains of those denominations (and in the case of the first-named the Bishops) are individually appointed by the Secretary of State and rank as gazetted officers of Government. Throughout the Indian Empire there are 134 Anglican and 18 Church of Scotland chaplains whose appointments have been confirmed. The Roman Catholics and Wesleyans receive block-grants from Government for the provision of clergy to minister to troops and others belonging to their respective denominations. The Wesleyan Methodist Church has a staff of military chaplains in India who receive a fixed salary from Government and 25 chaplains working on a capitation basis of payment by Government. Churches of all four denominations may be built, furnished and repaired, wholly or partly at Government expense.

In the Anglican Communion a movement towards "disestablishment" has recently taken definite shape. The *Indian Church Measure* adopted by the Provincial Council of the Church of England in India and Ceylon in February 1922 aims at the severance of all legal ties between the Indian Church and the Church of England. The Measure has been sent down to the Diocesan Councils, for discussion, and will come before the Provincial Council for final adoption at its next meeting—January 1924. The fate of this Measure is at present uncertain. The Government of India may not accept its proposals in their entirety. But assuming that the Government of India accepts the principle of the Measure it will have to pass the National Assembly of the Church of England and be presented by that body to Parliament. The object of the Measure is thus stated by the Bishop of Nagpur :—

"It is simply to sever every legal connection which at present exists between the Church of England in India on the one hand and the Government of India, together with the Secretary of State for India, as well as the Church of England in England. If passed, it will make our Church in India as independent of the Home Church and of the Governing body of this country as are our sister Churches in the Colonies. We shall then have power to select our own Bishops, to create new Dioceses, to frame new rules and regulations for the Church suitable for India, as well as to give it freedom to adopt its own expressions of faith, worship, rites and ceremonies. Our Synods and Councils will then be not merely Synods and Councils in name but actually ruling bodies whose resolutions would form laws of the Church which every loyal member of the Church would feel bound to obey."

In effect it will confer upon the Indian Church not only the privilege of appointing its own Bishops but the responsibility of paying their stipends. This aspect of the matter causes disquietude in certain quarters. On the other hand the probability that Government will soon greatly reduce the personnel of the Ecclesiastical Establishment is regarded as a strong argument in favour of the Church claiming full freedom of self-government now.

So far as the European and Anglo-Indian communities are concerned the activities of the Church are not confined to public worship and pastoral functions. The **education** of the children of those communities is very largely in the hands of the Christian denominations. There are a few institutions such as the La Martiniere Schools, on a non-denominational basis; but they are exceptional. In all the large centres there exist schools of various grades as well as orphanages, for the education of Europeans and Anglo-Indians under the control of various Christian bodies. The Roman Catholic Church is honourably distinguished by much activity and financial generosity in this respect. Her schools are to be found throughout the length and breadth of the Indian Empire; and they maintain a high standard of efficiency. The Anglican Church comes next, and the American Methodists have established some excellent schools in the larger hill-stations. The Presbyterians are also well represented in this field, particularly by the admirable institution for destitute children at Kalimpong, near Darjeeling. Schools of all denominations receive liberal grants-in-aid from Government, and are regularly inspected by the Education Departments of the various provinces. Thanks to the free operation of the denominational principle and its frank recognition by Government, there is no "religious difficulty" in the schools of the European and Anglo-Indian communities.

Christian Missions.

The tradition that St. Thomas, the Apostle was the first Christian missionary in India is by no means improbable. History, however, carries us no further back than the sixth century, when a community of Christians is known to have existed in Malabar. Since then the so-called **Syrian Church** in south-west India has had a continuous life. Except in its in-

fancy this Church (or rather these Churches for the Syrian Christians are now divided into four communions) has displayed little of the missionary spirit until quite recent times. Western Christianity was first introduced into India by the Portuguese, who established their hierarchy throughout their sphere of influence, Goa being the metropolitical see of the Indies. St. Francis Xavier, a Spaniard by race, took full advantage of the Portuguese power in Western India to carry on his Christian propaganda. His almost super-human zeal was rewarded with much success, but many of the fruits of his labour were lost with the shrinkage of the Portuguese Empire. It is really to the work of the missionaries of the **Propaganda** in the 17th century that the Papacy owes its large and powerful following in India to-day. The Roman Catholics in India number 1,904,006, of whom 379,251 were added during the decade 1901-1911. The total of "Syrian" Christians (exclusive of those who while using the Syrian liturgy, are of the Roman obedience) is 315,612, as against 248,741 in 1901. Protestant Christians (the term throughout this article includes Anglicans) number 1,636,731, an increase of 486,986 since 1901. Thus, the total number of Christians of all denominations in India is now close on four millions. In fact it probably exceeds that figure at the present moment, as these statistics are taken from the Census Report of 1911, and the rate of increase during the previous decade was nearly 100,000 per annum.

The Protestant Churches made no serious attempt to evangelise India till the beginning of the nineteenth century. They have thus been at work in the Indian mission field for something over 100 years, and the statistical results of their efforts are given above. It is now, however, generally recognised that Christian missions are producing indirect effects in India which lend themselves only incompletely to any sort of tabulation. The main agency of this more diffusive influence of Christianity is the missionary school and college. The **Protestant missions** fill a considerable part in the elementary education of the country. According to the *Year Book of Missions in India*, 1912, they are teaching 446,000 children in 13,204 elementary schools, mostly situated in villages. This represents one-ninth of the total of elementary schools and scholars throughout the Empire. The majority of children in these schools are non-Christians. The same is true also of the high schools and in a still greater degree of the colleges. The former number 283 with 62,600 male and 8,400 female pupils. There are 38 colleges affiliated to Universities, containing 5,488 male and 61 female students. Of these as many as 5,241 are non-Christians. From the standpoint of missionary policy much importance is attached to these agencies for the indirect propagation of the Christian faith. The statesman and the publicist are chiefly interested in the excellent moral effect produced by these institutions amongst the educated classes, and the higher educational ideals maintained by their staffs. The principal **University colleges** under Protestant auspices are the Madras Christian College; the Duff College, Calcutta; the Wilson College, Bombay; and the Foreman College, Lahore. All these are maintained by Presbyterian societies, either British or American. The Roman Catholics have a large number of educational institutions, ranging from small village schools to great colleges preparing students for University degrees. But the proportion of Christian students in their institutions is very much larger than in those of the Protestant bodies. The proportion of literates amongst native Roman Catholics is probably lower than amongst the Protestant converts; but compared with Hindus and Mahomedans it is conspicuously higher. The Roman Catholics have some 3,000 elementary schools in which 98,000 boys and 41,000 girls are receiving instruction. In middle and high schools they have 143,000 boys and 73,000 girls and in University colleges about 5,000 students of both sexes. These figures, however include a large proportion of Europeans and Eurasians, who are an almost negligible quantity in Protestant mission schools and colleges.

More recent, but producing even more widespread results, is the **Philanthropic work** of Christian missions. Before the great famine of 1878, missionaries confined themselves almost exclusively to evangelistic and educational activity. The famine threw crowds of destitute people and orphan children upon their hands. Orphanages and industrial schools became an urgent necessity. But the philanthropic spirit is never satisfied with one kind of organisation or method. A great stimulus was also given to medical missions. **Hospitals and dispensaries** have sprung up in all parts of the mission field; and leper asylums are almost a monopoly of Christian missionary effort. In 1911 the total number of medical missionaries working under Protestant societies in India was 118 men and 217 women, the majority of the former being also ordained ministers of religion. There are 184 industrial institutions in which 59 different arts and crafts are taught, ranging from agriculture to type-writing. In this department the **Salvation Army** hold a prominent place; and the confidence of Government in their methods has been shown by their being officially entrusted with the difficult work of winning over certain criminal tribes to a life of industry. The indirect effect of all this philanthropic activity under missionary auspices has been most marked. It has awakened the social conscience of the non-Christian public, and such movements as "The Servants of India" and the mission to the Depressed Classes are merely the outward and visible sign of a great stirring of the philanthropic spirit far beyond the sphere of Christian missionary operations.

Reunion.—For very many years Indian Christians have shown that they felt much more acutely than Europeans the scandal and disadvantage of the divisions of Christendom. These divisions are due to a very much greater extent than is always recognised to political causes, and in the political conflicts of the sixteenth and seventeenth centuries, when they became crystallised, India had no part. Even those differences amongst Chris-

tians which have a purely religious origin and foundation seem to be of very little account to Indian converts. For them the great dividing line is that between Christ and Mahommed or Shiva and Vishnu. Standing before a background of paganism they are conscious of a real fundamental unity in Christ. Compared with the greatness of the gulf which separates Christian from non-Christian, the differences of "confession" and "order" which separate Christian from Christian seem to be wholly artificial and negligible. In consequence the reunion movement, which is noticeable all over the world, is nowhere so strong as in India. In South India it has already resulted in the formation of the South India United Church, which is a group union of five of the principal Protestant communions, and as these bodies are in communion individually with all, or almost all, the other Protestant bodies at work in India the Union may be regarded as a Pan-Protestant Union. The S.I.U.C. is at present negotiating with the Anglican Church. If as seems probable the negotiations are successful the result will amount to a union of all the Christian bodies in South India, except the Roman Catholics, on the basis of the last Lambeth encylical. This will mean that a real National Indian Church will come into being. Although it will be tolerant of almost every expression of Evangelical opinion and will retain the freedom of development characteristic of Protestantism, by its acceptance of the Catholic creeds and the Historic Episcopate, it will be linked up with the Catholic tradition of the Anglican Church.

Anglican Missionary Societies.

The Church Missionary Society carries on work n India in seven different missions—the United Provinces, South India, Travancore and Cochin, Bengal, Western India, Punjab and Sind and the Central Provinces and Rajputana. The names are in order of seniority. Work was begun in what are now called the United Provinces in 1813, in Bombay in 1820, in the Punjab in 1851, and in the Central Provinces in 1854. The Society has always kept Evangelistic work well to the fore; but it also has important medical missions, especially on the N.-W. Frontier, and many schools of the Primary, Middle and High standards. The Church of England Zenana Missionary Society is an offshoot of the C. M. S. controlling the work of 162 missionary ladies. The number of ordained European missionaries of the C. M. S. in India and Ceylon is 160, European laymen 30 and European laywomen 258. The Society claims a Christian community of 2,21,359 of whom 63,055 are adult communicants.

Society for the propagation of the Gospel.—Statistics of the work of this Society are not easily ascertained, as much of it is done through Diocesan institutions, which, while financed and in many cases manned by the S. P. G., are entirely controlled by the Diocesan authorities. The best known of the S. P. G. missions is that at Delhi, commonly called the Cambridge Mission to Delhi, carrying on educational work at St. Stephen's College and School. At the College there are about 200 students under instruction, and at the High School 800. The College hostels accommodate 100 students. Missions to the depressed classes exist in Burma, in the Ahmednagar District and in several parts of South India, especially in the Diocese of Tinnevelly-Madura. There are 1,16,000 Indian Christians under the ægis of the S. P. G.; 90 ordained European missionaries and 98 European lady workers.

Other Anglican Societies.—The Oxford Mission to Calcutta was started in 1880. It works in the poorest parts of Calcutta and also at Barisal. There are 11 missionpriests of this Society, and 16 Sisters. In addition to its work amongst the poor, the Oxford Mission addresses itself to the educated classes in Bengal and issues a periodical called *Epiphany*, which is known all over India.

The Society of St. John the Evangelist (commonly known as the Cowley Fathers) has house at Bombay and Poona, and small stations in the Bombay Konkan. In Bombay its missionary work centres round the Church of Holy Cross, Umarkhadi, where there is a school and a dispensary. The Christians are chiefly drawn from the very poorest classes of the Bombay population. At Poona the Society co-operates with the Wantage Sisters and in Bombay with the All-Saints' Sisters. Other Anglican sisterhoods represented in India are the Clewer Sisters at Calcutta and the Sisters of the Church (Kilburn) at Madras. The St. Hilda's Deaconesses' Association of Lahore carries on important educational work (chiefly amongst the domiciled community) in the Punjab. The mission of the Scottish Episcopal Church at Nagpur, the Dublin University Mission at Hazaribagh, and the Mission of the Church of England in Canada working at Kangra and Palampur (Punjab) should also be mentioned under the head of Anglican Missions.

Bengal Ecclesiastical Department.

Westcott, The Right Reverend Foss, D.D. .. Lord Bishop of Calcutta and Metropolitan of India.

SENIOR CHAPLAINS.

Stokoe, Rev. Cecil George, M.A.	.. (On leave.)
Firminger, Ven'ble Walter Kelly, M.A., B.D.	.. (On leave.)
Drawbridge, Rev. W. H., M.A.	.. (On leave.)
Parker, Rev. William Almair Hedley ..	.. Chaplain, St. Thomas' Church, Calcutta.
Crosier, Rev. Philip Horsefall .. .	.. (On leave.)
Penley, Rev. Horace Octavius, M.A. .	.. Chaplain, St. James's, Calcutta.
Ridadale, Rev. Arthur Cyril .. .	.. Services placed at the disposal of the Government of Bihar and Orissa.
Godber, Rev. John	.. St. Paul's Cathedral, Calcutta.

And 12 Junior Chaplains.

CHAPLAINS OF THE CHURCH OF SCOTLAND.

Gordon, Rev. James Drummond, M.A., B. SC. .. (On leave.)
Macfarlane, Rev. Andrew, D.S.O., B.D. .. .. Presidency Senior Chaplain, Bengal, and Senior Chaplain, St. Andrew's Church, Calcutta.

Ingram, Rev. James William, B.D. .. .. .. Senior Chaplain, St. Andrew's Church, Calcutta.

McLean, Rev. Lachlan, M.A., B.D. .. .. .. Under Army Department.

CHAPLAINS OF THE CHURCH OF ROME.

Meuleman, The Most Reverend Dr. Brice, S.J. .. Archbishop, Calcutta.
Carbery, Rev. Fr. Philip, S.J. .. .. .. Chaplain, Alipore Central Jail.

Bombay Ecclesiastical Department.

Palmer, Right Reverend Edwin James, M.A. .. Lord Bishop of Bombay (On furlough).
Hatchell, Ven'ble C. F. W. .. .. Archdeacon of Bombay.
Smith, A. K. .. .. Registrar of the Diocese.

SENIOR CHAPLAINS.

D'Alessio, Rev. Edward Samuel John, P.A... .. Ghorpuri.

Kennelly, Rev. W. J. M. .. .. (On leave.)
Tibbs, Rev. Philip Gordon, B.A. .. .. .. Kirkee.

Arnould, Rev. Henry Lloyd M.H. .. .. .. St. Mary's, Poona.
Hill, Rev. Edward Eustace .. ..

And 16 Junior Chaplains.

CHAPLAINS OF THE CHURCH OF SCOTLAND.

Macfarlane, Rev. A. .. .. (On deputation)
Nelson, Rev. A. M. .. .. (On leave.)
Jamieson, Rev. R. G. .. .. Presidency Senior Chaplain and Chaplain, St. Andrew's Church, Bombay.

Lee, Rev. R. E., M.A., B.D. .. .. (On combined leave.)
Rennie, Rev. J. Y. .. .. St. Andrew's Church, Karachi.

Bell, Rev. G. .. .. Chaplain, Poona and Kirkee.
McLellan, Rev. D. T. H. .. .. Chaplain, St. Andrew's Church, Bombay.

CHAPLAINS OF THE CHURCH OF ROME.

Goodier, The Most Rev. A. .. .. Presidency.

Madras Ecclesiastical Department.

Waller, Right Reverend Edward Harry Mansfield, D.D. .. .. Lord Bishop of Madras.

Nuttall, Venerable Frank, M.A. .. .. .. Archdeacon and Senior Joint Chaplain, St. George's Cathedral.

Rowlandson, Frederic, B.A., LL.B. .. .. .. Registrar of the Diocese and Secretary to the Lord Bishop.

SENIOR CHAPLAINS.

Flynn, Rev. Hugh Hamilton .. .. Coonoor.
Heycock, Rev. Francis Wheaton, M.A. .. .. (On leave.)

Morton, Rev. Bertram Mitford .. .. .. On combined leave.
Stone, Rev. Henry Cecil Brough .. .. .. St. Thomas' Mount with Pallavaram.
Jervis, Rev. E. O. .. .. Holy Trinity Church, Bangalore.

Bridge, Rev. Henry Noel .. .. Ootacamund.
Proctor, Rev. Francis Owen.. .. .. .. Vizagapatam.

Wright, Rev. G. A. Arthur .. .. Mercara and Myso.e.
Sell, Rev. Charles Edward .. .. .. Fort St. George.

Smith, Rev. George C. Augustus .. .. .. Trimulgherry, Deccan.
Brownrigg, Rev. Ernest Graham, M.A. .. .. St. Mark's Church, Bangalore.

Borlase, Rev. J. J. D., B.A., LL.B. .. .. (On combined leave.)
Loasby, Rev. Harry Clement, M.A. .. .. (On combined leave.)
Hacking, Rev. Henry, M.A. .. .. .. Vellore.

Careless, Rev. William Edward, M.A. .. .. Bellary.
Beeley, Rev. Ben Darcey .. .. Wellington.
Bull, Rev. Francis Faulkner .. .. .. Trichinopoly.

And 11 Junior Chaplains.

CHURCH OF SCOTLAND.

Mackenzie, Rev. Donald Francis, M.A. ..	.. St. Andrew's Church, Madras.
McNeill, Rev. J. H. H.	.. (On combined leave).
Mitchell, Rev. James Donald, M.A., B.D. ..	.. St. Andrew's Church, Bangalore.
Pitcairn Hill, Rev. Colin Cecil, M.A. ..	.. Probationary, St. Andrew's Church, Secunderabad.
Wright, Rev. J. Johnstone	.. St. Andrew's Church, Madras and Acting Presidency Senior Chaplain.

Assam Ecclesiastical Department.

Thomson, Rev. T. A.	.. Shillong.
Pakenham-Walsh, The Right Rev.	.. Officiating, Darrang.
Wylde, Rev. F. St. J. Quinton	.. Lakhimpur.
Wood, Rev. W. S. A.	.. Silchar.
Dixey, Rev. A. D.	.. Sibsagar.

Bihar and Orissa Ecclesiastical Department.

JUNIOR CHAPLAINS.

Ridsdale, Rev. A. C.	.. Chaplain, Cuttack.
Williams, Rev. H. F. F.	.. Bankipore.
Dyer, Rev. B. S., M.A.	.. Dinapore.
Perfect, Rev. Henry	.. Bhagalpur.
Reginald, Rev. A. J. C...	.. Monghyr and Jamalpur.
Vacant	.. Muzaffarpur and Darbhanga.
Minto-Senhouse, Rev. Bernard Darley ..	.. Ranchi.

Burma Ecclesiastical Department.

Fyffe, The Right Reverend Rollestone Sterritt, M.A., Lord Bishop of Rangoon.

SENIOR CHAPLAINS.

Price, Rev. Howel Evans	.. Archdeacon of Rangoon and Bishop's Commissary. (On leave.)
Cowper-Johnson, Rev. Wilfrid Harry, M.A.	.. Chaplain, Maymyo. Offg. Archdeacon of Rangoon and Bishop's Commissary.

And 7 Junior Chaplains.

Central Provinces Ecclesiastical Department.

Chatterton, Right Reverend E., D.D. ..	.. Lord Bishop of Nagpur.
Martin, Ven'ble F. W	.. Archdeacon and Chaplain, Nagpur.

SENIOR CHAPLAINS.

Clarke, Rev. W. L.	.. (On leave.)
Molony, Rev. P. J.	.. Second Chaplain, Mhow.
Clough, Rev. E. R.	.. Garrison Chaplain, Jubbulpore.
Wardell, Rev. A. F. G.	.. (On leave.)
Carter, Rev. B. B., M.A.	.. Neemuch.

And 9 Junior Chaplains.

North-West Frontier Ecclesiastical Department.

SENIOR CHAPLAINS.

Henry, Rev. W. E. C., M.A.	.. Abbottabad.
Devenish, Rev. C. R. S.	.. (On leave.)
Dixon, Rev. T. H., M.A.	.. (On leave.)
Carden, Rev. H. C.	.. Peshawar.

And 3 Junior Chaplains.

Punjab Ecclesiastical Department.

Durrant, Right Reverend H. B., M.A., D.D.	.. Lord Bishop of Punjab, Lahore.
Wheeler, The Ven'ble Cauffon High Trevor, M.A.	.. Archdeacon, Karachi.

SENIOR CHAPLAINS.

Cole, Rev. Alexander Barnet Farquharson, M.A.	(On leave.)
Markby, Rev. Frederick Edward, M.A. ..	. (On leave.)
Fagan, Rev. High William Farquharson. B.A.	. (On leave.)
Buckwell, Rev. Frederick Charles ..	. Simla.
Castle, Rev. Willie Wichello, B.A. ..	. Hyderabad (Sind.)
Stephenson, Rev. Canon Henry Stanley. M.A	. Bishop's Chaplain, Lahore.
Rintoul, Rev. Charles Randolph, M.A. ..	. (On leave.)
Selwyn. Rev. Arthur Lewis Henry. B.A.	. (On leave.)
Campbell, Rev. Rowland William. B.A.	. Murree.
Maunsell, Rev. Arthur Persse Gabbett. B.D.	. (On leave.)
Williams, Rev. James Ernest Harris, M.A.	Jullunder.
Proby, Rev. Randolph Simon Bennertz. B.A.	Rawalpindi.
Hanvy, Rev. William Ernest Charles, M.A.	Abbottabad.
Dixon Rev. Thos. Harold, M.A. ..	Raisina.
Barne, Rev. George Dunsford, M.A. ..	On Foreign Service.

And 18 Junior Chaplains.

United Provinces Ecclesiastical Department.

Westcott, The Right Reverend George Herbert	.. Lord Bishop of Lucknow.
Irwin, The Ven'ble B.C.B., M.A.	.. Archdeacon of Lucknow.
James, J. W. Langford	.. Registrar of the Diocese of Lucknow.

SENIOR CHAPLAINS.

Smith, Rev. H. T. P.	.. Benares.
Bell, Rev. William Lachlan, M.A.	.. Waziristan Field Force.
Irwin, Rev. Benjamin Christopher Bulteel, M.A.	.. (On leave.)
Padfield, Rev. George Augustus Selwyn ..	.. Chakrata.
Meyler, Rev. Edward Mowbray, B.A. ..	.. Allahabad.

And 13 Junior Chaplains with 8 Additional Clergy.

CHURCH OF SCOTLAND;

McCaul, Rev. M. W., B. D. .. .. Allahabad, Army Department.

THE ROMAN CATHOLIC CHURCH.

With regard to numbers, the *Catholic Directory of India*, 1913, gives the following discrepant tables:—

	Civil Census, 1911.	Ecclesiastical Estimate.
British India { Latin rite	1,430,582	1,535,820
British India { Syriac rite	413,142	364,660
Total, British India and Prot. States	1,843,724	1,900,480
Burma	60,282	88,447
Ceylon	339,300	322,163
Total, India, Burma and Ceylon	2,243,306	2,311,090
French India	....	25,918
Portuguese India	....	296,148
Ecclesiastical Grand Total ..	....	2,663,156*

* After trying to rectify discrepancies the *Directory* fixes as probable the following numbers:—

European and Anglo-Indian Catholics	114,512
Baptised Indian Catholics	2,423,286
Total	2,537,798

There has been a notable increase during the last 10 years, but the figures have not been completely worked out. The number of Catholics for India and Ceylon has risen to over 3,000,000, and the priests amount to 3,145.

The Catholic community as thus existing is composed of the following elements:—

(1) The "Syrian" Christians of the Malabar Coast, traditionally said to have been converted by the Apostle St. Thomas. They were brought under allegiance to the Pope by the Portuguese in 1599, and placed first under Jesuit bishops and then under Carmelite Vicars Apostolic. They are at present ruled by four Vicars Apostolic of their own Syriac rite.

(2) Converts of the Portuguese missionaries from 1500 and onwards, starting from Goa and working in the south of the peninsula and up the west coast, Ceylon, Bengal, etc.

(3) European immigrants at all times, including British troops.

(4) Modern converts from Hinduism and Animism in recent mission centres.

The Portuguese mission enterprise starting after 1500, continued for about 200 years, after which it began to decline. To meet this decline fresh missionaries were sent out by the Congregation *de propaganda fide*, till by the middle of the 19th century the whole country was divided out among them except such portions as were occupied by the Goa clergy. Hence arose a conflict of jurisdiction in many parts between the Portuguese clergy of the "padroado" or royal patronage, and the propaganda clergy. This conflict was set at rest by the Concordat of 1886. At the same time the whole country was placed under a regular hierarchy, which after subsequent adjustments now stands as follows:—

Of the **Portuguese Jurisdiction**:—

The archbishopric of Goa (having some extension into British territory) with suffragan bishoprics at Cochin, Mylapore and Damaun (all three covering British territory).

Of the **Propaganda Jurisdiction**:—

The archbishopric of Agra with suffragan bishoprics of Allahabad and Ajmere.

The archbishopric of Bombay, with suffragan bishoprics of Poona, Mangalore and Trichinopoly.

The archbishopric of Calcutta, with suffragan bishoprics of Dacca, Krishnagar and Patna, and the Prefecture Apostolic of Assam.

The archbishopric of Madras, with suffragan bishoprics of Hyderabad, Vizagapatam and Nagpur.

The archbishopric of Pondicherry (French) with suffragan bishoprics of Mysore, Coimbatore and Kumbakonam.

The archbishopric of Simla with suffragan bishopric of Lahore and the Prefecture Apostolic of Kashmere.

The archbishopric of Colombo (Ceylon) with suffragan bishoprics at Kandy, Galle, Jaffna and Trincomalee.

The archbishopric of Verapoly, with suffragan bishopric of Quilon.

Four Vicariates Apostolic of the Syriac rite for the Syrian Christians of Malabar.

Three Vicariates Apostolic of Burma.

During 1923 two new dioceses have been constituted; Tuticorin and Calicut.

The European clergy engaged in India almost all belong to religious orders, congregations or mission seminaries, and with a few exceptions are either French, Belgian, Dutch, Swiss, Spanish or Italian by nationality. They number about 1,000 besides which there is a body of secular clergy mostly native to the country, numbering about 2,000 and probably about 2,000 nuns. The first work of the clergy is parochial ministration to existing Christians, including railway people and British troops. Second comes education, which is not confined to their own people; their schools being frequented by large numbers of Hindus, Mahomedans, Parsis, etc. Among the most important institutions are St. Xavier's College, Calcutta, St. Peter's College, Agra, St. Xavier's College, Bombay, St. Joseph's College, Trichinopoly, St. Aloysius College, Mangalore, teaching university courses; besides a large number of high schools and elementary schools. The education of girls is supplied for by numerous convent schools worked by religious congregations of nuns to say nothing of orphanages and other charitable institutions. The total number under education amounted in 1904 to 143,051 boys and 73,164 girls, later figures being unavailable. As to missionary work proper, the country is covered with numerous mission centres, among which those in Chota Nagpur, Gujerat, Orissa, the Nizam's Dominions, the Ahmednagar district and the Telugu coasts may be mentioned. (Full particulars on all points will be found in the Catholic Directory already quoted.) The mission work is limited solely by shortage of men and money, which if forthcoming would give the means to an indefinite extension. The resources of the clergy after the ordinary church collections and pay of a few military and railway chaplaincies are derived mainly from Europe, that is, from the collections of *the Society for the Propagation of the Faith* and of *the Holy Childhood*; helped out by private or other donations secured from home by the different local missionaries. In mission work the fathers count as enrolled only those who are baptised and persevering as Christians, and no baptism, except for infants or at point of death; is administered except after careful instruction and probation. This, while keeping down the record, has the advantage of guaranteeing solid results.

The Holy See is represented by a Delegate Apostolic of the East Indies who resides at Bangalore.

THE SCOTTISH CHURCHES.

The Church of Scotland.—The Chaplaincy work of the Church of Scotland dates from 1814, when the Rev. Dr. Bryce landed in Calcutta, and organised a congregation of his Scottish fellow countrymen. The centenary of the churches in the three Presidency towns was celebrated: Calcutta, 1914: Bombay, 1919; Madras, 1921. Since 1903 there have been eighteen chaplains on the staff, of whom nine belong to the Bengal

Presidency, five to Bombay, and four to Madras. These minister both to the Scottish troops and to the civil population of the towns where they are stationed, but when there is a Scottish regiment the chaplain is attached to the regiment, instead of being posted to the station where the regiment happens to be placed and as a rule moves with the regiment. There are three Presidency senior Chaplains in charge of Bengal, Bombay, and Madras respectively. There are churches in the chief towns of the Presidencies, and churches have also been built, in all considerable military stations, *e.g.*, Chakrata, Lucknow, Peshawar, Ranikhet, Rawalpindi, Sialkot, Umballa and Jubbulpore. In addition to the regular establishment there are a number of acting Chaplains sent out by the Colonial Committee of the Church of Scotland, and these are serving in such stations as Rawalpindi, Lahore, Cawnpore, Meerut, Mhow and Quetta. The Additional Clergy Societies in India contribute towards the cost of this additional establishment. In other places such as Sialkot, Murree, Dalhousie, and Darjeeling, regular services are provided by Scottish Missionaries. Simla has a minister of its own sent out from Scotland.

The Mission work of the Church of Scotland dates from 1829, when Alexander Duff, one of the greatest of modern missionaries, was sent to Calcutta. He was the first to open schools where English was made the medium for instruction, and where religious teaching was given daily. Similar educational missions were soon afterwards started in Bombay and Madras. Educational work is still an important branch of the mission work of the Church, but the Bombay College was closed in 1891, and in 1907 the College in Calcutta was united with the College of the United Free Church of Scotland, to form the Scottish Churches College. In the Punjab Evangelistic work is being carried on from eight centres under seventeen missionaries. The baptised Christian community now numbers over 14,000. Work commenced in Darjeeling in 1870 is now carried on throughout the whole Eastern Himalayan district, and there is a Christian community there of over 8,000. In the five mission districts of Calcutta, the Eastern Himalayas, Madras, Poona, and the Punjab there were at the end of 1919 over 24,787 baptised Indian Christians. In connection with these missions the Women's Association of Foreign Missions does invaluable service in school, medical and zenana work, having in India 41 European missionaries, 163 teachers, over 50 schools, three hospitals and six dispensaries.

The Church of Scotland has also done much to provide education for European children in India. Together with the United Free Church St. Andrew's Church provides the governing body of the Bombay Scottish High Schools, which have always held a high place among such institutions, and exercises pastoral supervision over the Bombay Scottish Orphanage. In Bangalore there is the St. Andrew's High School, and both in Bangalore and in Madras the local congregation supports a school for poor children. The Ayrcliffe Girls' Boarding and High School is under the care of the Kirk-Session of St. Andrew's Church, Simla. The now well-known St. Andrew's Colonial Homes at Kalimpong, Bengal, though not directly part of the work of the Church of Scotland, were initiated by and are being locally managed by missionaries of that Church. The homes exist for the benefit of the domiciled European Community, and are doing magnificent work. There are now twenty cottages, and about 600 children in residence. Further information may be found in "Reports of the Schemes of the Church of Scotland," Blackwood & Sons; "The Church of Scotland Year Book" and "The Handbook of the Church of Scotland in India and Ceylon" a new edition of which is being prepared.

The United Free Church of Scotland.—This branch of the Scottish Church has only three purely European congregations in India, two in Calcutta, Wellesley Square, and Howrah and one in Bombay, Waudby Road. In Calcutta the Howrah Church is in the district of the mills, and every effort is made to minister to the Scottish Engineers and other workers in the mills. As noted above members of these congregations co-operate with the Established Church of Scotland in providing education for European children.

The Church carries on Mission work in seven different areas. They are Bengal (Calcutta, Kalna and Chinsura); the Santal Parganas, with five stations; Western India (Bombay, Poona and Alibag); Hyderabad State (Jalna, Bethel and Parbhani); Madras (Madras City, Chingleput, Sriperumbudur and Conjeeveram); the Central Provinces (Nagpur, Bhandara, Wardha, and Amraoti); Rajputana, where the extensive work instituted by the United Presbyterian Church in 1860 is now carried on from eleven centres.

The work falls into three main divisions, evangelistic, medical, and educational. The Christian community has been organised in all the chief centres into congregations which form part of the Indian Presbyterian Church, and this Church is seeking to take an increasing share in the work of evangelism. There are nineteen Mission Hospitals, among which are four excellently equipped and staffed Women's Hospitals, in Madras, Nagpur, Ajmer, and Jaipur. From the days of Duff in Calcutta and Wilson in Bombay the Mission has given a prominent place to education. It has many schools in all parts of its field and it has also made a large contribution to the work of higher education through four Christian Colleges. The Scottish Churches College, Calcutta, is under the joint management of the Church of Scotland and the United Free Church. The Madras Christian College, which owes so much to the work of Dr. William Miller, is now under the direction of a Board representing several Missionary Societies. Wilson College, Bombay, with which the names of Wilson and Dr. Mackichan are specially associated and Hislop College, are under the direct management of the United Free Church.

BAPTIST SOCIETIES.

THE BAPTIST MISSIONARY SOCIETY OF GREAT BRITAIN.—Formed in 1792, largely through the efforts of Dr. Wm. Carey, operates mainly in Bengal, Bihar, the United Provinces, the Punjab, and Ceylon. The Baptist Zenana Mission has recently been united with this Society. The staff of the united Mission in India numbers 256 missionaries and about 968 Indian workers. Connected with the Society are 232 Indian Churches, 268 Primary Day Schools, 24 Middle and High Schools, and 3 Theological Training Colleges. The church membership at the close of 1922 stood at 16,866 and the Christian Community at 49,851. In the methods of the Society, a prominent place is given to Bazaar and Village preaching. Increase in membership during the past ten years, about 60 per cent. and in the community 50 per cent. for the same period. Amongst the non-caste people great progress has been made in recent years, and many of the Churches formed from amongst these peoples are self-supporting.

Special work amongst students is carried on in Calcutta, Dacca, Cuttack and Delhi, where hostels have been erected for the prosecution of this form of work.

EDUCATIONAL WORK.—Ranges from Primary School to Colleges. Serampore College, the only College in India able to bestow a theological degree granted under Royal Charter by His Danish Majesty in 1827, and confirmed by the British Government in the Treaty of purchase of the Settlement of Serampore in 1845, and placed in 1856 by the College Council at the disposal of the Baptist Missionary Society to become a part of its Missionary Educational operations, Arts and Theological. It was affiliated in 1857 to the newly-formed Calcutta University; reorganised in 1910 on the lines of its original foundation with the appointment of a qualified Theological Staff on an Inter-denominational basis for the granting of Theological Degrees to qualified students of all Churches.

As the only College in India granting a Theological Degree a large number of students are now resident in the splendid College Buildings. In Arts, the College prepares for the Calcutta Arts Examinations. *Principal* : Rev. G. Howells, M.A., B.D., B.LITT., PH. D.

A Vernacular Theological Institute likewise attaches to Serampore. There is an institute also at Cuttack, for the training of Indian preachers and Bible schools in several centres.

There are 9 or 10 purely English Baptist Churches connected with the Society, but English services are carried on in many of the stations where an European population obtains. Medical work connected with the Society reported 5 Hospitals, 8 Dispensaries, and about 64,800 out-patients for the year 1922. Two large Printing Presses for both English and Vernacular work are conducted at Calcutta and Cuttack. The Secretaries of the Mission are the Rev. John Reid and W. Craig Eadie, Esq., 48, Ripon Street, Calcutta.

The Headquarters of the Mission are at 19, Furnival Street, Holborn, London. The total income for 1920 of the Society amounted to £267,338.

THE CANADIAN BAPTIST MISSION.—Was commenced in 1873, and is located in the Telugu Country to the north of Madras, in the Kistna, Godavari, Vizagapatam and Ganjam Districts. There are 22 stations and 313 outstations with a staff of 96 missionaries, including 6 qualified physicians, and 989 Indian workers, with Gospel preaching in 1,400 villages. Organised Churches number 79, communicants 15,100 and adherents 20,409 for the past year. Nine Churches are entirely self-supporting. In the Educational department are 390 village day schools, with 13,145 children, 13 boarding schools, 2 High schools, a Normal Training school, a Theological Seminary providing in all for 1,000 pupils, and an Industrial school. There are 6 Hospitals and two leper asylums. The Mission publishes a Telugu newspaper. Village Evangelisation is the central feature of the Mission, and stress is laid upon the work amongst women and children. During the last decade membership has increased by 52 per cent., the Christian community by 50 per cent., and scholars by 500 per cent. The Indian Secretary is the Rev. Gordon P. Barss, Tekkali, Ganjam District.

THE AMERICAN BAPTIST TELUGU MISSION.—Was commenced in the year 1836, and covers large parts of Nellore, Guntur, Kistna, and Kurnool Districts, parts of the Deccan and an important work in Madras and the surrounding vicinity. Its main work is evangelism, but there are also Educational and Medical Institutions of importance. Industrial Settlement work for the Erukalas is carried on at Kavali and vicinity. Industrial departments are maintained also in connection with the Mission High School at Nellore, and the Mission High School at Kurnool. Organized Telugu Churches number 184, with 75,841 baptized communicants. There are 95 missionaries, and 1,886 Indian workers. The mission maintains in cooperation with the Canadian Baptist Mission a Union Theological Seminary at Ramapatnam for the training of Indian preachers. A bible Training School for the training of Telugu women is located in Nellore. A total of 27,794 receive instruction in 879 primary schools, 13 secondary schools and 4 High schools. In Medical work 7 Hospitals and 7 Dispensaries report 2,881 in-patients, 55,077 out-patients, and 122,482 treatments during the year.

Secretary : Rev. S. W. Stenger, Nandyal.

AMERICAN BAPTIST FOREIGN MISSION SOCIETY, organized in 1814, has Missions in Burma begun 1814; Assam 1836; Bengal and Orissa 1836; South India 1840. It owes its rise to the celebrated Adoniram Judson. Until 1910 the Society was known as the American Baptist Missionary Union. There are 33 main stations in Burma, 12 in Assam, 10 in Bengal and Orissa, 25 in South India, besides hundreds of outstations. All forms of missionary enterprise come within the scope of the Society.

The missionary staff numbers 450 in all, with an Indian workers' staff of 5,713. Communicants number 176,620. Organized churches number 1,500 of which 880 are self-supporting. Educational work is conducted on a large scale, the total number of schools of all grades being 2,147 with over 60,121 pupils. The Christian College has 125 students in col-

lege classes. There are twenty High Schools with 4,423 pupils.

Medical work embraces 15 Hospitals and 32 Dispensaries, in which 75,739 out-patients and 4,582, in-patients were treated last year.

Indian Christians contribute annually more than Rs. 5,47,861 for religious and benevolent work within the Mission.

The great work of the Mission continues to be evangelistic and the training of the native preachers and Bible-women, and extends to many races and languages, the most important of which, in Burma, has been the practical transformation of the Karens, whose language has been reduced to writing by the Mission. The work in Assam embraces 9 different languages, and large efforts are made amongst the employers on the tea plantations. There are 12 Theological Seminaries and training schools with 765 pupils. The Mission Press at Rangoon is the largest and finest in Burma.

Assam Secretary, Rev. A. J. Tuttle, Gauhati, Assam.

Burma Secretary, Rev. Walter E. Wiatt, 15, Mission Road, Rangoon, Burma.

Bengal and Orissa Secretary, Rev. Harold I. Frost, Balasore, Orissa.

South India (or Telugu) Secretary, Rev. W. J. Longley, Ramapatnam, S. India.

THE TASMANIAN BAPTIST MISSION.—With 2 missionaries, established at Serajgunge, E. Bengal.

Secretary: Rev. T. C. Kelly, Mission House, Serajgunge.

THE AUSTRALIAN BAPTIST FOREIGN MISSION.—Embracing the societies representing the Baptist Churches of the States of the Australian Commonwealth. The field of operations is in East Bengal. The staff numbers 35 Australian workers. There are 1,927 communicants and a Christian community of 4,143.

Secretary, Field, Council: Rev. H. J. Sutton, M. A., Mymensingh.

THE STRICT BAPTIST MISSION.—Has 11 European Missionaries, and 102 Indian Workers in Madras, and Salem District. Communicants number 225; organised Churches 5; elementary schools 32, with 1,500 pupils.

Secretary: Rev. E. A. Booth, Kilpauk, Madras, W.

AMERICAN BAPTIST, BENGAL-ORISSA MISSION commenced in 1836. Area of operation: Midnapore district of Lower Bengal and Balasore district of Orissa. Mission staff 32, Indian workers 321. One English Church and 21 Vernacular Churches, Christian Community 5,000. One hospital and two dispensaries. Educational: One Theological and one High School, and 129 Elementary schools, pupils 3,883. One Industrial school for weaving and carpentering, &c. The Vernacular Press of this mission printed the first literature in the Santali language.

Secretary: Rev. Harold I. Frost, Balasore, Orissa.

PRESBYTERIAN SOCIETIES.

THE IRISH PRESBYTERIAN CHURCH MISSION.—Operates in Gujerat and Kathiawar with a staff of 37 Missionaries of whom 4 are qualified doctors and an Indian staff of 340 including school teachers. There are 11 Organised Churches, a communicant roll of 1,691, and a Christian community of 6,759. In Medical work there are 3 Hospitals, 5 Dispensaries, with 792 in-patients and 12,413 out-patients. The Mission conducts 2 High schools, 1 Anglo-Vernacular school, and 123 vernacular schools affording tuition for 5,978 pupils, 4 Orphanages, a Divinity College at Ahmedabad, a Teachers' Training College for men, a Teachers' Training College for women, both at Ahmedabad, and a Mission Press at Surat. The Mission has made a speciality of farm colonies, of which there are about a score in connection with it, most of them thriving.

The Jungle Tribes Mission with 7 missionaries is a branch of the activities of the above, working in the Panch Mahals and Rewa Kantha districts, with farm colonies attached.

Secretary: Rev. Hamilton Martin, B.A., Mission House, Ahmedabad.

THE UNITED PRESBYTERIAN CHURCH OF NORTH AMERICA.—The Sialkot Mission of the above Church was opened at Sialkot, Punjab, in 1855. It is now carrying on work in ten districts of the province and one in the N. W. F. Provinces. Its missionaries number 126, and its Indian workers 734. Its educational work comprises one Theological Seminary, one College, five High Schools, one Industrial School, eight Middle Schools, and 208 Primary Schools. The total enrolment in all schools was 13,758 in 1921. The Mission is also carrying on Medical work through five hospitals and eight dispensaries. The total Christian Community in connection with the Mission is 71,380.

Secretary: W. H. Merriam, M.A., Gujranwala, Punjab.

THE AMERICAN PRESBYTERIAN MISSION operates in 3 main sections known as the Punjab, North India and Western India Missions. The American Staff (including women) numbers 243, and the Indian Staff 1,343. There are 33 main stations and about 210 out-stations. Organized churches number 78, 22 of which are self-supporting. There are 10,701 communicants and a total baptized community of 80,640. Educational work as follows: 2 Men's Colleges, and an interest in the Isabella Thoburn and the Kinnaird Colleges for women, students 1,210; Theological Schools 2, students 35; Training Schools for village workers 2, students 233; High Schools 14, students, 1,424; Industrial Schools 6, Agricultural Demonstration Farms 4; Teachers' Training Departments 7; The Miraj Medical School and an interest in the Ludhiana Medical School for women, students 50; Elementary Schools 248; Schools of all grades 293, pupils 11,559. Medical Work: Hospitals 6; Dispensaries 14. Sunday Schools 319 with 11,487 pupils. Contributions for Church and Evangelistic work on the part of the Indian Church Rs. 37,227.

The Hospital at Miraj, under the care of Dr. W. J. Wanless and Dr. C. E. Vell, is well known throughout the whole of S. W. India, and the Forman Christian College at Lahore under the principalship of Rev. E. D. Lucas, D.D., is equally well-known and valued in the Punjab. The Ewing Christian College (Dr. C. A. R. Janvier, Principal) has grown rapidly in numbers and influence.

Secretary of Council of A.P. Missions in India Rev. H. D. Griswold, D.D., Ph.D., Lahore.

Secretary, Punjab Mission: Rev. C. H. Rice, M. A., Lahore.

Secretary, North India Mission: Rev. W. T. Mitchell, M. A., Mainpuri, U. P.

Secretary, Western India Mission: Rev. M. W. Strahler, M.A., Kolhapur.

THE NEW ZEALAND PRESBYTERIAN MISSION.—Commenced as recently as 1910 at Jagadhri, Punjab.

Secretary : Miss M. Salmond, M. A., Jagadhri.

THE CANADIAN PRESBYTERIAN MISSION.—Commenced in 1877 ; has 15 main stations in the Indore, Gwalior, Rutlam, Dhar, Alirajpur, Barwani, Jobat, Jaora, Sitamau, Banswara and other Native States. The Mission staff numbers 85 ; Indian workers 290 ; Organised Churches 14 ; Communicants, (Sept. 30, 1921) 1,248 ; Baptised non-communicants, 2,827 ; unbaptised and catechumens 399. Total Christian Community 4,474.

Educational work comprises Elementary and Middle Schools, High Schools for boys and girls, College, Theological Seminary and Classes. Industrial teaching and work are done in the three Girls' Boarding Schools and in Rasalpura Boys' School. Technical and practical training is given in Printing, Weaving and Carpentry. The Medical work is large. There are two General Hospitals, where both men and women are treated, and five Women's Hospitals.

Secretary:—The Rev. J. S. Mackay, B.A., Neemuch, Central India.

THE WELSH CALVINISTIC METHODIST MISSION (OR WELSH PRESBYTERIAN MISSION) established in 1840 with a staff of 32 Missionaries, 600 Native workers occupies stations in Assam in the Khassia and Jaintia Hills, the Lushai Hills and at Sylhet and Cachar. The Khassia language has been reduced to writing, the Bible translated, and many books published in that language by the Mission. A large amount of literature has been produced in the Lushai language also. In 1921, Communicants numbered 21,457 ; the total Christian community 60,088 ; organised Churches 571; self-supporting Churches 35. Elementary schools number 555, scholars 17,673 ; Boarding schools 3, scholars 820, in addition to 1 Industrial school, 4 Training institutions and 1 Theological Seminary. Two Hospitals and 3 Dispensaries provided for 10,000 patients in 1920.

Secretary : Rev. T. W. Rees, Silchar.

THE ARCOT MISSION of the Reformed Church in America (Dutch), organised in 1853 occupies the North and South Arcot and Chittoor districts in S. India with a staff of 48 Missionaries, and 708 Indian ministers and workers. Churches number 17, Communicants 4,462 ; total Christian community 22,630 ; Boarding schools 11, scholars 842 ; Theological school 1, students 27 ; Voorhus College, Vellore, students 140. High schools 4, Scholars 2,070 ; Training schools 2, students 145 ; Industrial schools 2, pupils 95 ; Elementary schools 224, scholars 6,665. Three Hospitals, 7 Dispensaries with staff of 68 provided for 2,905 in-patients and 50,000 out-patients for the past year.

The Union Mission Medical College for South India and a Union Mission Training School are located at Vellore, the headquarter of the Mission. The Union Mission Tuberculosis Sanitarium for S. India is near Madanapalle, Arogivaram P. O., Chittoor Dist.

Secretary: Rev. H. J. Scudder, M.A. & B. D, Madanapalle, S. India.

CONGREGATIONAL SOCIETIES.

THE AMERICAN BOARD OF COMMISSIONERS FOR FOREIGN MISSIONS.—Has two large Missions, the American Marathi Mission, and the Madura Mission. The Marathi Mission includes a large part of the Bombay Presidency, with centres at Bombay, Ahmednagar, Satara and Sholapur, and was commenced in 1813, the first American Mission in India. Its activities are large and varied. The staff at the beginning of 1922 consisted of 51 missionaries and 608 Indian workers operating in 198 outstations exclusive of Bombay City. Organised Churches number 71 with 8,986 communicants, and 7,401 adherents. There is a Leper work at Sholapur. The Educational work embraces 13 training and secondary schools, with 867 pupils and 174 primary schools, with 7,781 pupils, three-fifths of whom are non-Christians. A Theological College at Ahmednagar trains for the Indian Ministry. Zenana work and Industrial work are vigorously carried on, the latter embracing carpentry, lace work and carpet weaving. A school for the blind is conducted on both Educational and Industrial lines. 33,000 patients were treated in the Hospitals and Dispensaries of the Mission last year, Special evangelistic work is carried on amongst the tribes known as the Bhils and Mangs. This Mission was the first to translate the Christian scriptures into the Marathi tongue. At Sholapur, a settlement for Criminal Tribes is carried on under the supervision of Government. *Secretary* : Rev. Alden H. Clark, M.A., Ahmednagar.

THE MADURA MISSION.—In the South of the Madras Presidency, commenced in 1834, has a staff of 63 missionaries and 910 Indian workers, operates in the Madura and Ramnad districts and has a communicant roll of 9,142 and a total Christian community of 26,724 and 32 organised churches, most of which are entirely self-supporting and self-governing. Schools number 292 with 14,923 pupils. There is a Christian College at Madura, high and training Schools for Girls as also Hospitals for men and women; at Pasumalai are a High School, Theological Institution, Trade School, Teachers' Training School and Printing Press. The Secretary is the Rev. John J. Banninga, D. D., Pasumalai.

The ARCOT MISSION commenced under the American Board was transferred to the Reformed Church of America in 1851.

THE SCANDINAVIAN ALLIANCE MISSION OF NORTH AMERICA.—Embraces two Branches, one in Bengal and the other in Khandesh. The total mission staff is represented by 12 missionaries and 20 Indian workers. There are 62 communicants and a Christian community of 158. Ten Elementary Schools provide for 200 pupils.

Secretaries: Rev. J. S. Otteson, Navapur, Khandesh, and Miss H. Abrahamson, Domar, Bengal.

THE SWEDISH ALLIANCE MISSION.—Working among the Bhils in West Khandesh has 27 missionaries and 64 Indian workers. There are 8 congregations with a total membership of 841, of whom 326 are communicants. There are 13 Elementary Schools, and 4 School Homes. The pupils in all schools are 331.

Secretary: Miss Emma Johanson, Dhanora *via* Nandurbar, West Khandesh.

THE FREE CHURCH MISSION OF FINLAND.—The total Mission Staff is represented by six Missionaries and 14 Native workers. There are about 120 communicants, five Churches and a Christian Community of about 200. There is one middle school and three day schools. Medical work is carried on, also industrial work (weaving).

Acting Secretary: Miss Kronguist, Lachung; *via* Gangtok, Sikkim.

THE LONDON MISSIONARY SOCIETY.—Commenced work in India in 1798 and occupies 10 centres in N. India, 12 in S. India and 7 in Travancore. The Mission engages in every form of Missionary activity. The European staff numbers 160, Indian workers 2,128; Organised Churches 520; Communicants 17,456 and Christian Community 115,068. There are 4 Christian Colleges, students 159; 5 Theological Institutions, students 70; 4 Training Institutions, pupils 114; 22 High schools, pupils 4,849; 25 Boarding schools, scholars 1,167; 9 Industrial schools, pupils 116 and 862 Elementary schools with 36,775 scholars. In Medical work Hospitals number 23, Dispensaries 14, qualified doctors 9 (European), 41 Assistants and 3,971 in-patients and 174,898 out-patients for the year.

The main centres of the Mission in N. India are at Calcutta, Benares and Almora. The Bhowanipur Institution at Calcutta is now a Teachers' Training College. Evangelistic work is carried on amongst the thousands of pilgrims visiting Benares and Almora is noted for its Hospital and Leper Asylum. Special efforts are made amongst the Nama Sudras and the aboriginal tribes known as the Majhwars, Cheros and Pankas. The S. India district is divided into the Kanarese, Telugu, Tamil and Malayalam with 12 stations and 472 outstations. At Nagercoil (Travancore) is the Scott Memorial College with 985 students, a Church and congregation said to be the largest in India, and a large Printing Press, the centre of the S. Travancore Tract Society.

N. India Secretary: Rev. J. H. Brown, B.A., B.D., Calcutta.

S. India Secretary: Rev. Geo. Wilkins, Bangalore City.

ALL-INDIA MISSIONS.

THE CHRISTIAN AND MISSIONARY ALLIANCE.—Dates from the year 1893 under the name of the International Missionary Alliance, but a number of its missionaries were at work in Berar Province much earlier. The work is confined to the provinces of Berar, Khandesh and Gujarat. There is a staff of 72 missionaries and 155 Indian workers. The number of Mission stations is 20, with additional outstations. There is a Christian Community of 2,870 people. There are 4 orphanages, 2 for boys and 2 for girls: 2 training schools for Indian workers, and 1 English congregation at Bhusawal. *Chairman, Treasurer* and *Secretary*:—Rev. W. Moyser, Akola, Berar, C. P.

THE CHURCH OF THE BRETHREN (AMERICAN)—Opened work in 1895, and operates in Broach, Surat and Thana Districts, also in Baroda and Rajpipla States. Its staff number 50 foreign workers including missionaries' wives, and 270 Indian workers. The Baptized (immersed) membership stands at 2,916. Education is carried on in 6 Girls' Boarding Schools, 8 Boarding Schools for Boys, and 81 Village Day Schools and 44 Village Night Schools. Females under instruction number 779, Males 2,639, under total instruction 3,418. Of this number 883 are supported in Boarding Schools and 96 in Training Schools and other institutions of learning. There are 200 teachers of which 58 are women. There are 91 Sunday Schools having 177 teachers and a total enrolment of 3,286. There were 28,422 calls at mission dispensaries in 1922. The foreign medical staff consists of three doctors and four nurses. At Umalla, Rajpipla State, there is a Home for Babies with 26 inmates. Industrial work is carried on in six of the Boarding schools, and an Industrial Normal Training Institution is under construction at Ankleśvar. Evangelistic, Temperance, and Publicity work receives due emphasis; the "Gujrati Sunday School Quarterly" (1800 copies) and the "Prakash Patra," a Christian monthly of 800 copies are published.

THE POONA AND INDIAN VILLAGE MISSION.—Founded in 1893 and for 28 years directed by Mr. Charles F. Reeve. On his retirement in January 1921, a Field Council took charge of operations and continue work in the Poona, Satara and Sholapur districts with 21 European and 38 Indian workers. Indian Christians associated with the work number 64. The main work is evangelistic in the villages, with women's zenana work and schools. Medical work is conducted at Pandharpur and Lonand and a hospital is in use in Pandharpur. The Headquarters are at Nasrapur, Poona Dist. *Chairman of the Field Council*: N.L. Gooden. *Secretary*: J. W. Stothard, Nasrapur.

THE AMERICAN CHURCHES OF GOD MISSION.—Has two missionaries at Bogra, Bengal.

THE INDIAN CHRISTIAN MISSION.—Founded in 1897, has 31 Organised Churches, 10 Missionaries, 24 stations, 41 out-stations, 1,392 Communicants, 30 Primary schools and two Industrial Schools in the Ellore district, S. India, stations also in Berenag, Kumaon, N. India, and Nuwara Eliya, and Polgabawella, Ceylon. Total Christian Community, 5,848. *Director*: Rev. A. S. Paynter, *(on furlough)*; H. T. Roper (acting), Nuwara Eliya, Ceylon.

THE CHURCH OF THE NAZARENE MISSION.—Has its headquarters for Western India at Buldana, Berar, where it has a boys' boarding school for training Native preachers and a girls' school for training Bible women. This mission has 3 stations in Thana District, namely Khardi, Vasind and Murbad. There is a total force of 12 missionaries at present in this part of India, also 28 native preachers and Bible Women.

District Superintendent:—K. Hawley Jackson, Buldana, Berar.

The headquarters for Eastern India are at Kishorganj, Mymensingh District with an orphanage and a force of 7 missionaries; also about 11 preachers and Bible women. This totals 19 missionaries and 39 native preachers and Bible women for the Church of the Nazarene in India.

District Superintendent: F. E. Blackman, Kishorganj, Mymensingh District.

THE TANAKPUR AND LOHAGHAT BIBLE AND MEDICAL MISSION—Was established in 1910. It is now carried on in Tanakpur and District only, that neighbourhood having again been attached to the Naini Tal District in Kumaon. *Address*: Tanakpur, Rohilkhand and Kumaon Railway, United Provinces.

THE HEPHZIBAH FAITH MISSIONARY ASSOCIATION—Has six missionaries. *Agent:* D. W. Zook, Adra, B. N. Ry.

THE TIBETAN MISSION—Has 4 Missionaries with headquarters at Darjeeling, and Tibet as its objective. *Secretary*: Miss J. Ferguson, Darjeeling.

THE INDIAN MISSIONARY SOCIETY OF TINNEVELLY (DORNAKAL MISSION)—Opened in 1904 operates in the Warangal District of the Nizam's Dominions. It is the missionary effort of the Tamil Christians of Tinnevelly. There are now 3,200 Christians in 92 villages. *Secretary*: Rev. Samuel Pakkianathen, Palamcottah.

THE MISSION TO LEPERS—Founded in 1874, is an inter-denominational and international Society for the establishment and maintenance of Asylums for Lepers and Homes for their untainted children, working in 12 countries but largely in India, China and Japan. Its work in India is carried on through co-operation with 33 Missionary Societies. In India alone the Mission now has 42 Asylums of its own with over 5,000 inmates and is aiding or has some connection with work for lepers at 21 other places in India. Altogether in India over 7,000 lepers are being helped. In the Mission's own and aided asylums in India there are nearly 4,000 Christians.

An important feature of the work of the Mission is the segregation of the untainted or healthy children of lepers from their diseased parents. Nearly 600 children are thus segregated and saved from becoming lepers.

Most of the Mission's income is received from voluntary contributions. Some funds are raised in India, but the bulk of the money expended by the Mission in India, was received from Britain, although the Provincial Governments give regular maintenance grants.

There is an Indian Auxiliary of the Mission to Lepers, of which H. E. Lady Lloyd who represents the Bombay Presidency is a Vice-President.

The General Secretary of the Mission is Mr. W. H. P. Anderson, 33, Henrietta St., Covent Garden. London, W.C. The Rev. Frank Oldrieve, Secretary for India, is in England, and the Acting Secretary for India is Mr. A. Donald Miller, Purulia, Behar.

THE REGIONS BEYOND MISSIONARY UNION.—An interdenominational Society commenced work at Motihari, Behar, in 1900, and now occupies 6 stations and 7 outstations in the Champaran and Saran Districts, with a staff of 15 Europeans, and 40 Indian workers. There are 21 Elementary schools, with 540 pupils, a Girls' and a Boys' Orphanage and Boarding school, communicants number 60.

THE NATIONAL MISSIONARY SOCIETY OF INDIA—Established 1905, it has a staff of 20 Indian Missionaries and 55 helpers and Volunteers operates in Montgomery District (the Punjab), Nukkar Thasil (U. P.), Haluaghat, Mymensingh District (Bengal), Rewah State (C. I.), Jarsaguda (B. & O.) North Kanara (Bombay), Karjat—Karmala Talukas (Bombay), and Tirupattur Taluk (N. Arcot). Christian community over 5,000. Eighteen Elementary schools and one High School. Two Dispensaries and one Hospital. Annual expenditure Rs. 50,000. Supported by Indian Christians of all denominations and Provinces. Organ: *The National Missionary Intelligencer* (a monthly journal in English sold at Re. 1 per year post free).

General Secretary: Mr. P. O. Phillip, B.A., N.M.S. Office, Vepery, Madras.

THE SEVENTH DAY ADVENTISTS.—Established in India in 1895. Work carried on in English, Hindi, Urdu, Punjabi, Bengali, Santali, Tamil, Telugu, Malayalam, Marathi, Gujarati, Burmese and Karen, including schools, dispensaries and evangelical stations and a publishing house. *President*: W. W. Fletcher; *Secretary* and *Treasurer*: A. H. Williams, Post Box 15, Poona.

THE AMERICAN MENNONITE MISSION.—Established 1899, works in the C. Provinces. Mission staff numbers 23, Indian workers 80, Church members 1,400, 1 Industrial Training Institution, 1 High School, 2 Vernacular Middle Schools, 1 Men's Home, 2 Homes for untainted children of lepers, 1 Bible School, 2 Orphanages, 1 Widows' Home, 1 Leper Asylum; Elementary Schools, 8; Dispensaries, 6.

Secretary: Rev. A. C. Brunk, Dhamtari, C. P.

THE GENERAL CONFERENCE—MENNONITE MISSION—Started in 1901 in the C. Provinces. Workers number 17; Leper, Medical, Orphan, Zenana, Evangelistic and educational work carried on. *Secretary*: Rev. P. W. Penner, Janjgir, C. P.

THE KURKU AND CENTRAL INDIA HILL MISSION—Established 1890 in the C. P. and Berar, has a mission staff of 14, Indian workers 22; Churches 6, Communicants 105; Christian community 209; 2 Boarding schools with 95 boarders and 5 Elementary schools. *Secretary*: Rev. Carl Wyder, Ellichpur, Berar, C. P.

THE CEYLON AND INDIA GENERAL MISSION—Established 1892, occupies stations in India in the Coimbatore and Anantapur Districts and also stations in Panadura, Ceylon. Mission staff 31; Indian workers 110; Churches 11, with Communicants 489, and Christian community 1,354; Orphanages 4; Elementary schools 31 pupils 744.

Secretary: Mr. A. Scott, Kadiri, Anantapur District.

THE BOYS' CHRISTIAN HOME MISSION—Owes its existence to a period of famine, was commenced in 1899. Mission staff 9, Indian workers 60. There are elementary schools with three orphanages, two boys and one girl, and a Widows' Home, where Industrial training is given. There are four main stations—At Dhond, in the Poona District and at Babraich, Orai and Benares in United Provinces. There are also 14 out-stations. *Director*: Rev. Norton Dhond, Poona District.

Ladies' Societies.

ZENANA BIBLE AND MEDICAL MISSION.—This is an interdenominational society, with headquarters,33, Surrey Street, London, working among women and girls in seven stations in the Bombay Presidency, 10 in United Provinces, and 3 in the Punjab. There are 82 European Missionary ladies on the staff and 39 Assistant Missionaries, 212 Indian teachers and nurses and 77 Bible women. During 1922 there were 2,646, in-patients in the five hospitals supported by the Society (Nasik, Benares, Jaunpur, Lucknow and Patna), but the Victoria Hospital, Benares, was closed. There were 24,181 out-patients, 80,731 attendances at the Dispensaries. In their 41 schools were 3,295 pupils, and there is a University Department at Lahore. The evangelistic side of the work is largely done by house to house visitations and teaching the women in Zenanas; 1,291 women were regularly taught and 592 houses were visited. The 77 Bible women visited 392 villages; the number of houses was 592.

WOMEN'S CHRISTIAN MEDICAL COLLEGE, WITH WHICH IS INCORPORATED THE PUNJAB MEDICAL SCHOOL FOR WOMEN.—In 1894 the North India School of Medicine for Christian Women was opened in Ludhiana in order to give a Medical Education under Christian influences to Indian Women. Doctor Edith Brown, M. A., M. D. was its Founder and Principal. The School was Interdenominational, and trained students for various Missionary Societies.

Clinical work was at first given at the Charlotte Hospital, which belonged to the Ludhiana Zenana and Medical Mission. The Memorial Hospital was opened in 1900, and has now 180 beds. In 1913 Non-Christian Students were also admitted for training, and the name was modified to its present title given above.

In 29 years 116 Medical Students have qualified as Doctors, over 50 as Compounders, over 120 as Nurses. and over 150 as Dais. Plans are now on hand to enlarge both Hospital and College considerably.

THE MISSIONARY SETTLEMENT FOR UNIVERSITY WOMEN was founded in Bombay in 1895 to reach the higher class of Indian ladies, its activities now include a hostel for women students, in addition to educational, social, and evangelistic work, and a Holiday House for students and other ladies at Jahbordi-Gholvad, B. B. & C. I. Ry. *Warden*: Miss Gedge, Bebsch Street, Jacob Circle, P. O., Bombay.

THE MUKTI MISSION, the well-known work of the late Pandita Ramabai, enables upwards of 850 widows, deserted wives and orphans to earn a comfortable living by means of industrial work organised by the Pandita, supported by a good staff of Indian helpers. A staff of 12 European workers do evangelistic work in the surrounding Kedgaon, Poona District.

Disciple Societies.

The India Mission of the Disciples of Christ (Foreign Christian Missionary Society of Cincinnati, Ohio, and Christian Women's Board of Missions of Indianopolis combined) commenced work in 1882; its area Central and United Provinces; number of Indian Churches 14, and immersed communicants 18,450. The Christian Constituency numbers 2,945. Its staff, including Missionaries' wives, 76; Asst. missionaries 2 and Indian Workers' staff 319. There are 8 Hospitals, 13 Dispensaries, with 109,994 in-patients and out-patients for the past year. Two Orphanages and an Industrial Home show 536 inmates, and one Boarding School for girls and two hostels for boys, 664 inmates. Two leper asylums with 95 inmates. Tubercular Sanatarium at Pindra Road: 44 in-patients during year. In connection with the industrial work a farm of 400 acres has been taken at Damoh, an Industrial School at Damoh which teaches carpentry, needle work industry at Kulpahar which did Rs. 6,200 worth of business last year. Printing work at Jubbulpore 3,000,000 pages of Christian Literature last year. There are 8 Middle schools, 34 Primary schools with 2,017 scholars; 2 Boarding schools, with 300 students. An active zenana work is carried on, and there is a home for women and children.

The Australian branch has three Mission stations in Poona District. The Great Britain and Ireland branch has two mission stations, one in Mirzapur District, U. P., and one in Alamau District, Orissa. These have no organic connection with the India Mission of the Disciples of Christ.

Secretary: Rev. W. B. Alexander, Jubbulpore, C.P.

Undenominational Missions.

THE CENTRAL ASIAN MISSION, with a Church, Dispensary and School is found on the N.-W. Frontier, conducted on the lines of the China Inland Mission, and has Kafristan as its objective.

THE FRIENDS' FOREIGN MISSION ASSOCIATION works in five stations of the Hoshangabad Division of the Central Provinces, and in two of the adjacent Bhopal State, and has also some work going on in that of Gwalior. There are 7 Churches, 15 missionaries, 193 members in full communion, 1,060 Christian adherents, Boarding Schools for Boys and Girls, 1 Anglo-Vernacular School, 14 Day Schools, 2 Hospitals with Dispensaries attached; in addition to a self-supporting weaving community at Itarsi and a Farm Colony at Makoriya, in Hoshangabad District. *Secretary*: Mr. A. Taylor, Sehore Cantonment, C. I.

THE AMERICAN FRIENDS' MISSION with 5 Missionaries is working at Nowgong. *Secretary:* Miss E. E. Baird, Nowgong, C. I.

THE OLD CHURCH HEBREW MISSION was established in 1858, in Calcutta, and is said to be the only Hebrew Christian Agency in India. *Secretary*: The Rev. Walter Plant, 11, Mission Row, Calcutta.

THE OPEN BRETHREN—Occupy 46 stations in the U. Provinces, Bengal, S. Mahratta, Godaveri Delta, Kanarese, Tinneveily, Malabar Coast, Coimbatore and Nilgiri Districts. They hold an annual Conference at Bangalore.

Lutheran Societies.

THE AMERICAN EVANGELICAN LUTHERAN MISSION. General Council, founded in 1844 for the Godaveri and Kistna Districts, has its Headquarters at Rajahmundry. Its staff consists of 24, including Missionaries' wives and Lady Doctors, with 1,692 Indian Workers. The membership is 34,901. There are Boys' and Girls' Central Schools, Mission Press, a well-equipped hospital and Book Depot at Rajahmundry, and a High School at Peddapur and another at Bhimavaram, since November 1918 the two American Lutheran Missions at Guntur and Rajahmundry have been amalgamated, existing as two Conferences now. *Chairman*: The Rev. E. Neudoerffer, Bhimavaram.

The General Synod Section of the above has its headquarters in Guntur, founded in 1842. Its Christian Community numbers 63,301 with 21,969 communicants, 32 missionaries inclusive of wives and 1,132 Indian workers. The following institutions are connected with the Mission: a second grade College, High School for Girls, Hospital for women and children, School for the Blind, Normal Training School, and Industrial School. *Secretary*: The Rev. J. R. Strock, Guntur.

THE EVANGELICAL NATIONAL MISSIONARY SOCIETY OF STOCKHOLM, SWEDEN, founded in 1856, occupies the districts of Saugor, Betul, and Chindwara in the Central Provinces. There are about 1,900 Church members constituted into an indigenous Church with 12 local congregations. The European and Indian Staff numbers 24 and 154 respectively. One Theological Seminary for training catechists and pastors, and one training school for training Bible Women. 38 Day Schools with 1,442 children. 35 Sunday Schools with 1,121 children. 10 Dispensaries with 39,068 patients during 1922. 3 Workshops, one of them with an aided Carpentry School. One Female Industrial School, one Widows' Home, 5 Orphanages and one Boarding School for Christian Children. At the end of 1922 there were 165 boys and 218 girls in these institutions.

Chairman and Secretary: Rev. P. E. Froberg, Chhindwara, C. P.

THE KANARESE EVANGELICAL MISSION with Headquarters at Mangalore, South Kanara, was organised on January 1st, 1919, to take over the Mission work done formerly by the Basel German Evangelical Mission in two of her fields, namely, the Districts of South Kanara and South Mahratta. The missionaries and the majority of the Funds come from Switzerland. Part contributions are received from the late Basel Mission Industrial Department, now under British ownership and management as the "Commonwealth Trust Limited." The Mission has 12 chief stations and 56 outstations with a total missionary staff of 30 and 360 Indian workers. There are 66 organised congregations with a total membership of 11,383, which gave last year Rs. 13,486 for church and mission work. Educational work embraces 66 schools, of which there are 3 High Schools. The students number 7,902.

Medical work is done at Betgeri with a full staff and a hospital and two branch hospitals and dispensaries. A women's and children's hospital has been opened in June 1923 at Udipi.

The Mission maintains a Home-Industrial department for women's work, and a large Publishing department at Mangalore with a bookshop and a printing press occupying some 150 hands and doing work in many languages. *Secretary:* Dr. P. de Benoit, Mangalore.

THE CHURCH OF SWEDEN MISSION—Was founded in 1874. Operated till 1915 in the Madura, Tanjore, Trichinopoly and Ramnad Districts. Since 1915 the Mission having taken full charge of the former Leipzig Evangelical Lutheran Mission field, works also in the Madras, Chingleput, Coimbatore, Salem and S. Arcot Districts with diaspora congregations in Rangoon, Penang and Colombo. European staff numbers 30, ordained Indian Ministers 41; Indian workers 83; organised churches 42; Baptised membership 22,616; Schools 321; pupils 16,292 (12,780 boys and 3,512 girls); and teaching staff 755. *Secretary:* Rt. Rev. Bishop E. Heuman, D.D., Trichinopoly.

THE MISSOURI EVANGELICAL LUTHERAN MISSION—is located in North Arcot, Salem, Tinnevelly, Travancore and the Kolar Gold Fields, with 20 missionaries, 1 doctor, 3 nurses (American), 1 Zenana worker and 1 Lady educationist. Besides the three Training Institutes there are 1 High School at Ambur and among the Elementary schools three are complete *Higher* Elementary. In addition to evangelistic and educational work, the Mission has now an up to date Dispensary and Lying-in Hospital with 18 beds in Ambur and a dispensary in Barqur (Salem). *Secretary*: Rev. T. Gut-Knecht, Nagercoil, S. Travancore.

THE DANISH EVANGELICAL LUTHERAN MISSION.—Established 1863 in South Arcot, working there and in North Arcot, on the Shevaroy Hills and in Madras, has a total staff of 214 Indian and 45 European workers, Communicants 1,050, Christian community 3,000, 1 High School, 2 Boarding Schools, 4 Industrial Schools, Elementary Schools 58, total scholars 3,484. *Chairman*: Rev. J. Bittmann, 38, Broadway, Madras.

THE SANTAL MISSION OF THE NORTHERN CHURCHES (formerly known as the India Home Mission to the Santals)—Founded in 1867, works in the Santal Parganas, Goalpara (Assam), Malda and Dinajpur. Work is principally among the Santals. The mission staff numbers 27; Indian workers 480; communicants 4,000; Christian community 23,000; organised churches 36; boarding schools 4; pupils 508; elementary schools 69; pupils 1,035; industrial schools 2; Orphanage 1; children 29. *Secretary*: Rev. P. O. Bodding,

MISSIONS AND ENEMY TRADING ACT.—In May 1918, the following notice regarding Missions was published in the "Gazette of India":—"The following missions or religious associations are declared companies under Act 2 (the Enemy Trading Act) of 1916:—The Leipzig Evangelical Lutheran Mission, Madras, the Hermansberg Evangelical Lutheran Mission, Madras, the Schleswig-Holstein Evangelical Lutheran Mission, Madras, the Gosner Evangelical Lutheran Mission of the United Provinces and Behar and Orissa, the German Evangelical Lutheran Mission of Ranchi, Behar and Orissa. The Governor-General in Council notifies that the powers conferred under Section 7 of the said Act shall extend to the property, movable and immovable, of these missions or religious associations."

In June, 1919, the Government of India stated:—"Effect is already being given to the suggestion that enemy missions in India should be taken over by British societies. The properties and undertakings of hostile missions have been vested in the Provisional Custodian of Enemy Property with a view to their transfer to boards of trustees composed partly of non-official members nominated by the National Missionary Council of India with the approval of the Government of India and partly of Government officials, and those Boards of Trustees will in due course transfer the undertakings and properties to a missionary society to be selected by them with the approval of the Governor-General in Council.

Methodist Societies.

The Methodist Episcopal Church is the organization in the United States of America which grew out of the Wesleyan revival in England and her American colonies during the latter part of the eighteenth century. This Church began its work in India in 1856, at first confining its activities to what is now the United Provinces. From that centre it spread until the outposts of its work were found in Baluchistan, Burma, Malaysia, Netherlands Indies and the Philippine Islands. In 1920 a rearrangement of the mission field of the Church separated India, Burma and Baluchistan into what is now known as the Southern Asia division. Within this present field the Church now has a total baptized Christian community of 426,546, of whom 35,340 were added the year ending with 1922.

The avowed task of the Church has been the uplift of the depressed classes, and its work has been largely among that class. As a matter of fact, however, it has large numbers who came from the Mohammedans and the caste Hindus, and among such its influence is extending.

The educational work of the Church is extensive, it having in this area a total of 1,627 schools of all grades, including three colleges twenty-two high schools, and numerous normal training and the logical institutions. The registered attendants in these schools number 46,750.

Special effort is made for the instruction and development of the young people of the Church, there now being 798 chapters of the Epworth League with 26,477 enrolled members, and 6,120 organized Sunday Schools with an enrolment of 196,363.

The publishing interests of the Church are represented in two presses at Madras and Lucknow, the former doing work in four vernaculars and the latter in six. The periodicals issued cover the interests of both the evangelistic and the educational field, the Indian Witness, the Junior Methodist and Methodist Education being in English, while the Kaukab-i-Hind, the Rafiq-i-Niswan, the Bal Hit Karak, and other periodicals for women and children are issued in several of the vernaculars, as are lesson helps of various grades for the Sunday Schools.

The governing body of the Church is the General Conferences held quadrennially, in which the ten conferences now existing in India are represented by twenty-six delegates. The polity of the Church in India looks forward to complete independence under the general governing body, there at present being but about three hundred and fifty American men and women as compared to 480 ordained and 2,200 unordained Indian and Burmese workers. At present the area is divided into seventy-two districts each in charge of a superintendent and among whom are many Indians. The work is supervised by four Bishops, elected by the General Conference, and resident as follows: Bishop Frank W. Warne, Lucknow; Bishop John W. Robinson, Bombay; Bishop Frederick B. Fisher, Calcutta; and Bishop H. Lester Smith, Bangalore.

The American Wesleyan Methodist Mission, Sanjan, Thana District Headquarters. Stations with missionaries, Danda Maroli, *via* Nargol, Thana District. Vapi (Daman Road Station), Surat District. Pardi, Surat District. Ten missionaries on field. Two on furlough. One under appointment. Four main stations Two boarding schools. One industrial school, One Bible school. Six village schools. *Superintendent*, C.B. Harvey, Sanjan, Thana District.

The Reformed Episcopal Church of American (Methodist) at Lalitpur and Lucknow, U. P., has 2 Missionaries, 4 Outstations, 2 Orphanages, and a membership of nearly 100.

THE WESLEYAN METHODIST MISSIONARY SOCIETY commenced work in India in 1817 (Ceylon in 1814). The Mission in India, apart from Ceylon, is organised into 8 District Synods with 2 Provincial Synods. There is a large English work connected with the Society, 20 ministers giving their whole time to Military work and English churches.

The districts occupied include 64 main stations in Bengal, Madras, Mysore, Bombay, Punjab, Central Provinces, Hyderabad (Nizam's Dominions), United Provinces and Burma. The European staff numbers 98 with 61 Indian Ministers and 615 Indian workers; Communicants 15,688, and total Christian community 68,892. There are 8 large numbers of organized Churches many of which are self-supporting.

Educational work comprises 3 Christian Colleges, students, 1,993; 5 Theological Institutions, students, 233; 10 High Schools, pupils, 4,524; 14 Industrial schools, pupils, 400; 707 Elementary schools, with 23,034 scholars. In Medical work there are 3 hospitals, 6 dispensaries, 1,033 in-patients and 43,227 out-patients. The Society expended over £35,000 on its Indian Missions in 1922.

The Women's Auxiliary carry on an extensive work in the places occupied by the men's society. There are 71 women workers from Britain of whom 9 are qualified doctors. The Indian women workers number 271. There are 116 girls' day schools with 13,377 pupils and 31 boarding schools with 1,979 boarders. There are several philanthropic institutions for the rescue and training of women. The Women's Auxiliary manage 12 hospitals and 3 dispensaries, which had 5,788 in-patients and 70,529 out-patients. The cost of the work to the Women's Auxiliary in 1922 was over £20,000.

Vice-Chairman of General Synod: Rev. D. A. Rees, Mysore.

The Woman's Foreign Missionary Society of the M. E. Mission is divided into 9 Conferences and is co-extensive with the main work of the Mission. 210 Lady Missionaries are engaged in Educational, Zenana, Evangelistic and Medical work. The Secretary for the Bombay Conference is Miss A. A. Abbott, B.A., Basim, Berar.

THE FREE METHODIST MISSION of North America—Established at Yeotmal, 1893, operates in Berar with a staff of 19 Missionaries and 42 Indian workers. Organised churches 4, 1 Theological school and 5 Elementary schools, and 2 Anglo-Vernacular schools and Dispensaries 3. *Secretary*: Rev. Elizabeth Moreland, Wun, Berar.

THE SALVATION ARMY.

For many years the operations of the Salvation Army in India were under the immediate direction of eight Territorial Commanders, in part responsible to Commissioner Booth-Tucker, as Special Commissioner for India, and in part to International Headquarters. The General recently decided to divide the country into four distinct Commands, each under its own Territorial Commissioner and directly responsible to International Headquarters.

Northern India.—The area under this command is the S. A. work in the whole of the Punjab and the United Provinces with Headquarters at Lahore.

In addition to an extensive evangelistic work in the Punjab, and in several centres in the United Provinces, there are a number of Settlements for the Criminal Tribes in the United Provinces (where this important work was first introduced) and several also in the Punjab.

In the Punjab is also situated an agricultural settlement consisting of a large village of 1,800 inhabitants who cultivate some 2,000 acres of land, in which they will gradually acquire proprietary rights, the Government having given it to the Salvation Army on easy terms. This is proving to be very successful.

Other industries include Weaving Schools, Agricultural, Dairy and Fruit Farms, Day and Boarding Schools, a Home for stranded Europeans, and for British Military Soldiers, a Hospital and Dispensaries.

Village Centres occupied, 1,738; Officers, 359; Employees, 260; Social Institutions, 23.

Territorial Headquarters: S. A., Ferozepore Road, Lahore, Punjab.

Territorial Commander: Lt. Commissioner Jai Kumar (Toft).

Chief Secretary: Lt.-Colonel Muthiah.

Western India.—The three Territories of Bombay, Guzerat, and Maratha now form the Territory of Western India.

Besides the distinctly evangelistic operations, there are established a large General Hospital—Thomas Emery Memorial—several Dispensaries, at which during the year about 20,000 patients are treated, over 240 Day and Boarding Schools, also a Boarding School and Hostel for Bhil Children, a Home for Juvenile Criminals, an Industrial Home for Women, a British Soldiers' and Sailors' Furlough Home, Weaving and Silk Schools; a Factory for Weaving, Warping, and Reeling Machines, and a Land Colony having a population of some hundreds of Salvationists.

Corps, 289; Outposts, 528; Officers, 634, of whom 589 are Indian; employees and teachers, 123; Social Institutions, 15.

Territorial Headquarters: S. A., Moreland Road, Byculla, Bombay.

Territorial Commander: Commissioner Horskins.

Chief Secretary: Lt.-Col. Jaya Prakas (Gore).

Southern India.—The newly formed Territory comprises what until the end of 1919 were the three Territories, Madras and Telugu, South India (Travancore). One of the earliest fields in India was the State of Travancore. Here whole communities have become Salvationists. In the villages around Nagercoil some hundreds of women have been taught lace-making and needlework. At Bangalore, what is generally acknowledged as the premier Silk School in India is established. Scores of Silk and Weaving Masters have been trained there, and due regard is paid to the spiritual welfare of the students. A Home of Rest for Sick Officers is situated in the Nilgiri Mountains. The Catherine Booth Hospital in Travancore, under the skilful direction of Staff Captain Dr. Noble, has been the centre of the Medical Work in that part of India where Students and Nurses are trained, and where thousands of patients receive attention every year. There are other branch Hospitals and Dispensaries in the Madras.

There are 1,443 Corps and outposts, *i.e.*, Villages in which work is systematically carried on; 1,343 Officers and teachers; 413 Day Schools; 5 Hospitals; 6 Boarding Schools; 5 Criminal Tribes Settlements; 2 Industrial Departments; 1 Rescue Home; and 1 Silk Farm.

Territorial Head-quarters: S.A., The Broadway, Madras.

Territorial Commander: Commissioner Sukh Sing (Blowers).

ROYAL ARMY TEMPERANCE ASSOCIATION.

In 1862 there was started among the British troops in Agra a small Society, under the leadership of Rev. G. Gregson, Baptist minister, which after a short time took the name of the Soldiers' Total Abstinence Society.

For some ten years the Society struggled with varying success, spreading to other Garrison Stations, but at the end of that time, though it had obtained recognition from the Horse Guards, and was the first Society whose Pledge was so recognised, the membership was not more than 1,200. In the year 1873, however, through the influence of the then Commander-in-Chief, the work was placed

on a firmer footing, the Rev. Gelson Gregson gave up his whole time to it, and by accompanying the troops through the Afghan War, making an extended tour through Egypt, and bringing the work into close touch with troops, both during peace and war, in the year 1886, when he left the Society, it numbered about 11,000 members. He was followed by a Madras Chaplain, who after two years gave place to the Rev. J. H. Bateson. In 1886, the late Lord Roberts, Commander-in-Chief, organised his Scheme for Regimental Institutes, which have had a wonderful effect on the life of British soldiers in the East; and the Total Abstinence Society was so far incorporated into the scheme as to be allowed ample accommodation, and many practical benefits, in every Unit. At the same time the name was changed to that of the Army Temperance Association, and the work of various societies thus linked together, under one organisation. The effect has been more than even the inaugurator himself ever hoped for. The membership rose steadily from that date and still increases.

Growth of the Society.—In 1889 there were 12,140 members; in 1899, 20,688; in 1909, 30,220, while in 1913-14, the total was 35,000, or over 45 per cent. of the total garrison in India. In 1908, the Secretary having retired after 20 years' work, the Rev. H. C. Martin, M.A., a Chaplain in Bengal, was selected by H. E. Lord Kitchener, to the post of Secretary. Twenty years ago, the Association, which has now for some years been the Royal Army Temperance Association, with the Patronage of King Edward VII, and later of the King-Emperor, George V, organised a similar Society in Great Britain, with headquarters in London, from which the troops in South Africa, the Mediterranean, etc., are controlled, so that the whole British Army receives the attention of the Association.

Varied Activities.—What primarily has been the effort of the Association, namely, the decrease of Intemperance, and promotion of sobriety among soldiers has gradually grown into work of every kind, in the interests of soldiers; promotion of sport, occupation of spare time, assistance towards employment in Civil Life, advice and information on the subject of Emigration, provision of Furlough Homes, all tend to enlist the support of officers and men in the Association, and add to its value to them, and to the efficiency of its work, generally. The wonderful change that in late years has taken place in the character of the British Army, in India especially, is due to various causes, including the increased interest in games and sports, the spread of education, the different class of men enlisted, and so on, but the R. A. T. A. has always been given its due share among other causes, by all authorities and Blue Books, and particularly by Officers Commanding Divisions, Brigades and Units. These changes in conduct are seen most plainly in the increased good health of the Army in India.

Effect in the Army.—In the year 1889, 1,174 British soldiers died in India, and 1,800 were invalided unfit for further duty; in 1910, only 330 died, and 484 were invalided. In 1889, 688 underwent treatment for Delirium tremens; in 1910, only 37. In conduct the same difference is to be found; as late as 1901 as many as 545 Courts Martial were held on men for offences due to excessive drinking; in 1906 only 217. In 1904, 2,231 good conduct medals were issued; in 1910, there were 4,581. In regard to the character of the men themselves, who become members of the Association, during their service, we find that in 1912, 59 per cent. on transfer from the Colours obtained Exemplary characters, and 93 per cent. either Exemplary or Very Good; the remainder were for the most part men who, after some years of heavy drinking, had towards the end of their service been persuaded to try and reform themselves, but not soon enough to avoid the consequences of previous excess.

Organisation.—The War has necessarily brought increased work upon this society, the results of which were very quickly apparent. Capacious reception sheds fitted up in the Docks at Bombay and Karachi, proved of the greatest value to troops moving from India, and to the large number coming in: special arrangements aided by a loan from the Government of India, enabled the R. A. T. A. to organise branches in every Territorial unit immediately on arrival, special attention being paid to small detachments and to the Hill stations. In consequence there were, within a month of the completion of the Garrison, over 70 Territorial Branches, containing nearly 50 per cent. of the new arrivals, and this has increased consistently ever since. During the war in addition to covering all troops from Aden to Singapore, the R. A. T. A. was the only Society working in Mesopotamia. Institutes were opened and the cordial good will of the authorities enabled the R. A. T. A. to provide many amenities to the very trying experiences of that Force. The men relieved, and sent back to India for periodic rest, in addition, received a warm welcome and entertainment at the hands of the Association. The following is the organisation of the Council and management:—

Patron: His Majesty the King-Emperor.
President: His Excellency the Commander-in-Chief.

Council:

The General Officers, Heads of Departments; Army Headquarters.

The General Officers Commanding Division.

Two Officers Commanding Regiments.

Officers of the R. A. M. C. and I. M. S.

Two Regimental Quartermasters.

Representatives of the various Churches

Executive Committee:

Col. J. F. Tyrrell, C.B.E, President.

Lt.-Col. F. G. Moore.

Major R. N. G. Scott.

General Secretary: Miss V. T. Blanchfield.

Auditors: Nelson, Dignasse & Co.

Bankers: Imperial Bank of India, Ltd.

Head Office: Talbot House, Simla.

Warrant of Precedence.

A new Warrant of Precedence for India in supersession of the notification published on February 10, 1899, which has been approved by His Majesty the King Emperor of India, was published in 1922. Henceforth the following table will be observed with respect to the rank and precedence of persons named, as under :—

1. Governor-General and Viceroy of India.

2. Governors of Provinces within their respective charges.

3. Governors of Madras, Bombay and Bengal.

4. Commander-in-Chief in India.

5. Governors of the United Provinces, Punjab, Bihar and Burma.

6. Governors of the Central Provinces and Assam.

7. Chief Justice of Bengal.

8. Bishop of Calcutta, Metropolitan of India.

9. Members of the Governor-General's Executive Council.

10. Commander-in-Chief of His Majesty's Naval Forces in the East Indies.

11. President of the Council of State.

12. President of the Legislative Assembly.

13. Chief Justice of a High Court other than that of Bengal.

14. Bishops of Madras and Bombay.

15. Agents to the Governor-General in Rajputana, Central India and Baluchistan, Chief Commissioner of the North-West Frontier Province, Members of Executive Councils and Ministers of Governors and Lieutenant-Governors, Political Resident in the Persian Gulf, Residents at Hyderabad and in Mysore, and Commissioner in Sind,—within their respective charges.

16. Chief of the General Staff; General Officers Commanding, Northern, Southern, Eastern and Western Commands, and Officers of the rank of General.

17. Members of the Executive Councils and Ministers in Madras, Bombay and Bengal.

18. Members of the Executive Councils and Ministers, United Provinces, Punjab, Burma and Behar.

19. Agents to the Governor-General in Rajputana, Central India and Baluchistan; Chief Commissioner of the North-West Frontier Province; Political Resident in the Persian Gulf; and Residents at Hyderabad and in Mysore.

20. Members of the Executive Councils and Ministers, Central Provinces and Assam.

21. Presidents of Legislative Councils within their respective Provinces.

22. Chief Judges of Chief Courts; and Puisne Judges of High Courts.

23. Lieutenant-Generals.

24. Comptroller and Auditor-General; President of the Public Service Commission; and President of the Railway Board.

25. Bishops of Lahore, Rangoon, Lucknow and Nagpur.

26. Members of the Railway Board and Secretaries to the Government of India.

27. Additional Secretaries and Joint Secretaries to the Government of India; Commissioner in Sind; Financial Adviser, Military Finance; and Judges of Chief Courts.

28. Chief Commissioner of the Andamans; and Chief Commissioner of Delhi,—within their respective charges; Chief Secretaries to the Governments of Madras, Bombay and Bengal; Agent to the Governor-General, Punjab States, when within the Punjab.

29. Commissioner of Revenue and Customs, Bombay; Development Commissioner, Burma; Director of Development, Bombay; Director-General, Indian Medical Service; Director-General of Posts and Telegraphs; Financial Commissioners; Inspector-General of Irrigation; Judicial Commissioners of Oudh, Central Provinces, Sind and Upper Burma; Major-Generals; members of a Board of Revenue; Surgeon-Generals.

30. Vice-Chancellors of the Indian Universities.

31. Agents of State Railways; Controller of the Currency; Additional Judicial Commissioners; Agency Commissioner, Madras; Commissioners of Divisions, and Residents of the 2nd Class,—within their respective charges.

32. Members of the Indian Civil Service of 30 years' standing (not holding any other appointment mentioned in this Warrant).

33. Advocate-General, Calcutta.

34. Advocates-General, Madras and Bombay.

35. Chief Secretaries to Governments other than those of Madras, Bombay, Bengal and Assam.

36. Bishops (not territorial) under license from the Crown.

37. Accountants-General, Class I; Agricultural Adviser to the Government of India; Archdeacons of Calcutta, Madras and Bombay; Census Commissioner for India; Colonels Commandant and Colonels on the Staff; Commissioner, Northern India Salt Revenue; Director, Intelligence Bureau; Director-General of Archæology in India; Director of the Geological Survey; Director, Royal Indian Marine, when an officer of the Royal Navy of rank lower than Rear-Admiral or an officer of the Royal Indian Marine; Educational Commissioner with the Government of India; Financial Adviser to the Railway Board; His Majesty's Senior Trade Commissioner, Calcutta; Inspector General of Forests; Military Accountant-General; Opium Agent, Benares; Sanitary Commissioner with the Government of India; and Surveyor General of India.

38. Additional Judicial Commissioners; Agency Commissioner, Madras; Chief Commissioner of the Andamans; Chief Commissioner of Delhi; Chief Secretary to the Government of Assam;

Commissioners of Divisions; and Residents of the 2nd Class.

39. Private Secretary to the Viceroy; Secretaries; Additional Secretaries and Joint Secretaries to Local Governments.

40. Accountants-General other than Class I; Chief Auditors, Eastern Bengal Railway and North-Western Railway; Chief Conservators of Forests; Chief Engineers; Chief Engineer, Telegraphs; Colonels; Command Controllers of Military Accounts; Deputy Controller of the Currency at Bombay; Director of the Botanical Survey of India; Director-General of Commercial Intelligence; Director-General of Observatories; Directors of Public Instruction under Local Governments; Director, Zoological Survey; His Majesty's Trade Commissioner, Bombay; Inspectors-General, Civil Hospitals; Inspectors-General of Police under Local Governments and in the North-West Frontier Province; Inspectors-General of Prisons under Local Governments; Members of the Indian Civil Service and of the Indian Political Department of 23 years' Civil service, if not holding any other appointment mentioned in this Warrant, Mint Masters, Calcutta and Bombay; President of the Forest College and Research Institute; Provincial Sanitary Commissioners; Superintendents of the Imperial Survey of India; and Traffic Managers and Locomotive Superintendents of State Railways.

41. Military Secretary to the Viceroy.

42. Solicitor to the Government of India; and Standing Counsel to the Government of India.

43. Archdeacons of Lahore, Lucknow, Rangoon and Nagpur; and Presidency Senior Chaplains of the Church of Scotland.

44. Chairmen of Port Trusts and of Improvement Trusts of the Presidency towns-Rangoon and Karachi; Members of the Public Service Commission; Non-official Presidents of Municipal Corporations in Presidency towns and Rangoon within their respective municipal jurisdictions; Senior Controller of Military Supply Accounts; Settlement Commissioners; Chief Executive Officers of the Municipalities of the Presidency towns and Rangoon within their charges; and Chief Inspector of Mines.

45. Collectors of Customs; Collectors and Magistrates of Districts; Collector of Stamp Revenue and Deputy Collector of Land Revenue, Calcutta; Commissioner of Ajmer-Merwara; Deputy Commissioners of Districts, and Deputy Commissioner, Port Blair; Divisional and District and Sessions Judges (including the Judicial Commissioner of Chota Nagpur); Political Agents and Superintendents, and Residents (other than those of the 1st and 2nd Class), —within their respective charges; Remembrancers of Legal Affairs and Government Advocates under Local Governments.

46. Deputy Financial Adviser, Military Finance; Deputy Secretaries to the Government of India; Inspector of Office Procedure in the Government of India; Director, Central Bureau of Information, Government of India; and Secretary and Joint Secretary to the Railway Board.

47. Director, Central Research Institute, Kasauli; Director of the Indian Institute of Science; and Principal of the Thomason Civil Engineering College, Roorki.

48. Assistant to the Inspector-General of Forests; Assistant to the Inspector-General of Irrigation; Commandant, Frontier Constabulary, North-West Frontier Province; Commissioners of Police in the Presidency towns and Rangoon; Comptroller, Assam; Conservator of Forests; Controller of Marine Accounts; Deputy Chief Engineer, Telegraphs; Deputy Director General, Indian Medical Service; Deputy Director-General of Post Office; Deputy Director-General, Telegraph Traffic; Deputy Director, Intelligence Bureau; Deputy Military Accountant-General; Director, Medical Research; Directors of Commercial Intelligence; Directors of Telegraph Engineering; District Controllers of Military Accounts; Electrical Adviser to the Government of India; Lieutenant-Colonels; Members of the Indian Civil Service and of the Political Department of 18 years' Civil service, if not holding any other appointment mentioned in this Warrant; Mining Engineer to the Railway Board; Postmasters-General; and Superintending Engineers.

49. Assay Masters, Calcutta and Bombay; Chief Auditor, Oudh and Rohilkhand Railway; Deputy Controllers of the Currency, Calcutta and Northern India; and Deputy Controller-General.

50. Actuary to the Government of India; Chief Inspector of Explosives; Chief Judges of Small Cause Courts, Presidency towns and Rangoon; Controller of Printing, Stationery and Stamps; Director, Imperial Bacteriological Laboratory, Muktesar; Directors of major Laboratories; Director of Public Instruction, North-West Frontier Province; and Director of Statistics.

51. Private Secretaries to Governors, and Secretaries and First Assistants in 1st Class Residencies.

52. Administrators-General; Chief Presidency Magistrates; Deputy Agents, Deputy Traffic Managers and Officers of similar status of State Railways; Metallurgical Inspector, Jamshedpur; and Officers in Class I of the General or the Public Works List of the Indian Finance Department.

53. Commissioners of Income-tax in the United Provinces, Bombay and Sind; Commissioner of Labour, Madras; Controller of Patents; Deputy Inspector General of Police; Directors of Agriculture; Directors of Fisheries in Bengal and Madras; Directors of Industries; Directors of Land Records; Excise Commissioners; Inspector-General of Railway Police and Police Assistant to the Agent to the Governor-General, Rajputana; Inspectors-General of Registration; Principal, Research Institute, Cawnpore, and Registrars of Co-operative Societies.

54. District Judges not being Sessions Judges within their own districts.

55. Adviser to the Government of India for Far Eastern Questions; First Assistant to the Residents at Aden, Baroda and in Kashmir; and Judicial Assistant, Kathiawar.

56. Military Secretaries to Governors.

57. Senior Chaplains other than those already specified.

58. Sheriffs within their own charges.

59. Collectors of Customs; Collectors and Magistrates of Districts; Collector of Stamp Revenue and Deputy Collector of Land Revenue, Calcutta; Commissioner of Ajmer-Merwara; Deputy Commissioners of Districts; Deputy Commissioner, Port Blair; Divisional and District and Sessions Judges (including the Judicial Commissioner of Chota Nagpur); Political Agents and Superintendents; Residents (other than those of the 1st and 2nd Class); and Settlement Officers.

60. Assistant Directors-General of the Post Office, 1st grade; Deputy Directors of Commercial Intelligence; Deputy Director-General of Archæology; Deputy Director of Industries, United Provinces; Deputy Postmasters-General, 1st grade; Deputy Registrar of Co-operative Societies, United Provinces; Deputy Superintendents of the Imperial Survey of India; Government Solicitors other than the Solicitor and Assistant Solicitor to the Government of India; Managing Director, Opium Factory, Ghazipur; Officers of the Indian Educational Service and of the Indian Institute of Science of 18 years' standing; Principals of major Government Colleges; Registrars to the High Court; Secretaries to Legislative Councils; Senior Inspectors of Mines; Assistant Collectors of Customs; Divisional Engineers and Assistant Engineers, Telegraphs; Executive Engineer of the Indian Service of Engineers holding a charge declared to be of not less importance than that of a division; Officers of the Archæological and other Scientific Departments; Officers of the Civil Veterinary Department; Officers of Civil Veterinary Department; Officers of Class II of the General or the Public Works List of the Indian Finance Department; Officers of the Indian Agricultural Service; Officers of the Indian Forest Department; Officers on the Superior List of the Military Accounts Department; Officers of the Superior Revenue Establishment of State Railways who hold the rank of district officer or a position of a similar status and Superintendents and Deputy Commissioners of Police of 20 years' standing.

61. Assistant Solicitor to the Government of India; and Under-Secretaries to the Government of India.

62. Agent-General in India for the British Protectorate in Africa under the administration of the Colonial Office; Chief Constructor of the Royal Indian Marine Dockyard at Bombay; Consulting Surveyor to the Government Bombay; Directors of the Persian Gulf Section and of the Persian Section of the Indo-European Telegraph Department; Directors of Survey, Madras and Bengal; Emigration Agents, Madras and Benares; Government Emigration Agents at Calcutta for British Guiana and Natal, and for Trinidad, Fiji, Jamaica and Mauritius; Keeper of the Records of the Government of India; and Librarian, Imperial Library.

63. District Judges not being Sessions Judges; Majors; and Members of the Indian Civil Service of 12 years' standing.

64. Chief Accountant of the office of Director of Ordnance Factories.

65. Assistant Directors-General of the Post Office, 2nd grade; Assistant Superintendents of the Imperial Survey of India; Chief Works Chemist, United Provinces; Civil Engineer Adviser to the Director of Ordnance Factories; Deputy Postmasters-General, 2nd grade; Officers of the Indian Educational Service and of the Indian Institute of Science of 10 years' standing; Officer in charge of the Mathematical Instrument Office; Presidency Postmasters; Superintendent, Bombay City Survey and Land Records; Superintendents and Deputy Commissioners of Police of less than 20 years' standing; Assistant Collectors of Customs; Divisional Engineers and Assistant Divisional Engineers, Telegraphs; Executive Engineers of the Indian Service of Engineers holding a charge declared to be of not less importance than that of a division; Officers of the Archæological and other Scientific Departments; Officers of the Civil Veterinary Department; Officers of Class II of the General or Public Works List of the Indian Finance Department; Officers of the Indian Agricultural Service; Officers of the Indian Forest Department; Officers on the Superior List of the Military Accounts Department; and Officers of the Superior Revenue Establishment of State Railways who hold the rank of district officer or a position of similar status, of 12 years' standing.

66. Assistant Commissioners (Senior), Northern India Salt Revenue; Assistant Directors of Dairy Farms; Assistant Financial Adviser, Military Finance; Assistant Secretaries to the Government of India; Chemical Examiner for Customs and Excise, Calcutta; Chief Chemical Examiner, Central Chemical Laboratory, Naini Tal; Chief Inspectors of Factories and Boilers in Bengal and Bombay; Collector of Income-tax, Calcutta; Commander of the steamer employed in the Persian Gulf Section of the Indo-European Telegraph Department; Curator of the Bureau of Education; Deputy Accountant, Office of the Director of Ordnance Factories; Deputy Administrator-General, Bengal; Deputy Commissioner Northern India Salt Revenue; Deputy Commissioners of Salt and Excise; Deputy Director of Land Records, Burma; Deputy Sanitary Commissioners; Superintendents of Central Jails and Civil Surgeons not belonging to the Indian Medical Service; Director, Vaccine Institute, Belgaum; Engineer and Electrician of the Persian Gulf Section of the Indo-European Telegraph Department; Examiner of Questioned Documents; Executive Engineers of less than 12 years' standing; First Assistant Commissioner, Port Blair; First and Second Collectors of Income-tax, Bombay, and Senior Collectors of Income-tax, Karachi; Honorary Presidency Magistrates; Judge of the City Civil Court, Madras; Judges of Presidency Courts of Small Causes; Lady Assistants to the Inspectors-General, Civil Hospitals; Legal Assistant in the Legislative Department of the Government of India; Manager of the Cordite Factory, Aruvankadu; Officers of the Provincial Civil Services drawing the maximum pay of the time-scale of upwards; Presidency Magistrates; Protector of Emigrants and Superintendents of Emigration, Calcutta; Public Prosecutors in Bengal and in Sind; Registrars to Chief Courts; Registrar of

Companies, Bombay; Registrar of Joint Stock Companies, Bengal; Secretary, Board of Examiners; Secretary to the Board of Revenue in the Department of Revenue and Agriculture, Madras, when a member of the Provincial Service; and Sub-Deputy Opium Agents.

1. The entries in the above table apply exclusively to the persons entered therein, and while regulating their relative precedence with each other, do not give them any precedence over members of the non-official community resident in India who, shall take their place according to usage.

2. Officers in the above table will take precedence in order of the numbers of the entries. Those included in one number will take precedence *inter se* according to the date of entry into that number.

3. When an officer holds more than one position in the table he will be entitled to the highest position accorded to him.

4. Officers who are temporarily officiating in any number in the table will rank in that number below permanent incumbents.

5. All officers not mentioned in the above table, whose rank is regulated by comparison with rank in the army, to have the same rank with reference to civil servants as is enjoyed by military officers of equal grades.

6. All other persons who may not be mentioned in this table to take rank according to general usage, which is to be explained and determined by the Governor-General in Council in the case any question shall arise. When the position of any such person is so determined and notified, it shall be entered in the table in italics, provided he holds an appointment in India.

7. Nothing in the foregoing rules to disturb the existing practice relating to precedence at the Courts of Indian States or on occasions of intercourse with Indians, and the Governor-General in Council to be empowered to make rules for such occasions in case any dispute shall arise.

8. The following will take courtesy rank as shown:—

Consuls-General, Immediately after article 37, which includes Colonels Commandant; Consuls, Immediately after article 40, which includes Colonels; Vice-Consuls, Immediately after article 63, which includes Majors.

Consular officers de carriere will in their respective grades take precedence of consular officers who are not de carriere.

9. The following will take courtesy rank as shown, provided that they do not hold appointments in India:—

Peers according to their precedence in England; Knights of the Garter, the Thistle and St. Patrick; Privy Councillors; Members of the Council of the Secretary of State for India.—Immediately after Members of the Governor-General's Executive Council, article 9.

Baronets of England, Scotland, Ireland and the United Kingdom, according to date of Patents, Knights Grand Cross of the Bath; Knights Grand Commander of the Star of India; Knights Grand Cross of St. Michael and St. George; Knights Grand Commander of the Indian Empire; Knights Grand Cross of the Royal Victorian Order; Knights Grand Cross of the Order of the British Empire; Knights Commander of the Bath; Knights Commander of the Star of India, Knights Commander of St. Michael and St. George; Knights Commander of the Indian Empire; Knights Commander of the Royal Victorian Order; Knights Commander of the Order of the British Empire; and Knights Bachelor.—Immediately after Puisne Judges of High Courts, article 22.

10. All ladies, unless by virtue of holding an appointment themselves they are entitled to a higher position in the table, to take place according for the rank herein assigned to their respective husbands, with the exception of wives of Peers and of ladies having precedence in England independently of their husbands, and who are not in rank below the daughters of Barons; such ladies to take place according to their several ranks, with reference to such precedence in England, immediately after the wives of Members of the Governor-General's Executive Council.

SALUTES.

Persons.	No. of guns.	Occasions on which salute is fired.
Imperial salute	101	When the Sovereign is present in person.
Royal salute	31	On the anniversaries of the Birth, Accession and Coronation of the Reigning Sovereign; the Birthday of the Consort of the Reigning Sovereign; the Birthday of the Queen Mother; Proclamation Day.
Members of the Royal Family	31	On arrival at, or departure from a military station, or when attending a State ceremony.
Foreign Sovereigns and members of their families.	21	
Maharajadhiraja of Nepal	21	
Sultan of Maskat	21	
Sultan of Zanzibar	21	
Ambassadors	19	
Governor of the French Settlements in India.	17	
Governor of Portuguese India	17	
Governors of His Majesty's Colonies ..	17	
Lieutenant-Governors of His Majesty's Colonies.	15	
Plenipotentiaries and Envoys	15	
Governor of Damaun	9	
Governor of Diu	9	

Persons.	No. of Guns.	Occasions on which salute is fired.
Viceroy and Governor-General	31	On arrival at, or departure from a military station within Indian territories or when attending a State ceremony.
Governors of Presidencies and Provinces in India.	17	On assuming or relinquishing office whether temporarily or permanently. On occasions of a *public* arrival at, or departure from a military station, and on formal ceremonial occasions such as arriving at or leaving a Durbar, or when paying a formal visit to a Ruling Chief. Also on occasions of private arrival at, or departure from, a military station, if desired.
Residents, 1st Class	13	Same as Governors.
Agents to the Governor-General ..	13	
Commissioner in Sind	13	
Agent to the Governor in Kathiawar ..	13	
Residents, 2nd Class	13	On assuming or relinquishing office, and on occasion of a *public* arrival at, or departure from a military station.
Political Agents (*b*)	11	
Commander-in-Chief in India (if a Field Marshal).	19	On assuming or relinquishing office. On *public* arrival at, or departure from, a military station, and on formal ceremonial occasions. Also on occasions of private arrival or departure, if desired.
Commander-in-Chief in India (if a General)	17	
Naval Commander-in-Chief, East Indies Squadron (*c*).	..	Same as for military officer of corresponding rank (*see* K.R.).
G.Os.C. in C. Commands (*d*)	15	On assuming or relinquishing command, and on occasions, of *public* arrival at, or departure from, a military station within their command. Also on occasions of private arrival or departure, if desired.
Major-Generals Commanding Districts (*d*).	13	
Major-Generals and Colonel-Commandants Commanding Brigades (*d*).	11	

Permanent Salutes to Chiefs.

Salutes of 21 *guns.*

Baroda. The Maharaja (Gaekwar) of.
Gwalior. The Maharaja (Scindia) of.
Hyderabad. The Nizam of.
Jammu and Kashmir. The Maharaja of.
Muscat. The Sultan of.
Mysore. The Maharaja of.

Salutes of 19 *guns.*

Bhopal. The Begam (or Nawab) of.
Indore. The Maharaja (Holkar) of.
Kalat. The Khan (Wali) of.
Kolhapur. The Maharaja of.
Travancore. The Maharaja of.
Udaipur (Mewar). The Maharana of.

Salutes of 17 *guns.*

Bahawalpur. The Nawab of.
Bharatpur. The Maharaja of.
Bikaner. The Maharaja of.
Bundi. The Maharao Raja of.
Cochin. The Maharaja of.
Cutch. The Maharao of.
Jaipur. The Maharaja of.
Jodhpur (Marwar). The Maharaja of.
Karauli. The Maharaja of.
Kotah. The Maharao of.
Patiala. The Maharaja of.
Rewa. The Maharaja of.
Tonk. The Nawab of.

Salutes of 15 *guns.*

Alwar. The Maharaja of.
Banswara. The Maharawal of.
Bhutan. The Maharaja of.
Datia. The Maharaja of.
Dewas (Senior Branch). The Maharaja of.
Dewas (Junior Branch). The Maharaja of.
Dhar. The Maharaja of.
Dholpur. The Maharaj Rana of.
Dungarpur. The Maharawal of.
Idar. The Maharaja of.
Jaisalmer. The Maharawal of.

(*b*) Within the territories of the State to which they are attached.
(*c*) According to naval rank, with two guns added.
(*d*) No military officer shall receive an artillery salute unless he is in actual military command and is the senior military officer in the spot. Attention is invited to the extra guns allowed for individuals.

Khairpur. The Mir of.
Kishangarh. The Maharaja of.
Orchha. The Maharaja of.
Partabgarh. The Maharawat of.
Rampur. The Nawab of.
Sikkim. The Maharaja of.
Sirohi. The Maharao of.

Salutes of 13 *guns.*

Benares. The Maharaja of.
Bhavnagar. The Maharaja of.
Cooch Behar. The Maharaja of.
Dhrangadhra. The Maharaja of.
Jaora. The Nawab of.
Jhalawar. The Maharaj-Rana of.
Jind. The Maharaja of.
Junagadh. The Nawab of.
Kapurthala. The Maharaja of.
Nabha. The Maharaja of.
Nawanagar. The Maharaja of.
Palanpur. The Nawab of.
Porbandar. The Maharaja of.
Rajpipla. The Maharaja of.
Ratlam. The Maharaja of.
Tripura. The Maharaja of.

Salutes of 11 *guns.*

Ajaigarh. The Maharaja of.
Alirajpur. The Raja of.
Baoni. The Nawab of.
Barwani. The Rana of.
Bijawar. The Maharaja of.
Bilaspur. The Raja of.
Cambay. The Nawab of.
Chamba. The Raja of.
Charkhari. The Maharaja of.
Chhatarpur. The Maharaja of.
Faridkot. The Raja of.
Gondal. The Thakur Saheb of.
Janjira. The Nawab of.
Jhabua. The Raja of.
Maler Kotla. The Nawab of.
Mandi. The Raja of.
Manipur. The Maharaja of.
Morvi. The Thakor Saheb of.
Narsinggarh. The Raja of.
Panna. The Maharaja of.
Pudukkottai. The Raja of.
Radhanpur. The Nawab of.
Rajgarh. The Raja of.
Sailana. The Raja of.
Samthar. The Raja of.
Sirmur. The Maharaja of.
Sitamau. The Raja of.
Suket. The Raja of.
Tehri. The Raja of.

Salutes of 9 *guns.*

Balasinor. The Nawab (Babi) of.
Banganapalle. The Nawab of.
Bansda. The Raja of.
Baraundha. The Raja of.
Bariya. The Raja of.
Chhota Udepur. The Raja of.
Danta. The Maharana of.
Dharampur. The Raja of.
Dhrol. The Thakor Saheb of.
Fadthli (Shukra). The Sultan of.
Hsipaw. The Sawbwa of.
Jawhar. The Raja of.
Kalahandi. The Raja of.
Kengtung. The Sawbwa of.
Khilchipur. The Rao Bahadur of.
Kishn and Socotra. The Sultan of.
Lahej (or Al Hauta). The Sultan of.
Limbdi. The Thakor Saheb of.
Loharu. The Nawab of.
Lunawada. The Raja of.
Malhar. The Raja of.
Mayurbhanj. The Maharaja of.
Möng Nai. The Sawbwa of.
Mudhol. The Raja of.
Nagod. The Raja of.
Palitana. The Thakor Saheb of.
Patna. The Maharaja of.
Rajkot. The Thakor Saheb of.
Sachin. The Nawab of.
Sangli. The Chief of.
Savantvadi. The Sar Desai of.
Shehr and Mokalla. The Sultan of.
Sonpur. The Maharaja of.
Sunth. The Raja of.
Vankaner. The Raj Saheb of.
Wadhwan. The Thakor Saheb of.
Yawnghwe. The Sawbwa of.

Personal Salutes.

Salutes of 21 *guns.*

Indore. His Highness Maharajadhiraja Raj Rajeshwar Sawai Shri Tukoji Rao Holkar Bahadur, G.C.I.E., Maharaja of.

Kalat. His Highness Mir Sir Mahmud Khan, G.C.I.E., Wali of.

Travancore. Colonel His Highness Sri Maharaja Raja Sir Pala Rama Varma Bahadur, G.C.S.I., G.C.I.E., Maharaja of.

Udaipur (Mewar). His Highness Maharajadhiraja Maharana Sir Fateh Singh Bahadur, G.C.S.I., G.C.I.E., G.C.V.O., Maharana of.

Salutes of 19 *guns.*

Bikaner. Major-General His Highness Maharaja Sir Ganga Singh Bahadur, G.C.S.I., G.C.I.E., G.C.V.O., G.B.E., K.C.B., A.D.C., Maharaja of.

Kotah. Lieutenant-Colonel His Highness Maharao Sir Umed Singh Bahadur, G.C.S.I., G.C.I.E., G.B.E., Maharao of.

*Mysore. Her Highness Maharani Kempa Nanjammanni Avaru Vanivilas Sannidhana, C.I., Maharani of.

Nepal. General His Highnes Maharaja Sir Chandra Shumshere Jung Bahadur, Rana, G.C.B., G.C.S.I., G.C.M.G., G.C.V.O., D.C.L., Prime Minister, Marshal of.

Patiala. Major-General His Highness Maharajadhiraja Sir Bhupindar Singh Mahindar Bahadur, G.C.S.I., G.C.I.E., G.C.V.O., G.B.E., A.D.C., Maharaja of.

Tonk. H. H. Amin-ud-Daula Wazir-ul-Mulk Nawab Sir Muhammad Ibrahim Ali Khan Bahadur Saulat Jang, G.C.S.I., G.C.I.E., Nawab of.

Salutes of 17 *guns.*

Alwar. Colonel His Highness Sewai Maharaj Shri Jey Singhji, G.C.I.E., K.C.S.I., Maharaja of.

Dholpur. Lieutenant-Colonel His Highness Maharajadhiraja Sri Sawai Maharaj-Rana Sir Udaibhan Singh Lokindar Bahadur Diler Jang Jai Deo, K.C.S.I., K.C.V.O., Maharaja-Rana of.

Kishangarh. Lieutenant-Colonel His Highness Umdae Rajahae Baland Makan Maharajadhiraja Sir Madan Singh Bahadur, K.C.S.I., K.C.I.E., Maharaja of.

Orchha. His Highness Maharaja Mahindr Sawai Sir Pratap Singh Bahadur, G.C.S.I. G.C.I.E., Maharaja of.

Sirohi. His Highness Maharajadhiraja Maharao Sir Kesri Singh Bahadur, G.C.I.E., K.C.S.I., *Ex*-Maharao of.

Salutes of 15 *guns.*

Benares. Lieutenant-Colonel His Highness Maharaja Sir Parbhu Narayan Singh Bahadur, G.C.S.I., G.C.I.E. Maharaja of.

Jind. Lieutenant-Colonel His Highness Maharaja Sir Ranbir Singh Rajendra Bahadur, G.C.I.E., K.C.S.I., Maharaja of.

Junagadh. His Highness Vali Ahad Mohabat Khanji, Rasulkhanji, Nawab of.

Kapurthala. Lieutenant-Colonel His Highness Maharaja Sir Jagatjit Singh Bahadur, G.C.S.I., G.C.I.E., Maharaja of.

Nawanagar. Lieutenant-Colonel His Highness Maharaja Shri Sir Ranjitsinhji Vibhaji, G.C.S.I., G.B.E., Maharaja of.

Salutes of 11 *guns.*

Aga Khan, His Highness Aga Sir Sultan Muhammad Shah, G.C.S.I., G.C.I.E., G.C.V.O., of Bombay.

Bariya. Captain H. H. Maharawal Shri Sir Ranjitsinhji Mansinhji, K.C.S.I., Raja of.

Chitral. His Highness Mehtar Sir Shuja-ul-Mulk, K.C.I.E., Mehtar of.

Lahej (Al Hauta). His Highness Sultan Sir Abdul Karim Fadhli bin Ali, K.C.I.E., Sultan of.

Lunawada. His Highness Maharana Shri Sir Wakhatsinghji Dalelsinghji, K.C.I.E., Raja of.

Sachin. Major His Highness Nawab Sidi Ibrahim Mohamed Yakut Khan, Mubazarat Daula Nasrat Jung Bahadur, Nawab of.

Shehr and Mokalla. H. H. Sultan Oomer bin Awad Alkaity, Shamseer Jung Bahadur, Sultan of.

Vankaner. Captain His Highness Raj Saheb Sir Amarsinhji Banesinhji, K.C.I.E., Raj Saheb of.

Salutes of 9 *guns.*

Dashahr. Raja Padam Singh, Raja of.

Dthala. Amir Nasr bin Shaif bin Sef bin Abdul Hadi, Amir of.

Jamkhandi. Captain Meherban Sir Parashramrav Ramchandrarav, K.C.I.E., Chief of.

Kanker. Maharajadhiraja Kamal Deo, Chief of.

Loharu. Nawab Sir Amir-ud-din Ahmad Khan Bahadur, K.C.I.E., *ex*-Nawab of.

Tawngpeng. Hkun Hsang Awn, K.S.M., Sawbwa of.

Local Salutes.

Salutes of 21 *guns.*

Bhopal. The Begam (or Nawab of). Within the limits of her (or his) own territories, permanently.

Indore. The Maharaja (Holkar) of. Within the limits of his own territories, permanently.

Udaipur. (Mewar). The Maharana of. Within the limits of his own territories, permanently.

Salute of 19 *guns.*

Bharatpur. The Maharaja of.
Bikaner. The Maharaja of.
Cutch. The Maharao of.
Jaipur. The Maharaja of.
Jodhpur (Marwar). The Maharaja of.
Patiala. The Maharaja of.
(Within the limits of their own territories, permanently.)

Salute of 17 *guns.*

Alwar. The Maharaja of.
Khairpur. The Mir of.
(Within the limits of their own territories permanently).

Salutes of 15 *guns.*

Benares. The Maharaja of.
Bhavnagar. The Maharaja of.
Jind. The Maharaja of.
Junagadh. The Nawab of.
Kapurthala. The Maharaja of.
Nabha. The Maharaja of.
Nawanagar. The Maharaja of.
Ratlam. The Maharaja of.
(Within the limits of their own territories, permanently).

Salutes of 13 *guns.*

Bushire. His Excellency the Governor of. At the termination of an official visit.

Janjira. The Nawab of. (Within the limits of his own territory, permanently).

* Conferred in the first instance during the minority of her son, the Maharaja of Mysore, and in the capacity of Regent, and subsequently continued for her lifetime.

Salutes of 11 *guns.*

Savantvadi. The Sar Desai of..	Within the limits of his own territory, permanently.

Salutes of 5 *guns.*

Abu Dhabi, The Shaikh of	Fired by British Ships of War in the Persian Gulf at the termination of an official visit by this Chief.
Bunder Abbas. The Governor of	At the termination of an official visit.
Lingah. The Governor of	
Muhammerah. The Governor of	
Muhammerah. Eldest son of the Shaikh of ..	Fired on occasions when he visits one of His Majesty's ships as his father's representative.

Salutes of 3 *guns.*

Ajman. The Shaikh of	Fired by British Ships of War in the Persian Gulf at the termination of official visits by these Chiefs.
Dibai. The Shaikh of	
Ras-al-Kheima. The Shaikh of	
Shargah. The Shaikh of..	
Umm-ul-Qawain. The Shaikh of	

TABLE OF LOCAL PERSONAL SALUTES.

Salutes of 11 *guns.*

His Excellency Shaikh Sir Isa bin Ali al Khalifah, K.C.I.E., C.S.I., Shaikh of Bahrain.	Fired by British Ships of War in the Persian Gulf at the termination of an official visit by this Chief.

(TABLE OF) PROVISIONAL LOCAL SALUTES.

Salutes of 17 *guns.*

Council of Ministers (as a whole) of His Highness the Sultan of Muscat.

Salutes of 13 *guns.*

The President of the Council of Ministers of His Highness the Sultan of Muscat, when a member of the ruling family.

Salutes of 9 *guns.*

The President of the Council of Ministers of His Highness the Sultan of Muscat when not a member of the ruling family.

Salutes of 7 *guns.*

Bahrain. The Shaikh of.
Kuwait. The Shaikh of.
Muhammerah. The Shaikh of.
Qatr. The Shaikh of.

Salutes of 5 *guns.*

Bahrain. Eldest son of the Shaikh of, or other member of the ruling family.	Fired when acting as Deputy of these Chiefs.
Kuwait. Eldest son of the Shaikh of, or other member of the ruling family.	

Individual Members of the Council of Ministers of His Highness the Sultan of Muscat.

(TABLE OF) PROVISIONAL PERSONAL SALUTES.

Salutes of 13 *guns.*

His Excellency Shaikh Sir Khaz'al Khan, G.C.I.E., K.C.S.I., Shaikh of Muhammerah.	Fired by British Ships of War in the Persian Gulf at the termination of an official visit by this Chief.

Routes between India and Europe.

The Indian port for the direct journey to and from Europe is Bombay. There are ordinarily five lines of steamers by which the journey to and from the West *via* Bombay can be performed, either by sea all the way, or—and in some cases only—by sea part of the way and by rail across Europe. They are the **P. & O.**, the Anchor Line, the City and Hall Line, the Lloyd Triestino and the British India line. The Natal line steamers are available for Western passages only, the steamers sailing round the Cape on their Eastward voyages. There are ordinarily other services between Calcutta and the West, by steamers sailing round Ceylon, and several lines connect Colombo with Europe Of the latter the Orient, the Messageries Maritimes the Bibby Lines N.Y.K., Australian Commonwealth, & Royal Dutch Lines are the chief besides the P. & O. The Bibby and Henderson services extend to Rangoon. The new railway between India and Ceylon greatly increases the importance of the Colombo route for Southern India. The shortest time between London and Bombay is 15 days *via* Marseilles. The following are the fares which are convertible at approximately current rates of exchange:—

Peninsular and Oriental S. N. Co.

Fares from Bombay or Karachi.	1st Saloon.			2nd Saloon.	
	A Rate. £	B Rate. £	C Rate. £	A Rate. £	B Rate. £
Free passages (single and return) are granted between Karachi and Bombay by British India Steamer.					
To Plymouth or London by sea, Single	90	80	70	60	54
„ „ Return	157	140	122	105	95
To Marseilles, Single..	82	72	62	56	50
„ Return	143	126	108	98	80
To „ Malta or Gibraltar, Single	86	76	66	58	52
„ „ Return	143	126	108	98	88
From Calcutta	70	..	..	56	..

By the **British India S. N. Co.**, fares to London by sea from Bombay or Madras are:—single 1st saloon £66; 2nd saloon £52. Return £116 and £91. Bombay to Marseilles £60, and 2nd saloon £48. Return: £105 and £84.

By the **Anchor Line** fares to Liverpool from Bombay or Karachi are:—1st saloon £60 single and £105 return. To Marseilles:—£56 and (return from Liverpool) £101.

By Ellerman's "**City**" and "**Hall**" **Lines** fares from Bombay or Karachi to Liverpool, 1st saloon are:—

Single £64, return £112.
2nd saloon single £48, return £84.
From Bombay or Karachi to Marseilles.
1st saloon single £60, return £105.
2nd saloon single £45, return £79.
Calcutta to London.
1st saloon single £68, return £119.
2nd saloon single £52, return £91.

By **Bibby Line** fares from Rangoon to London.

1st saloon single £76.
1st saloon return £132.
Rangoon to Marseilles, 1st saloon single £68.
Rangoon to Marseilles, 1st saloon return £120.

By **Henderson Line** fares from Rangoon to Liverpool, 1st saloon are:—single £65, return (available for 4 months) £100, (available for 2 years) £117.

By **Lloyd Triestino Line** fares from Bombay or Karachi to Brindisi, Venice or Trieste are:—1st class £62, 2nd class £52. Return rates available for 2 years at one and three-fourth fares.

The Lloyd Triestino in conjunction with the Marittima Italiana are now running in addition to the above a fortnightly service between Bombay, Naples and Genoa, fares as above.

INDIAN TRAIN SERVICE.

The distances and railway fares from Bombay to the principal centres of other parts of India are as follow :—

——	Miles.	1st Class.	2nd Class.
		Rs. a.	Rs. a.
Delhi, B. B. & C. I. Railway, *via* new Nagda-Muttra direct route	865	105 8	52 12
Delhi, G. I. P. Railway, *via* Agra	957	105 8	52 12
Simla *via* Delhi	1,137	158 4	80 10
Calcutta, G. I. P. from Bombay, *via* Jubbulpore & Allahabad	1,349	150 14	75 8
Calcutta, G. I. P. from Bombay, *via* Nagpur..	1,223	142 14	71 8
Madras, G. I. P. from Bombay, *via* Raichur	794	112 0	55 15
Lahore, *via* Delhi	1,162	142 10	71 5

THE SUEZ CANAL.

The annual report of the **Suez Canal Company** for 1922 stated that in certain countries a revival in trade had begun to assert itself, and the maritime movement had surpassed the previous maximum, which was the more remarkable when existing circumstances were taken into consideration.

The growth of traffic caused a large increase in the company's receipts, and expenses were slightly less than in 1921. The repayment of Consolidated Coupon Bonds had relieved the company of a heavy charge, and it was therefore decided to declare an appreciable increase of dividend, whilst still maintaining the prudent policy which had always guided the board.

The same amounts as on the last occasion had been allocated to the sinking fund for stock, and to the fund for house building in Egypt. It had also been thought advisable to set aside from profits a sum of 25,000,000 as part of the expenses incurred in the works improvement fund. This would avoid, or at least delay for several years, the necessity of a loan, which had been already authorized, and greatly reduce the amount required. It was proposed to pay a dividend of 320f. net per share, almost double that paid before the war. In making this comparison, however, it should be borne in mind that part of the dividend was due to the depreciation of the franc.

Reduced Transit Rates.—The increase in traffic had permitted, from March 1, 1923, a reduction of transit rates of 25c. which was in conformity with the liberal policy hitherto adopted, thereby assisting the shipping industry, which was still passing through a difficult period. The continued progress in traffic which had justified the reduction had since been well maintained; moreover, the high rates of exchange permitted the remittance of money from Egypt or from England to France on exceptional terms, a condition, however, which it was hoped might erelong be modified.

Financial Position.—The total receipts for 1922 amounted to 305,455,608f., an increase of 45,319,612f. over the year 1921, of which transit dues supplied 17,551,225f. Expenses in Egypt were about the same as in 1921. After making allowance for depreciation of investments, expenses, and provision for buildings, stock, and works, the receipts over expenses amounted to 193,797,839f. to which had to be added 949,707f. brought forward, making a sum of 194,747,547f. This left an amount for distribution amongst the shareholders of 192,641,126f., and provided for the payment of a dividend of 341f. 93 8c. per share, to which was to be added 25f. for interest, representing a gross return of 366f. 93·8c., or a net amount of 320f., which exceeded that of 1921 by 75f. per share.

It was interesting to note that, in spite of the increased dividend, the revenue paid to the British Government was much less than in 1913.

Transit and Navigation.—Four thousand three hundred and forty-five ships traversed the Canal in 1922, representing a net tonnage of 20,743,245, an increase of 468,125 tons over the highest previously reached—that in 1912. Compared with 1921 the increase in ships is 370, or 2,624,246 tons. There was an ever-increasing number of vessels burning Mazout, representing 19 per cent. of the total movement of the year. The average time of transit was 15hr. 36min. German shipping was more in evidence, having passed the 1921 figures of 170,520 tons to 735,129 tons, a number much less than when Germany occupied second rank among the Canal's customers in 1913, with 3,352,287 tons.

Improvement Schemes.—It was announced in 1914 that from and after January 1st, 1915, **the maximum draught of water** allowed to ships going through the **Suez Canal** would be increased by 1ft., making it 30ft. English.

The maximum permissible draught of ships using the Canal was 24·4 feet in 1870; in 1890 ships drawing 25·4 feet could make the passage; and during the following 24 years the increase has been at the average rate of about 1 foot every six years, thus bringing the maximum draught authorized to 29 feet.

The scheme of improvement adopted by the Company on the recommendation of the International Consultative Committee of Works, the British representatives on which are Sir William Matthews and Mr. Anthony Lister, is a comprehensive one, and the details suggest that it will meet the needs of the big ship.

A 40 feet Channel.—The declared policy of the Canal Company in regard to the deepening of the Canal is to offer a slightly greater depth of water than that available in ports east of Suez. It is claimed that, with the exception of Sydney, there is no eastern port which at low tide has a greater depth of water than that now provided in the Canal throughout the full length of nearly 105 miles. In any case the work in hand should meet the needs of any ship likely to be built for the eastern trade during the next few years.

When the Canal was opened in 1869, the width was 72 feet and the depth about 26 feet 2 inches. In June, 1913, the width at a depth of 32 feet 8 inches had been increased to a minimum of 147 feet 6 inches over a length of about 85 miles, and to a width of 328 feet over a distance of about 20 miles. The latest scheme makes provision for a depth of 40 feet throughout and for a widening up to 196 feet 8 inches in the south section, and the cutting of an appropriate number of sidings in the north and central sections, where a minimum width of 147 feet 6 inches is believed to be sufficient for the requirements of the immediate future.

The work of enlarging the capacity of the Canal presents no special difficulty on the engineering side. A good deal of sand is occasionally driven into the channel at Port Said during storms, but a remedy for this will be found in extension of the west breakwater by about 2,700 yards at a cost of over £6,000,000. The construction of this extension, which has been in hand for the past two years, is making satisfactory progress. The Suez Roads are being adequately dredged in accordance with an agreement between the Egyptian Government and the Company.

Almost up to the end of 1915 the works for extending the jetty to the west of Port Said, works of capital importance for the **protection of the entry** to the Canal, were pushed on uninterruptedly. In November, however, for want of hydraulic lime, the manufacture of artificial rocks for this jetty was interrupted. The submarine foundations in stone and rubble of the new jetty were, as a matter of fact, completed to a length of 2,500 metres; the protective blocks were laid for 1,040 metres, and cemented for over 800 metres. The protection of the Channel is thus secured, and there is no need for any apprehension as to its future.

Indian Time.

For many years Indian time was in a state of chaotic confusion. What was called Madras or Railway time was kept on all the railways: and each great centre of population kept its own local time, which was not based on any common scientific principle and was divorced from the standards of all other countries. It was with a view to remedying this confusion that the Government of India took the matter up in 1904, and addressed to the Local Governments, and through them to all local bodies, a long letter which reviewed the situation and made suggestions for the future. The essential points in this letter are indicated below:

"In India we have already a standard time, which is very generally, though by no means universally, recognised. It is the Madras local time, which is kept on all railway and telegraph lines throughout India and which is 5h. 21m. 10s. in advance of Greenwich. Similarly, Rangoon local time is used upon the railways and telegraphs of Burma, and is 6h. 24m. 47s. ahead of Greenwich. But neither of these standards bears a simple and easily remembered relation to Greenwich time.

"The Government of India have several times been addressed by Scientific Societies, both in India and in England, and urged to fall into line with the rest of the civilised world. And now the Royal Society has once more returned to the attack. The Committee of that Society which advises the Government of India upon matters connected with its observatories, writes:—'The Committee think that a change from Madras time to that corresponding to a longitude exactly 5½ hours east of Greenwich would be an improvement upon the existing arrangements; but that for international scientific purposes the hourly zone system, making the time 5 hours in advance of Greenwich in the west, and 6 hours in advance in the east of India, would be preferable.'

"Now if India were connected with Europe by a continuous series of civilised nations with their continuous railway systems all of which had adopted the European hour-zone system, it would be imperative upon India to conform and to adopt the second suggestion. But as she is not, and as she is as much isolated by uncivilised States as Cape Colony is by the ocean, it is open to her to follow the example of that and some other similarly situated colonies and to adopt the first suggestion.

"It is believed that this will be the better solution. There are obvious objections to drawing an arbitrary line right across the richest and most populous portions of India, and so as to bisect all the main lines of communication, and keeping times differing by an hour on opposite sides of that line. India has become accustomed to a uniform standard in the Madras time of the railways; and the substitution for it of a double standard would appear to be a retrograde step; while it would, in all probability, be strongly opposed by the railway authorities. Moreover, it is very desirable that whatever system is adopted should be followed by all Europeans and Indians alike; and it is certain that the double standard would puzzle the latter greatly; while by emphasising the fact that railway differed from local time, it might postpone or even altogether prevent the acceptance of the former instead of the latter by people generally over a large part of India. The one great advantage which the second possesses over the first alternative is, that under the former, the difference between local and standard time can never exceed half an hour: whereas under the latter it will even exceed an hour in the extreme cases of Karachi and Quetta. But this inconvenience is believed to be smaller than that of keeping two different times on the Indian system of railways and telegraphs.

"It is proposed, therefore to put on all the railway and telegraph clocks in India by 8m. 50s. They would then represent a time 5½ hours faster than that of Greenwich, which would be known as **Indian Standard Time**: and the difference between standard and local time at the places mentioned below would be approximately as follows, the figures representing minutes, and F. and S. meaning that the standard time is in advance of or behind local time respectively:—Dibrugarh 51 S., Shillong 38 S., Calcutta 24 S., Allahabad 2 F., Madras 9 F., Lahore 33 F., Bombay 39 F., Peshawar 44 F., Karachi 62 F., Quetta 62 F.

"This standard time would be as much as 54 and 55 minutes behind local time at Mandalay and Rangoon, respectively; and since the railway system of Burma is not connected with that of India, and already keeps a time of its own, namely, Rangoon local time, it is not suggested that Indian Standard Time should be adopted in Burma. It is proposed, however, that instead of using Rangoon Standard Time as at present, which is 6h. 24m. 47s. in advance of Greenwich, a Burma Standard Time should be adopted on all the Burmese railways and telegraphs, which would be one hour in advance of Indian Standard Time, or 6½ hours ahead of Greenwich time, and would correspond with 97° 30′ E. longitude. The change would bring Burma time into simple relation both with European and with Indian time, and would (among other things) simplify telegraphic communication with other countries.

"Standard time will thus have been fixed for railways and telegraphs for the whole of the Indian Empire. Its general adoption for all purposes, while eminently advisable, is a matter which must be left to the local community in each case."

It is difficult to recall, without a sense of bewilderment, the reception of this proposal by various local bodies. To read now the fears that were entertained if Standard Time was adopted is a study in the possibilities of human error. The Government scheme left local bodies to decide whether or not they would adopt it. Calcutta decided to retain its own local time, and to-day Calcutta time is still twenty-four minutes in advance of Standard Time. In Bombay the first reception of the proposal was hostile; but on reconsideration the Chamber of Commerce decided in favour of it and so did the Municipality. Subsequently the opposing element in the Municipality brought in a side resolution, by which the Municipal clocks were put at Bombay time which is thirty-nine minutes behind Standard Time. On the 1st January 1906 all the railway and telegraph clocks in India were put at Indian Standard Time; in Burma the Burma Standard Time became universal. Calcutta retains its former Calcutta time; but in Bombay local time is retained only in the clocks which are maintained by the Municipality and in the establishments of some orthodox Hindus. Elsewhere Standard Time is universal.

DEPARTMENT OF INDUSTRIES.

By a resolution of the Government of India, Department of Commerce and Industry, dated February 26, 1920, a Board of Industries and Munitions was constituted as a temporary organization designed to close the war commitments of the Indian Munitions Board, to take over from the Commerce and Industry Department and the Public Works Department certain items of work, and to undertake the initial work of industrial organisation, and in particular to frame detailed proposals for a new Department of Industries.

Proposals formulated by the Board of Industries and Munitions for the creation of a Department of the Government of India to deal with industrial questions have now received the approval of the Secretary of State for India, and accordingly a permanent Department of Industries was created in 1921. The new Department will deal for the present with the heads of business detailed in the resolution. It will be under the charge of the Hon. Sir Thomas Holland, Member of the Governor-General's Executive Council.

Concurrently with the creation of the permanent Department of Industries, the Board of Industries and Munitions ceased to exist. The work connected with the closing of the war commitments of the late Indian Munitions Board and the disposal of surplus stores on behalf of His Majesty's Government has been entrusted to a separate temporary organisation under an officer designated Chief Controller (Surplus Stores) responsible to the Member-in-Charge of Industries.

On the retirement of Sir George Barnes in April 1921 Sir Thomas Holland became Member in charge of the portfolios of Industries and Commerce. This post he resigned later in the year on account of a difference of opinion with the Viceroy on the subject of what is called The Calcutta Munitions Case— a case where several individuals were under trial for fraud in connection with munitions contracts during the war. The case raised no little commotion at the time, not the least of the causes of this being the statement of the Advocate-General for the Crown that the Government knew the accused were guilty and could prove that they were guilty, but did not propose to proceed with the case. With the retirement of Sir Thomas Holland the activities connected with the Department, other than routine matters were suspended, as no successor had been appointed up to the close of the year and Mr. C. A. Innes, the Secretary of the Department, acted as Member. But although there has not been any official pronouncement on the subject it is unlikely that the grandiose scheme prepared by the Industries Commission will come to fruition. There is not the money available, and there are grave doubts whether these recommendations can fit in with the new constitution, which remits Industries to the Provinces for administration.

Indian Orders.

The Star of India.

The Order of the Star of India was instituted by Queen Victoria in 1861, and enlarged in 1866, 1876, 1897, 1902, and 1911, and the dignity of Knight Grand Commander may be conferred on Princes or Chiefs of India, or upon British subjects for important and loyal service rendered to the Indian Empire; the second and third classes for services in the Indian Empire of not less than thirty years in the department of the Secretary of State for India. It consists of the Sovereign, a Grand Master (the Viceroy of India), the first class of forty-four Knights Grand Commanders (22 British and 22 Indian), the second class of one hundred Knights Commanders, and the third class of two hundred Companions, exclusive of Extra and Honorary Members, as well as certain additional Knights and Companions.

The Insignia are (i) the Collar of gold, composed of the lotus of India, of palm branches tied together in satire, of the united red and white rose, and in the centre an Imperial Crown; all enamelled in their proper colours and linked together by gold chains. (ii) The Star of a Knight Grand Commander is composed of rays of gold issuing from a centre, having thereon a star of five points in diamonds resting upon a light blue enamelled circular riband, tied at the ends and inscribed with the motto of the Order, *Heaven's Light our Guide*, also in diamonds. That of a Knight Commander is somewhat different, and is described below. (iii) The Badge, an onyx cameo having Her Majesty Queen Victoria's Royal Effigy thereon, set in a perforated and ornamental oval, containing the motto of the Order surmounted by a star of five points, all in diamonds. (iv) The Mantle of light blue satin lined with white, and fastened with a cordon of white silk with blue and silver tassels. On the left side a representation of the Star of the Order.

The ribbon of the Order (four inches wide for Knights Grand Commanders) is sky-blue, having a narrow white stripe towards either edge, and is worn from the right shoulder to the left side. A Knight Commander wears (a) around his neck a ribbon two inches in width, of the same colours and pattern as a Knight Grand Commander, and pendent therefrom a badge of a smaller size, (b) on his left breast a Star composed of rays of silver issuing from a gold centre, having thereon a silver star of five points resting upon a light blue enamelled circular ribbon, tied at the ends, inscribed with the motto of the Order in diamonds. A Companion wears from his left breast a badge of the same form as appointed for a Knight Commander, but of a smaller size pendent to a like ribbon of the breadth of one and a half inches. All Insignia are returnable at death to the Central Chancery, or if the recipient was resident in India, to the Secretary of the Order at Calcutta.

Sovereign of the Order:—H. I. M. The King.

Grand Master of the Order:—His Excellency the Viceroy and Governor-General of India, the Right Honourable Lord Reading, P.C., G.C.B., G.M.S.I., G.M.I.E., G.C.V.O.

Honorary Knights Grand Commanders (G. C. S. I.)

Prince Louis Alberic D'Arenberg
Hon. General His Majesty Chowfa Somdetch Phra Paramendr Maha Vajiravudh Phra Mongkut Klao, G.C.B., G.C.V.O., King of Siam.

Extra Knights Grand Commanders (G. C. S. I.)

H. M. the Queen Empress
H. R. H. The Duke of Connaught
H. R. H. The Prince of Wales

Knights Grand Commanders (G. C. S. I.)

H. H. the Gaekwar of Baroda
H. H. the Maharana of Udaipur
H. H. the Maharaja of Travancore
The Marquis of Lansdowne
H. H. the Maharaja of Jammu and Kashmir
H. H. the Maharaja of Gwalior
Lord Harris
Baron Macdonnell
Earl Curzon of Keddleston
Lord George Hamilton
H. H. the Raja of Cochin
Baron Ampthill
Maharaja Sir Chandra Shumshere Jung Bahadur, Rana of Nepal.
H. H. the Maharaja of Orchha
H. H. the Maharaja of Mysore
Baron Hardinge of Penshurst
H. H. the Begum of Bhopal
Sir Steuart Bayley
Sir Dighton Probyn
Baron Sydenham
Sir Arthur Lawley
Sir John Hewett
H. H. the Maharaja of Bikaner
H. H. Maharao of Kotah
General Sir O'Moore Creagh
General Sir Edmund George Barrow
H. H. the Maharaja of Kapurthala
His Exalted Highness the Nizam of Hyderabad
H. H. the Aga Khan
H. H. the Nawab of Tonk
H. H. the Maharao of Cutch
Baron Carmichael of Skirling
Baron Pentland
Baron Willingdon
H. E. Sir Charles Monro
H. H. Maharao Raja of Bundi
H. H. The Maharaja of Benares
H. H. The Maharaja of Patiala
Sir Arthur Arnold Barrett
H. H. The Nawab of Rampur
Lord Chelmsford
The Earl of Ronaldshay
H. H. The Maharaja Jam Sahib of Navanagar.
H. E. General Lord Rawlinson

Knights Commanders (K. C. S. I.)

Sir Joseph West Ridgeway
Sir David Miller Barbour
Sir Phillip Perceval Hutchins
Sir Henry Edward Stokes
Sir Henry Mortimer Durand
H. H. Maharao of Sirohi
Sir Courtenay Peregrine Ilbert

Sir William Mackworth Young
Sir William John Cunningham
Sir Richard Udny
Sir John Frederick Price
Sir Charles Montgomery Rivaz
Sir Henry Martin Winterbotham
Sir James Monteath
Lieut.-Col. Sir Donald Robertson
Sir Hugh Shakespear Barnes
Sir Arundel Tagg Arundel
Sir Arthur Henry Temple Martindale
Sir James Thomson
Sir Joseph Bampfylde Fuller
Lieut.-Col. Arthur John, Baron Stamfordham
Sir Thomas William Holderness
Sir Charles Stuart Bayley
H. H. Maharaj Rana of Jhalawar
Sir James Wilson
H. H. Maharaja of Alwar
H. H. Raja of Jind
Sir George Stuart Forbes
H. H. Raja of Ratlam
Sir James Lyle Mackay, Baron Inchcape
Sir Harvey Adamson
Nawab of Murshidabad
Sir John Ontario Miller
Sir Lionel Montague Jacob
Sir Murray Hammick
Sir Krishna Govinda Gupta
Sir Leslie Alexander Selim Porter
Sir Spencer Harcourt Butler
Sir Robert Warrand Carlyle
H. H. Maharaja of Kishangarh
Sir Reginald Henry Craddock
Sir James McCrone Doule
Lord Meston of Agra and Dunottar
Sir Benjamin Robertson
Sir Richard Amphlett Lamb
Maharajadhiraj of Burdwan
Sir Elliot Graham Colvin
Sir Trevredyn Rashleigh Wynne
Sir George Casson Walker
H. H. Maharaja of Dhar
H. H. Maharaja of Dewas State (Senior Branch)
H. H. Maharaja of Bhutan
Sir John Nathaniel Atkinson
Sir William Thomson Morison
General Sir James Willcocks
Sir M. F. O'Dwyer
Sir Saiyid Ali Imam
Sir Michael William Fenton
Sir Harold Arthur Stuart
Colonel Sir Sidney Gerald Burrard
Sir William Henry Solomon
Genl. Sir W. R. Birdwood.
Sir P. Sundaram Aiyar Sivaswami Aiyar
Sir Frederick William Duke
Sir Edward Albert Gait
H. H. Nawab of Maler Kotla
H. H. Maharaja of Sirmur
Sir William Henry Clark
Major-General Sir Percy Zachariah Cox
Sir Steyning William Edgerley
Sir Harrington Verney Lovett
Sir Robert Woodburn Gillan
Maharaj Sri Sir Bhairon Singh Bahadur
Sir Alexander Gordon Cardew
Lieut.-Col. Sir Hugh Daly
Sir C. H. A. Hill
H. H. Maharaja Malhar Rao Baba Saheb Puar, Dewas (Junior Branch)
H. H. Maharaja Jam Saheb of Navanagar
H. H. The Maharaja of Dhrangadhra
Lieut.-Col. Sir F. E. Younghusband
Sir T. Morison
Major-Gen. G. M. Kirkpatrick
Major-Gen. R. C. O. Stuart
Sir George Rivers Lowndes
H. H. Maharajadhiraja Maharawal Sir Jowahir Singh Bahadur of Jaisalmer
Sir Archdale Earle
Sir Stuart Mitford Fraser
Sir John Strathedan Campbell
Sir Frank George Sly
H. H. the Maharaja of Datia
H. H. the Maharaj Rana of Dholpur
Sir William Vincent
Sir Thomas Holland
Lieut. General Sir William Raine Marshall
Sir James Bennett Brunyate
Sir Sydney Arthur Taylor Rowlatt
Sir Oswald Vivian Bosanquet
Lieut.-Gen. Sir Alexander Stanhope Cobbe
Sir G. Carmichael
Dr. Sir M. E. Sadler
The Right Hon'ble Lord Southborough
Lieut.-Colonel Maharaja Daolat Singhji of Idar
The Hon'ble Diwan Bahadur Sir P. Rajagopala Achariyar
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Lord Sinha of Raipur
Sir N. D. Beatson-Bell
Sir William Marris
Sir L. J. Kershaw
Sir G. S. Curtis
Sir L. Davidson
C. G. Todhunter
Sir Henry Wheeler
Captain His Highness Maharawal Shri Ranjitsinghji Mansinghji, Raja of Baria, Bombay
The Hon'ble Khan Bahadur Mian Sir Muhammad Shafi
The Hon'ble Mr. Hailey
The Hon'ble Sir Hamilton Grant of the North-West Frontier Provinces
Sir H. R. C. Dobbs
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Sir Ludovic Porter
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The Hon'ble Rao Bahadur B. N. Sarma
The Hon'ble Sir Ibrahim Rahimtulla
C. A. Innes
General Sir C. W. Jacob

Companions (C. S. I.)

Major-Gen. Beresford Lovett
Sir Henry William Primrose
Lieut.-Gen. Michael Weekes Willoughby
Raja Piari Mohan Mukharji of Uttarpara
Sir Frederick Russell Hogg
Col. Charles Edward Yate
William Rudolph Henry Merk
Sardar Jiwan Singh
Col. George Herbert Trevor
Lieut.-Col. Henry St. Patrick Maxwell
Sir Jervoise Athelstane Baines

Sir Arthur Upton Fanshawe
James Fairbairn Finlay
Joseph Parker
Horace Frederick D'Oyly Moule
Sir Henry Babington Smith
Henry Aiken Anderson
Lieut.-Col. Sir Arthur Henry McMahon
Sir Henry Evan Murchison James
Charles William Odling
Alexander Walmesley Cruickshank
David Norton
Thomas Stoker
Sir Edward Richard Henry
Lucas White King
Sir Mackenzie Dalzell Chalmers
Henry Farrington Evans
Richard Gillies Hardy
Herbert Charles Fanshawe
Sir Frederick Styles Philpin Lely
George Robert Irwin
Lieut.-Gen. Sir George Lloyd Reilly Richardson
Robert Burton Buckley
Arthur Frederick Cox
Charles Gerwien Bayne
Hartley Kennedy
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Major-Gen. Trevor Bruce Tyler
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Lt.-Gen. Henry Doveton Hutchinson
Raja of Burdwan
Col. James White Thurburn
Alfred Brereton
William Thomas Hall
Richard Townsend Greer
Sir Louis William Dane
Raja Ram Pal
Hermann Michael Kisch
Sir Cecil Michael Wilford Brett
Herbert Bradley
Sir Frank Campbell Gates
John Mitchell Holms
Percy Seymour Vessey Fitzgerald
Lt.-Col. Willoughby Pitcairn Kennedy
Raja Narendra Chand
Arthur Delaval Younghusband
Oscar Theodore Barrow
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Francis Alexander Slacke
Saiyid Husain Bilgrami
Percy Comyn Lyon
Algernon Robert Sutherland
Sir George Watson Shaw
William Arbuthnot Inglis
Romer Edward Younghusband
Major-General Herbert Mullaly
John Alexander Broun
Col. Henry Finnis
Maj.-Gen. Sir Alfred William Lambert Bayly
Maurice Walter Fox-Strangways
William Lochiel Sapte Lovett Cameron
Raja Madho Lal of Benares
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Maj.-Gen. Sir Henry Montague Pakington Hawkes
Francis Capel Harrison
Comdr. Sir Hamilton Pym Freer-Smith
Andrew Edmond Castlestuart Stuart
Norman Goodford Cholmeley
Walter Francis Rice
Havilland Le Mesurier
Cecil Edward Francis Bunbury
Major-General Reginald Henry Mahon
Rear-Admiral Allen Thomas Hunt
Henry Walter Badock
James Mollison
Sir Pirajirao Bapu Sahib Ghatge
John Walter Hose
Charles Ernest Vear Goument
Herbert Lovely Eales
George Moss Harriott
Ernest Herbert Cooper Walsh
Sir Edward Vere Levinge
Lieut.-Col. Charles Archer
James Peter Orr
Herbert Alexander Casson
William Axel Hertz
Sir Mahadev Bhaskar Chaubal
Brevet-Lieut.-Colonel Clive Wigram
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Major-General William Burney Bannerman
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Stuart Lockwood Maddox
Gilbert Thomas Walker
Lieut.-Col. Phillip Richard Thornhagh Gurdon
Khan Zulfikar Ali Khan
Surgeon-General George Francis Angelo Harris
Edmund Vivian Gabriel
John Stuart Donald
Henry Montague Segundo Mathews
Arthur Crommelin Hankin
Nawab Sir Faridoon Jang Bahadur
Maulvi Ahmad Hussain
Horace Charles Mules
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Michael Kennedy
Thakor Karansinghji Vajirajji of Lakhtar
Col. Alain Chartier de Lotbiniere Joly de Lotbiniere
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Edward Henry Scamander Clarke
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Oswald Campbell Lees
Paul Gregory Melitus
Lieut.-Col. Albert Edward Woods
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William Harrison Moreland, C.I.E.
Diwan Bahadur Chaube Raghunath Das
Col. Lestock Hamilton Reid
Surg.-Gen. Henry Wickham Stevenson
Hon. Lieut.-Col. Raja of Lambagraon
Lieut.-Col. Donald John Campbell MacNabb
Lieut.-Col. Henry Walter George Cole
Henry Venn Cobb
Major-General Gerald Godfrey Giffard
Frederick William Johnston
William Henry Lucas
The Thakor Saheb of Sayla
Arthur Leslie Saunders
Sardar Sir Daljit Singh of Jullunder
Lieut.-Col. Raj Kumar Bir Bikram Singh
Walter Maude
Henry Ashbrooke Crump
William James Reid
Sardar Sir Mysore Kantaraj Urs
Walter Gunnell Wood
John Cornwallis Godley

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S. M. Edwardes
Lt.-Col. F. H. Elliott
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H. Sharp.
R. R. Scott
Col. Sir J. W. E. Douglas-Scott Montagu of Beaulieu
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R. Burn
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Major-General Sir W. C. Knight
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Col. Hormasji Edulji Banatwalla, I.M.S
Lt.-Col. Lawrence Impey
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Lt.-Col. Harold Fenton Jacob
Lt.-Col. Francis Beville Prideaux
Lt.-Col. Stuart George Knox
Col. Hugh Whitchurch Perry
Henry Cecil Ferard
Charles Evelyn Arbuthnot William Oldham
Evan Maconochie
Francis Coope French
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Lt.-Col. A. P. Trevor
Horatio Norman Bolton
Major-General J. C. Rimington
Colonel H. R. Hopwood
Brig.-General R. H. W. Hughes
H. S. Laurence
L. E. Buckley
C. H. Bompas
M. M. S. Gubbay
Lieut.-Gen. R. Wapshare
Brig-Gen. J. M. Walter
Brig.-General W. G. Hamilton
Lieut.-Col. A. W. N. Taylor
Major A. J. Anderson
Major.-General Theodore Fraser
Brig.-General W. N. Campbell
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Major-General L. C. Dunsterville
Hugh McPherson
Henry Fraser Howard
Henry Hubert Hayden
Lieut.-Col. Herbert Des Voeux
Col. Charles Rattray
Temp. Lieut.-Col. Evelyn Berkeley Howell
Lieut.-Col. and Brevet-Col. Felix Fordati Ready
Col. Herbert Evan Charles Bayley Nepean
Lieut.-Col. Patrick Robert Cadell
Lieut.-Col. Montagu William Douglas
Colonel Charles Mactaggart
John Perronet Thompson
Richard Meredith
Hugh Lansdown Stephenson
Manubhai Nandshankar Mehta
Lieut.-Col. Thomas Wolseley Haig
Herman Cameron Norman
Reginald Arthur Maut
Colonel Alexander John Henry Swiney
Brevet-Col. James Wilton O'Dowda
Brevet-Lieut.-Col. Arnold Talbot Wilson
Lieut.-Col. and Brevet-Col. Charles Ernest Graham Norton
Captain Wilfrid Nunn
Brevet-Colonel (temporary Brigadier-General) Hubert Isacke
Colonel Stewart Gordon Loch
Colonel (temporary Brigadier-Gen.) William Kelty McLeod
Col. Frederick James Moberly
Colonel (temporary Brigadier-Gen.) Robert Fox Sorsbie
Colonel Alan Edmondson Tate
Major-Gen. William Cross Barratt
Temporary Brigadier-General Sir Edward Hugh Bray
Col. (temporary Brigadier-Gen.) Arthur Howarth Pryce Harrison
Colonel (temporary Major-Gen.) Frank Ernest Johnson
Major-General Robert Archibald Cassels
Alexander Phillips Muddiman
Frederick Campbell Rose
Selwyn Howe Fremantle
Peter William Monie
Major-General Charles Astley Fowler
Major-General Harold Hendley
Colonel Michael Edward Willoughby
Colonel Edward Arthur Fagan
Colonel Herbert William Jackson
Lt.-Col. Arthur Leslie Jacob
William Pell Barton
C. F. Payne
J. L. Rieu
W. J. J. Howley
B. P. Standen
J. L. Maffey
Lieut.-Col. J. L. W. F. French-Mullen
Lt. Col. J. L. R. Gordon, C. B.
Colonel H. A. P. Lindsay
Colonel C. W. Profeit
Nawabzada Haji Muhammad Hamidulla Khan of Bhopal
George Rainy
The Raja of Muhammadabad, United Provinces
R. E. Holland
Lieutenant-Colonel F. G. Beville
C. A. Innes
C. J. Hallifax
Major-General H. F. Cooke
E. M. Proes
L. T. Harris
A. R. Banerji
R. I. R. Glancy
W. R. Gourlay
Colonel K. Wigram, I. A.
Rai Bahadur Dewan Bishan Das
C. A. Barron
H. M. R. Hopkins
R. A. Graham
G. R. Clarke
D. Donald
Khan Bahadur Sardar Mohmed Ali Khan Kazilbash of Lahore
Lieut.-Col. G. B. M. Sarel
Col. F. E. Coningham
Lieut.-Col. D. A. D. McVean
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Col. J. H. Foster Lakin
Col. G. A. H. Beatty

Captain Raja Narendra Sah, of Tehri (Garhwal)
Arthur Rowland Knapp, I.C.S., Madras
Norman Edward Marjoribanks
Denys de Saumarez Bray
Charles Montagu King
Pandit Hari Kishan Kaul of the Punjab
S. R. Hignell
James Crerar
Colonel S. F. Muspratt
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G. R. Lambert
B. C. Allen
J. E. Webster
T. E. Moir
Diwan Bahadur Raghunath Rao Ramachandra Rao
Major C. C. J. Barrett
Nawab Mehrab Khan, Chief of Bugti Tribe.
Sir Godfrey John Vignoles Thomas, Bart.
Capt. Dudley Burton Napier North.
E. M. Cook, I.C.S.
S. P. O'Donnell, I.C.S.
F. G. Griffith
Maharaj Shri Fatch Singh
J. Hullah
S. E. Pears
J. F. Campbell
G. F. Paddison
J. Milne
J. Donald
Lt.-Col. W. F. T. O'Connor
E. S. Lloyd
L. F. Morshead
N. D. Craik
S. A. Smyth
Lt.-Col. W. H. Jefferey
C. G. Adam
Diwan Bahadur T. Raghavayya
Raja Ejaz Rasul Khan of Jehangirabad

OFFICERS OF THE ORDER.

Secretary, The Hon'ble Mr. J. P. Thompson, C.S.I., I.C.S.
Registrar, Col. The Hon. George A. C. Crichton, C.V.O.

The Most Eminent Order of the Indian Empire.

This Order, instituted by H. M. Queen Victoria, Empress of India, Jan. 1st, 1878, and extended and enlarged in 1886, 1887, 1892, 1897, and 1902 is conferred for services rendered to the Indian Empire, and consists of the Sovereign, a Grand Master, thirty-two Knights Grand Commanders (of whom the Grand Master is first and principal), ninety-two Knights Commanders, and an indefinite number of Companions (not exceeding, without special statute, 20 nominations in any one year); also Extra and Honorary Members over and above the vacancies caused by promotion to a higher class of the Order, as well as certain Additional Knights and Companions appointed by special statute Jan. 1st, 1909, commemorative of the 50th Anniversary of the assumption of Crown Govt. in India.

The Insignia are: (*i*) The COLLAR of gold formed of elephants, lotus flowers, peacocks in their pride, and Indian roses, in the centre the Imperial Crown, the whole linked together with chains; (*ii*) The STAR of the Knight Grand Commander, comprised of five rays of silver, having a small ray of gold between each of them, the whole alternately plain and scaled, issuing from a gold centre, having thereon Her Majesty Queen Victoria's Royal Effigy, within a purple circle, edged and lettered gold, inscribed *Imperatricis Auspiciis*, and surmounted by an Imperial Crown gold; (*iii*) The BADGE, consisting of a rose, enamelled gules, barbed vert, and having in the centre Her Majesty Queen Victoria's Royal Effigy, within a purple circle, edged and lettered gold, inscribed *Imperatricis Auspiciis*, surmounted by an Imperial Crown, also gold; (*iv*) The MANTLE is of Imperial purple satin, lined with and fastened by a cordon of white silk, with purple silk and gold tassels attached. On the left side a representation of the Star of the Order.

A Knight Commander wears: (*a*) around his neck a ribbon two inches in width, of the same colour (purple) and pattern as a Knight Grand Commander, pendent therefrom a badge of smaller size: (*b*) on his left breast a star, similar to that of the first class, but the rays of which are all of silver.

The above mentioned Insignia are returned at death to the Central Chancery, or if the Knight was resident in India to the Secretary of the Order at Calcutta.

A Companion wears from the left breast a badge (not returnable at death) of the same form as appointed for a Knight Commander, but of smaller size, pendent to a like ribbon of the breadth of one and a half inches.

Sovereign of the Order:—The King, Emperor of India.

Grand Master of the Order:—Lord Reading.

Honorary Knights Grand Commanders (G. C. I. E.)

The *ex*-Emperor of Korea.
Shaikh Sir Khazal Khan, Shaikh of Mohammerah and Dependencies.
Shaikh Sir Abdul Aziz bin Abdur Rahman Ruler of Nejd and Dependencies.

Extra Knight Grand Commander (G. C. I. E.)

The Duke of Connaught
H. R. H. The Prince of Wales.

Knights Grand Commanders (G.C.I.E.)

The Maharao of Cutch
Lord Lansdowne
Lord Harris
The Nawab of Tonk
The Wali of Kalat
Maharaja of Karauli
Thakur Sahib of Gondal
The Maharaja of Benares
Lord Curzon of Keddleston
The Maharaja of Orchha
Lord Ampthill
Maharao of Bundi
The Maharao of Sirohi
The Aga Khan
The Maharaja of Travancore
Lord Lamington
The Begam of Bhopal
Sir Edmond Elles
Sir Walter Laurence
Sir Arthur Lawley

The Maharaja of Bikaner
The Maharao of Kotah
Lord Sydenham
The Nawab of Rampur
Maharaj Sir Kishan Parshad
Lord Hardinge
Lord Carmichael
Maharaja of Kashmir
Sir Louis Dane
Maharaja of Bobbili
Lord Stamfordham
Sir Guy Fleetwood Wilson
Sir John Jordan
The Maharana of Udaipur
The Maharaja of Patiala
The Raja of Cochin
Lord Pentland
The Raja of Pudukottai
Lord Willingdon
The Yuvaraja of Mysore
Sir Charles Stuart Bayley
Maharaja of Darbhanga
H. H. the Maharaja of Jind
Lord Chelmsford
The Earl of Ronaldshay
Sir Michael Francis O'Dwyer
Sir Gulam Muhammad Ali, Prince of Arcot
Major-General Sir Percy Zachariah Cox
H. H. the Maharaja of Indore
The Raja of Cochin
Sir William Duke
Sir George Ambrose Lloyd
The Maharaja of Baroda
The Maharaja of Alwar
The Maharaja of Kapurthala
H. H. Sir Ugyen Wangchuk, Maharaja of Bhutan
Lord Lytton
The Maharaja of Dhrangadhra.
The Right Hon'ble Rowland Thomas Baring, Earl of Cromer, C.V.O.
Sir William Henry Hoare Vincent, K.C.S.I., Kt., I.C.S.
H. E. Sir Harcourt Butler
Sir Reginald Craddock.
The Hon'ble Maharajadhiraja Sir Bijay Chand Mehtab Bahadur of Burdwan

Honorary Knights Commanders (K. C. I. E.)

Sir Leon E. Clement-Thomas
Dr Sir Sven Von Hedin
Cavaliere Filippo De'Filippi
General Sir Baber Shumshere Jung Bahadur Rana of Nepal
General Sir Judha Shumshere Jung Bahadur, Rana of Nepal
Sultan Sir Abdul Karim Fadhli bin Ali of Lahej
Sir Alfred Martineau
Commanding General Sir Padma Shum Shere Jung Bahadur, Rana of Nepal.
Genl. Sir Tez Shum Shere Jung Bahadur, Rana of Nepal
H. E. The Shaikh of Bahrain and Dependencies
Sir Yang-tseng-hsin, Chiang Chun and Governor of Hsin Kiang Province.
The Reverend Doctor Sir James Carruthers Rhea Ewing, M.A., D.D., LL.D.

Knights Commanders (K. C. I. E.)

Surg.-Gen. Sir Benjamin Simpson
Sir Albert James Leppoc Cappel
Sir Alfred Woodley Croft
Sir Bradford Leslie
Sir Arthur Baron Carnock
Sir Guildford Molesworth
Sir Frederick Russell Hogg
Sir Henry Mortimer Durand
Raja of Lunawara
Sir Henry Hoyle Roworth
Sir Edward Charles Kayll Ollivant
Sir Henry Seymour King
Baron Inchcape
Sir Wm. R. Brooke
Maharaja of Gidhaur
Nawab of Loharu
Rear-Admiral Sir John Hext
Sir Mancherjee Bhownaggree
Col. Sir Thomas Holdich
Sir Andrew Wingate
Raja Sir Harnam Singh, Ahluwalia
Sir S. Subramaniya Aiyar
Sir Alexander Cunningham
Sir Henry Evan Murchison James
Sir James George Scott
Sir Lawrence Hugh Jenkins
Sir Herbert Thirkell White
Sir Frederick Augustus Nicholson
Sir Arthur Upton Fanshawe
Raja Dhiraj of Shahpura
Sir Gangadhar Rao Ganesh, Chief of Miraj (Senior Branch)
Brevet-Col. Sir Buchanan Scott
Col. Sir John Walter Ottley
Lieut.-Col. Sir Francis Edward Younghusband
Major-General Sir James R. L. Macdonald
Sir Fredric Styles Philpin Lely
Lt.-Col. Sir Arthur Henry McMahon
Sir Francis Whitmore Smith
Sir Thomas Henry Holland
Nawab Sir Muhammad Ali Beg
H. H. Maharajadhiraja of Kishangarh
Raja of Mahmudabad
Sir Trevredyn Rashleigh Wynne
Sir Richard Morris Dane
Maharajadhiraja of Burdwan
Sir Wilhelm Schlich
Sir Theodore Morison
Gen. Sir Robert Irvin Scallon
Sir John David Rees
Rear-Admiral Sir Edmond John Warre Slade
Sir John Benton
Sir Archdale Earle
Sir Charles Stewart-Wilson
Lieut.-Gen. Sir Malcolm Henry Stanley Grover
Sir Charles Rait Cleveland
Field Marshal Sir Douglas Haig
Lieut.-Col. Sir Hugh Daly
Sir Henry Parsall Burt
Sir James Houssemayne DuBoulay
Sir Rajendra Nath Mukharji
Lieut.-Col. Sir Henry Beaufoy Thornhill
Sir Gangadhar Madho Chitnavis
H. H. Nawab of Jaora State
H. H. Raja of Sitamau State
Raj Sahib Sir Amarsinhji Banesinhji (Vankaner)
Sir Ramkrishna Gopal Bhandarkar
Sir Michael Filose
Rear-Adm. Sir Colin Richard Keppel
Sir John Stanley
Sir Saint-Hill Eardley-Wilmot
Sir Francis Edward Spring
H. H. Maharawat of Partabgarh
H. H. Maharaja of Bijawar State, Bundelkhand
Sir John Twigg

Sir George Abraham Grierson
Sir Marc Aurel Stein
Nawab Sir Bahram Khan
Sir Henry Alexander Kirk
Sir Alfred Gibbs Bourne
Chief of Jamkhandi
Sir Frank Campbell Gates
Sir George Macartney
Sir Edward Douglas Maclagan
Maj.-Gen. Sir George John Younghusband
Sir Brian Egerton
Sir Stephen George Sale
Sir Prabhashankar D. Pattani
Maharaja of Kasimbazaar
Lieut.-Col. Sir John Ramsay
Sir William Maxwell
Sir Faridoonji Jamshedji, C.S.I.
Sir Mokshagundam Visvesvaraya
His Highness the Maharaja of Samthar
Sir John Stuart Donald
Lieut.-Col. Sir Percy Molesworth Sykes
Sir Edward Vere Levinge
Raja Sir Rampal Singh
Sir Alexander Henderson Diack
Sir Sao Mawng
H. H. Raja Sir Arjun Singh of Narsingarh
Captain Malik Sir Umar Hayat Khan
Sir Robert Balley Clegg
Sir Henry Wheeler
Sir Mahadeo B. Chaubal
Sir James Walker
Mirza Sir Abbas Ali Baig
H. H. the Raja of Bilaspur
Nawab Sir Sahibzada Abdul Qaiyum
Lieut.-Gen. Sir Raleigh Gilbert Egerton
Lieut.-Gen. Sir Henry D'Urban Keary
Sir George Cunningham Buchanan
Major-Gen. Sir William George Lawrence Beynon
Raja of Rajgarh
Rana of Barwani
Maharaja of Sonpur
Capt. Raja Sir Hari Singh
Sir John Barry Wood
Sir Alfred Hamilton Grant
Colonel Sir Vere Bonamy Fane
Thakur Saheb of Rajkot
Lieut.-Col. W. J. Buchanan
Lieut.-Col. Raja Jaichand of Lambagraon
Rear-Admiral Sir D. St. A. Wake
Major-Gen. Sir Alfred Horsford Bingley
Sir Godfrey Butler Hunter Fell
Lieut.-Gen. Sir Thomas Joseph O'Donnell
Major-Gen. Sir Godfrey Williams
Sir Nicholas Dodd Beatson Bell
Sir William Sinclair Marris
His Highness Mehtar Sir Shuja-ul-Mulk of Chitral
Khan Bahadur Maulvi Sir Rahim Bakhsh
Sir James Herbert Seabrooke
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Maharaj Kunwar Sir Bhopal Singh
Nawab Sir Mir Shams Shah, I.S.O.
Lieut.-Gen. Sir Edward Locke Elliot
Lieut.-Gen. Sir Edward Altham Altham
Lieut.-Gen. Sir Charles Alexandor Anderson
Lieut.-Gen. Sir Havelock Hudson
Major-Gen. Sir Wyndham Charles Knight
Major-Gen. Sir Herbert Aveling Raitt
Sir Herbert Guy Dering
Major-Gen. Sir H. F. E. Freeland
Baron Montagu of Beaulieu
Brevet-Lieut.-Col. Sir Arnold Talbot Wilson
2nd-Lt. Meherban Sir M. V. Raje Ghorpade, Chief of Mudhol
The Hon'ble Sir W. Maude, I.C.S.
The Hon'ble Rai Bahadur Sir Bepin Krishna Bose, Kt.
Sir C. M. Stevenson Moore, I.C.S.
J. G. Cumming
H. J. Maynard
H. H. The Nawab of Palanpur
H. R. C. Dobbs
H. A. Crump
Sardar Arur Singh of Amritsar
Lieut.-Gen. Sir Richard Wapshare
Major-Gen. Sir Willfrid Malleson
Major-Gen. Sir Patrick Hehir
The Maharaja of Sirmur
The Nawab of Malerkotla
The Thakor Saheb of Limbdi
W. D. Sheppard
L. C. Porter
Major-Gen. Sir Andrew Skeen
Col. Sir A. B Dew
Nawab Khan-I-Zaman Khan, Chief of Amb
Nawab Haji Fateh Ali Khan Kazilbash
Raja Muhammad Nazim Khan Mir of Hunza
Major-Gen. W. R. Edwards, I.M.S.
E. Maconochie
Sardar Kantaraj Urs
Dr. W. H. Willcox
The Maharaja of Panna
H. Le Mesurier
P. J. Fagan
Rao Raja Madho Singh
Sir Norcot Warren
Raja Sahib Sri Govinda Krishna Yachendrulu-varu
Raja Saiyid Abu Jafar
C. A. Bell
Maulvi Ahmad Husain Nawab Amin Jang Bahadur
Sir John H. Biles
Lieutenant-Colonel T. W. Haig
J. H. Kerr
His Excellency Sir John Henry Kerr
Vice-Admiral Sir Lionel Halsey
The Maharaja of Sikkim
The Chief of Sangli
Major-General G. G. Gifford, I.M.S.
Major Nawab Malik Khuda Baksh Khan Tiwana
H. F. Howard.
A. R. Knapp
R. A. Mant
Maung Kin
B. N. Mitra
Nawab Muhammad Muzammil-ullah Khan of Bhikrampur, U. P.

Ex-Officio Companion (C. I. E.)

Sir Courtenay P. Ilbert

Honorary Companions (C. I. E.)

Laurent Marie Emile Beauchamp
Jean Etienne Justin Schneider
Haji Mohammad Ali Rais-ut-Tujjar
Sheik Abdulla Bin Esa
Haidar Khan, Chief of Hayat Daud, Persian Gulf
Mirza Ali Karam Khan Shuja-i-Nizam, Dy Governor of Bandar-Abbas
Lieut.-Col. Ghana Bhikram
Lieut.-Col. Partab Jung Bahadur Rana
Major Alfred Paul Jacques Masson
Lieut.-Col. Gen. Sugiyama, Imperial Japanese Army
Lieut. Richard Beamish—*(Europe)*
Lieut. François Pierre Paul Razy—*(Europe)*

Colonel Indra Shum Shere Jung Bahadur Rana—(*Nepal*)
Lieut.-Col. Bhuban Bikram Rana—(*Nepal*)
Lieut.-Col. Shamshere Bikram Rana—(*Nepal*)
Lieut.-Col. Dumber Shumshere Thapa—(*Nepal*)
Lieut.-Col. Jit Jung Sahi—(*Nepal*)
Lieut.-Col. Bhairab Shumshere Jung Bahadur Rana—(*Nepal*)
Lieut.-Col. Madan Man Singh Basniat—(*Nepal*)
Lieut.-Col. Gambhir Jung Thapa—(*Nepal*)
Lieut.-Col. Chandra Jung Thapa—(*Nepal*)
Major Uttam Bikram Rana —(*Nepal*)
Captain Grihmardan Thapa—(*Nepal*)
Captain Narsing Bahadur Basniat—(*Nepal*)
Shikh Abdulla Bin Jasim, Ruler of Qatar—(*Persian Gulf*)
Taoyin Chur. Chu-jul-Ch'ih, Tao-yin of Kashgar
Sheikh Abdulla bin Jalowi, Amir of Hassa
Nobumichc Sakenobe
Major Masanosuke Tsunoda
His Excellency Muhammad Ibrahim Khan, Shaukat-ul-Mulk
His Excellency Shaikh Ahmad al Jabir, Shaikh of Koweit and dependencies
Ahmad al Thaniyan, cousin of Shaikh Bin Sand

Companions (C. I. E.)

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Pierre François Henri Nanquette
Stephen Paget Walter Vyvyan Luke
Charles Edward Pitman
Richard Isaac Bruce
Sir Steuart Colvin Bayley
George Felton Mathew
Sir Henry Christopher Mance
Maj.-Gen. Thomas Ross Church
Thakur Bichu Singh
Rev. William Miller
Benjamin Lewis Rice
Mortimer Sloper Howell
Maj.-Gen. Viscount Downe
Sir George Watt, M.B.
Joseph Ralph Edward John Royle
The Rt. Hon. Saiyid Ameer Ali
Sir Frank Forbes Adam
Frederick Thomas Granville Walton
Major-Gen. James Cavan Berkeley
Henry Irwin
Sir James L. Walker
Rayner Childe Barker
Lieut.-Col. Charles Henry Ellison Adamson
Berthold Ribbentrop
Langton P. Walsh
Edmund Neel
Brevet-Lieut.-Col. Sir George L. Holford
Maj.-Gen. L. H. E. Tucker
Sir John Prescott Hewett
Lieut.-Col. Henry Percy Poingdestre Leigh
Sir J. Bampfylde Fuller
Sir William Turner Thiselton-Dyer
Major-Gen. G. F. L. Marshall
Edward Horace Man
Lieut.-Gen. Sir G. L. R. Richardson
Paul Gregory Melitus
Lieut.-Col. Sir Richard Carnac Temple
Edward C. S. George
Col. Frank William Chatterton
Sri Ram Bhikaji Jatar
Fazulbhai Visram
Arthur C. Hankin
Adam G. Tytler
Charles E. Buckland
Harry A. Acworth
Col. C. A. Porteous
Sir Steyning W. Edgerley
Col. W. R. Yeilding
Henry J. Stanyon
Frederick John Johnstone
Col. Samuel Haslett Browne
Frank Henry Cook
Francis Erskine Dempster
Lieut.-Col. John Shakespear
Capt. Norman Franks
Sir William Earnshaw Cooper
Maharaj Rajashri Sankara Subbaiyar
Khan Bahadur Sir Naoroji Pestonji Vakil
Col. Algernon George Arnold Durand
Edwin Darlington
Dr. Waldemar M. Haffkine
Rustamji Dhanjibhai Mehta
Khan Bahadur Mancherji Rustamji Dholu
Col. John Charles F. Gordon
Sir Benjamin Robertson
Duncan James Macpherson
John Campbell Arbuthnott
Sir Robert Warrand Carlyle
Henry Cecil Ferard
Charles George Palmer
Lieut.-Col. Samuel John Thomson
P. C. H. Snow
Hony. Lieut.-Col. Kunwar Bir Bikram Singh
Lieut.-Col. A. B. Minchin
W. T. Van Someren
Charles Still
Col. H. K. McKay
Lieut.-Col. W. B. Browning
Francis Jack Needham
Robert Giles
Vishwanath Patankar Madhava Rao
Col. Walter Gawen King
James Sykes Gamble
Sir George William Forrest
Lieut.-Col. Frank Popham Young
Reginald Hawkins Greenstreet
John Sturrock
John Stuart Beresford
Lieut.-Col. Malcolm John Meade
Edward Louis Capp ell
George Moss Harriott
Frederick George Brunton Trevor
Henry Marsh
Lieut.-Col. Bertrand Evelyn Mellish Gurdon
Rai Bahadur Sir Kailash Chandra Basu
Henry Felix Hertz
Courtenay Walter Bennett
Rear-Admiral Walter Somerville Goodridge
Col. Solomon Charles Frederick Peile
Bertram Prior Standen
Henry Alexander Sim
Col. John Crimmin
Lieut.-Col. Granville Henry Loch
Fardunji Kuvarji Tarapurvala
Baba Kali Nath Mitter
Sir William Jameson Soulsby
Col. William John Read Ralnsford
Col. Oswald Claude Radford
Major-General George Kenneth Scott-Moncrieff
Major-General Thomas Edwin Scott
Lieut.-Col. Laurence Austine Waddell
General Mir Ausaf Ali Khan
Subadar-Major Sardar Khan
Hony. Capt. Yasin Khan
Sidney Preston
Sir Murray Hammick
Sir Richard Amphlett Lamb

Alexander Lauzun Pendock Tucker
Diwan Bahadur Kanchi Krishnaswami Rao
Lieut.-Col. John Clibborn
Col. George Wingate
Lieut.-Col. George Hart Desmond Gimlette
Arthur Henry Wallis
George Herbert Dacres Walker
Lieut-Col. Frank Cooke Webb Ware
Hony. Major Thomas Henry Hill
Alexander Porteous
Col. Thomas Elwood Lindsay Bate
Hon. Lockhart Mathew St. Clair
Sir Marshall Reid
Rao Bahadur Pandit Sakhdeo Parshad
Stuart Mitford Fraser
Maj.-Gen. Francis Edward Archibald Chamier
Lt.-Gen. Ernest De Brath
Walter Bernard de Winton
Algernon Elliott
Lt.-Col. Charles Arnold Kemball
Edward Giles
Lieut.-Col. Alfred William Alcock
Arthur Hill
Douglas Donald
Sir Jagadish Chandra Bose
Raja Sikandar Khan, of Nagar
Sir William Dickson Cruickshank
Sir Thomas Jewell Bennett
Charles Henry Wilson
Rao Bahadur Shyam Sundar Lal
Robert Herriot Henderson
Nawab Mir Mehrulla Khan
Charles Henry West
John Pollen
Charles Brown
George Huddleston
Lieut.-Col. Montagu William Douglas
Lieut.-Col. Arthur D'Arcy Gordon Bannerman
Rai Bahadur Gunga Ram
Robert Douglas Hare
William Bell
Claude Hamilton Archer Hill
Edward Henry Scamander Clarke
Webster Boyle Gordon

Lieut.-Col. Robert Arthur Edward Benn
Madhu Sudnan Das
George James Perram
Sir C. Sankaran Nayar
William Ninnis Porter
Stephen Finney
Edward Waller Stoney
Walter Home
C. W. Waddington

Khan Bahadur Barjorji Dorabji Patel
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Lionel Truninger
David Bayne Horn
Richard Grant Peter Purcell McDonnell
Commander George Wilson
Captain Thomas Webster Kemp
William Harrison Moreland
Pirajirao Bapu Saheb Ghatge
Surg.-Gen. William Richard Browne

Sir Montague de Pomeroy Webb
Hugh William Orange
Lieut.-Col. Charles Archer
Lionel Maling Wynch
Arthur William Uglow Pope
George Frederick William Thibaut
Major-General William Arthur Watson
Col. Alain Chartier de Lotbiniere Joly de Lotbiniere

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Herbert Cunningham Clogstoun
Thomas Robert John Ward
Lieut.-Col. Charles Ferguson Campbell
Major-Genl. Harry Davis Watson
Hon. Sir Derek William George Keppel
Commander Sir Charles Leopold Cust
Lt.-Col. Sir David Prain
Col. William John Daniell Dundee
Sir Ibrahim Rahimtoola
Sir Edward Albert Gait
Robert Greig Kennedy
Hony. Col. Arthur Hills Gleadowe-Newcomen
Edward Anthony Doran
Col. Henry Thomas Pease
Lieut.-Col. Malcolm Sydenham Clarke Campbell
Lieut.-Col. Arthur Le Grand Jacob
Sir John Stratheden Campbell
Frederick Palmer
Surgn.-Lieut.-Col. Sir Warren Roland Crooke-Lawless
Lt.-Col. Alexander John Maunsell MacLaughlin
George Claudius Beresford Stirling
Francis St. George Manners-Smith
Lieut.-Col. David Melville Babington
Samuel Digby
Sir Pazhamarneri Sundaram Aiyar Sivaswami Aiyar
Francis Guy Selby
Gen. William Riddell Birdwood
William Herbert Dobbie
Lt.-Col. John Norman Macleod
Rear-Admiral George Hayley-Hewett
Ralph Buller Hughes-Buller
Lieut.-Col. Francis Frederic Perry
Lieut.-Col. Francis Granville Beville
Diwan Bahadur Sir Diwan Daya Kishen Kaul
Lieut.-Col. Stuart Hill Godfrey
Lieut.-Col. Denys Brooke Blakeway
Maung Bah-Too
Brigadier-General Ernest William Stuart King Maconochy

William Ellis Jardine
Thomas Corby Wilson
Sir Frederick Loch Halliday
Percy Wyndham
Hugh Spencer
Cecil Ward Chichele-Plowden
Lieut.-Col. Richmond Trevor Crichton
Albert Claude Verrieres
Diwan Bahadur P. Rajagopala Achariyar.
Muhammad Aziz-ud-din Khan
Nilambar Mukharji
Rai Bahadur Kali Prasanna Ghosh
John Newlands
Col. James Henry Elias Beer
Lieut.-Col. Henry Parkin
Col. Robert Neil Campbell
Montagu Sherard Dawes Butler
Lieut.-Col. Stuart George Knox
Edgar Thurston
James Bennett Brunyate
Frederick James Wilson
Reginald Edward Enthoven
Henry Venn Cobb
Reginald Hugh Brereton
William Lochiel Berkeley Souter
Joseph John Mullaly
Oswald Vivian Bosanquet
John Hubert Marshall
Lieut.-Col. Arthur Grey
Lieut.-Col. George Grant Gordon
Col. Frank Goodwin

Lieut.-Col. George Frederick Chenevix-French
Archibald Young Gibbs Campbell
Andrew Bigoe Barnard
James Adolpus Guider
John Paul Warburton
James William Douglas Johnstone
Walter Culley Madge
Lieut.-Col. Wallace Christopher Ramsay Stratton
James Scott
Lieut.-Col. Edward Charles Bayley
Frederick William Johnston
Edward Gelson Gregson
William Malcolm Hailey
Col. Benjamin William Marlow
Herbert Gerald Tomkins
Henry Whitby Smith
Lieut.-Col. Francis Beville Prideaux
Lieut.-Col. Arthur Prescott Trevor
Lieut.-Col. Ramsay Frederick Clayton Gordon
Col. Charles Mactaggart
Hopetoun Gabriel Stokes
Lieut.-Col. Sir Leonard Rogers
Nawab Muhammad Abdul Majid
Henry Sharp
Mahamahopadhyaya Hara Prasad Shashtri
Lieut.-Col. Allen McConaghey
Nawab Kaisar Khan, Chief of the Magasci Tribe
Rai Bahadur Diwan Jannat Rai
Robert Charles Francis Volkers
Henry Hubert Hayden
Alexander Muirhead
Alexander Emanuel English
William Rucker Stikeman
Edward Robert Kaye Blenkinsop
George Sanky Hart
Nawab Muhammad Salamullah Khan Bahadur
Hon. Col. George Henry Evans
Lieut.-Col. Henry Burden
William George Knight
Rev. John Anderson Graham

Louis James Kershaw
William Taylor Cathcart
Maneckjee Byramjee Dadabhoy
Hugh Murray
Pandit Kailas Narayan Haksar
Lieut.-Col. Ernest Douglas Money
Lieut.-Col. Hugh Roderick Stockley
Major John McKenzie
Lieut.-Col. Richard Godfrey Jones
Lieut.-Col. James Reed Roberts
Lieut.-Col. Lawrence Impey
Arthur Ernest Lawson
Albion Rajkumar Banerji

Lieut.-Col. Frederick Fenn Elwes
Col. William Burgess Wright
Cecil Archibald Smith
Baba Gurbakhsh Singh Bedi
Col. Gilbert Walter Palin
Col. Robert Edward Pemberton Pigott
Col. William Daniel Henry
Gerald Francis Keatinge
Major John Glennie Greig
Sardar Nasoroji Pudamji

Brig.-Gen. R. E. T. Hogg.
Lieut.-Col. C. A. Barron.
Leonard William Reynolds
Charles Archibald Walker Rose
Lieut.-Col. Arthur Dennys Gilbert Ramsay
Pierce Langrishe Moore
Alfred Chatterton
Major Arthur Abercromby Duff
Lt.-Col. John Lawrence William French-Mullen

Bernard Coventry
Albert John Harrison
Richard Hamilton Campbell
Rao Bahadur Bangalore Perumal Annaswami Mudaliar
Prafulla Chunder Roy
Col. Francis Raymond
Lieut.-General Sir Michael Joseph Tighe
Major-General William Bernard James
Colonel Sydney D'Aguilar Crookshank
Edward Denison Ross
Khan Bahadur Muhammad Israr Hasan Khan
Brig.-General Reginald O'Bryan Taylor
David Wann Aikman
Rai Bahadur Pandit Hari Kishan Kaul
Lieut.-Col. Frederick William Wodehouse
Major-General Sir Richard Henry Ewart
Major-General Maitland Cowper
Thomas Walker Arnold
Lieut.-Col. Charles Henry James
Alexander Blake Shakespear
John Hope Simpson
Lt.-Colonel Hugh Stewart
Major William Glen Liston
Major-General Edwin Henry de Vere Atkinson
Walter Stanley Talbot
Frank Adrian Lodge
Lieut.-Col. Robert William Layard Dunlop
Hrishi Kesh Laha
Nalini Bhusan Gupta
Joseph Terence Owen Barnard
Lieut.-Col. Townley Richard Filgate
Alexander Macdonald Rouse
Charles Cahill Sheridan
Lieut.-Colonel Herbert de Lisle Pollard-Lowsley
Lt.-Colonel William Wilfrid Bickford
Henry Cuthbert Streatfield
Lt.-Col. Cecil Kaye
William Foster

Lt.-Col. G. K. Walker
Sardar Appaji Rao Sitole Anklikar.
Henry Fraser Howard
Lawrence Mercer
Sir Joseph Henry Stone
P. R. Cadell
Major W. L. Campbell
Lieut.-Col. G. S. Crauford
W. C. M. Dundas
Hon. Col. V. N. Hickley

J. H. Lace
Bhupendra Nath Mitra
A. P. Muddiman
Charles Cunningham Watson
H. L. Stephenson
Lieut.-Col. H. B. St. John
Abanindra Nath Tagore
W. H. H. Arden-Wood

J. R. Pearson
Col. R. J. Blackham
W. O. Ashmore
Hugh Edward Clerk
Percy James Mead
Deba Prosad Sarbadhikari
Frank Charles Daly
Haji Bukhsh Ellahie, Khan Sahib
James Gargrave Covernton
Louis E. B. Cobden-Ramsay
William Pell Barton
George Batley Scott
Rangnath Narsingh Mudholkar
Lieut.-Colonel James Curry Robertson
Raghunath Venkaji Sabnis

Col. William Molesworth
Phillip Glynn Messent
Lalubhai Samaldas Mehta
Leonard Birley
Mohendranath Ray
Frank Frederick Lyall
Col. George James Hamilton Bell
Frank Currie Lowis
Lewis French
Major Walter Hugh Jeffery
Richard Meredith
Albert Howard
Major E. D. Wilson Greig
Harold Arden Close
Richard Hugh Tickell
Francis Samuel Alfred Slocock
Lieut.-Col. Fitz Warren Lloyd
Lieut.-Col. Arthur Leslie Jacob
Nawab Khair Baksh, Khan Bahadur
Thomas Summers
Kiran Chandra De
Frank Willington Carter
Charles Montague King
Shiekh Raiz Hussain, Khan Bahadur
Edward Rawson Gardiner
Berkeley John Byng Stephens
Rear-Admiral Walter Lumsden
Major-General Dewan Bishan Das (Jammu and Kashmir)
Major Frederic Gauntlett
Lt.-Col. Samuel Richard Christophers
Colonel George William Patrick Dennys
William Peter Sangster
Montague Hill
Major Frederick Marshman Bailey
Sahibzada Abdus Samad, Khan of Rampur
Cecil Bernard Cotterell
Suleman Haji Kasim Mitha
Captain George Prideaux Millet
Ram Charan Mitra
Lieut.-Col. Walter Thomas Grice
Lieut.-Col. Hector Travers Dennys
Selwyn Howe Fremantle
Zia-ud-din Ahmed
Abdul Karim Abdul Shakur Jamal
Lt.-Col. Cecil Charles Stewart Barry
Col. Cyril Mosley Wagstaff
Arthur Robert Anderson
Col. Charles Henry Cowie
Kunwar Maharaj Singh
David Petrie
Godfrey Charles Denham
Lt.-Col. Charles Joseph Windham
Herbert George Chick
Lt.-Col. Charles Henry Dudley Ryder
Geoffrey F. deMontmorency
Raja Pratab Singh of Ali Rajpur
Brevet-Lieut.-Col. Cecil John Lyons Allanson
Chunilal Harilal Setalvad
John Norman Taylor
Khan Bahadur Sardar Din Muhammad Khan
Lionel Linton Tomkins
Douglas Marshall Straight
Raja Moti Chund
Matthew Hunter
John Tarlton Whitty
Moses Mordecai Simeon Gubbay
Lieut.-Col. C. A. Muspratt-Williams
Raja Bhagwat Raj Bahadur Singh of Sohawal
Lt.-Col. Robert Charles MacWatt
George Paris Dick
Horatio Norman Bolton
Major William John Keen
Lieut.-Col. William Magill Kennedy
Sheikh Maqbul Husain
Brigadier-General Cyril Harcourt Roe
Col. George Sim Ogg.
Lieut.-Col. Charles Hugh Hodges Nugent
Commander M. W. Farewell
Major John Bertram Cunliffe
Evelyn Berkeley Howell
Colonel William Montague Ellis
Raja Venganad Vasudeva Raja
Col. James Jackson
James Anderson Dickson McBain
Christopher Addams-Williams
Rai Bahadur Banshidhar Banerji
Hammett Reginald Clode Hailey
Robert Thomas Dundas
Reginald George Kilby
Robert Egerton Purves
Arthur Bradley Kettlewell
Lala Ram Saran Das
Khan Bahadur Mian Muhammad Shafi
Hugh Aylmer Thornton
Charles Stewart Middlemiss
Major Frederick Norman White
John Loader Maffey
Diwan Bahadur Tiwari Chhajuram
Seth Chandmul Dhudha
Steuart Edmund Pears
William Nawton Maw
John Edward Webster
Capt. A. G. J. MacIlwaine
Col. T. G. Peacocke
Major E. J. Mollison
Thomas Avery
Captain E. W. Huddleston
Maj. and Brevet-Col. Richard Alexander Steel
Lt.-Col. J. W. B. Merewether
Brig.-General d'Arcy Charles Brownlow
R. W. Bullard
Lt.-Col. F. W. Radcliffe
E. L. Bagshawe
Charles John Emile Clerici
Lt.-Col. A. K. Rawlins
Major Aurose Boxwell
Bt.-Col. N. R. Radcliffe
Major William Gillitt
William John Keith
Henry Miller
G. B. Power
Robert Erskine Holland
A. J. W. Kitchin
W. R. Gourlay
W. S. Coutts
Lt.-Col. Westwood Norman Hay
(Tem.) Major R. S. F. Macrae
Charles Augustus Tegart
Major R. E. H. Griffith
P. A. Churchward
Diwan Bahadur Lala Bishesar Nath
Rao Bahadur Appaji Ganesh Dandekar
Charles Francis Fitch
M. Y. Young
S. M. Burrows
P. J. Hartog
Lt.-Col. (Tem.-Col.) H. A. Young
Lt.-Col. J. H. Dickson
Lt.-Col. Hugh Alan Cameron
Lt.-Col. W. E. R. Dickson
Major William Edmund Pye
Lt.-Col. S. M. Rice
Lt.-Col. C. B. Stokes
Major E. S. Gillett
Major E. C. Withers

Major Edmund Walter
Captain Duncan William Wilson
Francis Sylvester Grimston
Victor Bayley
William Alexander
John Dillon Flynn
Col. Shafto Longfield Craster
Sidney Robert Hignell
Denys de Saumarez Bray
Henry Phillips Tollinton
James MacKenna
Edward Lister
Lt.-Col. David Waters Sutherland
Reginald Isidore Robert Glancy
Arthur Willsteed Cook
Thomas Eyebron Moir
James Crerar
Henry Robert Crosthwaite
Hilary Lushington Holman-Hunt
Gerald Aylmer Levett-Yeats
Rai Bahadur Hari Ram Goenka
Taw Sein Ko
Jivanji Jamshedji Modi
Dewan Bahadur Pandit Krishna Rao Luxman Paonaskar
Dewan Bahadur Krishnarajapuram Pallegondai Puttanna Chetty
Lt.-Col. John Anderson
Robert Glover Jaquet
Major (Tempy. Lt.-Col.) Ralph Ellis Carr-Hall
Lt.-Col. (Tempy. Col. Alexander Hierom) Ogilvy Spence
Lt.-Col. Charles Albert Edmond O'Meara
Lt.-Col. Godfrey Lambert Carter
Lt.-Col. Ernest Arthur Frederick Redl
Harry Seymour Hoyle Pilkington
James Alexander Ossory Fitzpatrick
Maj. David Lockhart Robertson Lorimer
Temp. Brig.-General Terence Humphrey Keyes
Major Harold Hay Thorburn
Captain Khan Muhammad Akbar Khan
Muhi-ud-din Khan, Sardar Bahadur
Maj.-Gen. Sardar Natha Singh, Sardar Bahadur
Maj.-Gen. Sardar Pooran Singh, Bahadur
Lt.-Col. Girdhar Singh, Sardar Bahadur
Lt.-Col. Haider Ali Khan, Sardar Bahadur
Tempy. Capt. Philip James Griffiths Pipon
Tempy. Capt. Cecil Sutherland Waite
Major James Ainsworth Yates
Major David Munro
Reverend William Robert Park
Brevet-Col. Francis Willam Pirrie
Commander Hubert McKenzie Salmond
Lt.-Col. Felix Oswald Newton Mell
Tempy. Hony. Lt.-Col. Seaburne Guthrie Arthur May Moens
Lt.-Col. Bhola Nauth
Major Harold Richard Patrick Dickson
Major (Tempy. Brig.-General) Henry Owen Knox
Col. James Archibald Douglas
Charles Rowlatt Watkins
John Henry Owens
Harry St. John Bridger Philby
Major Lewis Cecil Wagstaff
Major Cyril Penrose Paige
Sao Kawn Kiao Sawbwa of Kengtung
Arthur Herbert Ley
Lt.-Col. Peter Henry Clutterbuck
Lt.-Col. James Donald
William Woodword Hornell
Harchandrai Vishindas
Lt.-Col. Bawa Jiwan Singh
Thomas Ryan
Arthur William Botham
Henry Francis Cleveland
Augustus Henry Deane
Lt.-Col. William Byam Lane
Harry Nelson Heseltine
Alexander Langley
Lt.-Col. Henry Smith
Col. Francis William Hallowes
Major Henry Coddington Brown
Robert Colquhoun Boyle
Lewis Wynne Hartley
Rai Bahadur Pandit Gopinath
Jhala Sri Mansinghji Suraj Sinhji
Assistant Surgeon Kedar Nath Das
Brig.-General John Latham Rose
Lt.-Col. Roger Lloyd Kennion
Lt.-Col. Hugh Augustus Keppel Gough
Tempy. Major John Arnold Wallinger
Major Edward William Charles Noel
Colonel William Ewbank
Lieut.-Col. J. R. Darley
Brev.-Colonel C. M. Goodbody
Major J. G. Goodenough Swan
Major Charles Fraser Mackenzie
John Izat
Major Cyril Charles Johnson Barrett
Major William David Henderson Stevenson
Captain Robert Edward Alderman
Major John Gordon Patrick Cameron
James Laird Kinloch
Major Alfred James Hughes
Nawab Saiyid Nawab Ali Chandhurl Khan Bahadur
Claude Fraser de la Fosse
Henry Raikes Alexander Irwin
William Frederick Holms
George Herman Collier
Thomas Emerson
Jyotsananath Ghosal
Allan William Pim
George Rainy
Major George Henry Willis
Lieut.-Col. Ernest Alan Robert Newman
Edward Charles Ryland
Francis William Bain
John Desmond
John Ernest Jackson
John Robertson Henderson
Sardar Bahadur Gurnam Singh
Kumar Unkar Singh
Dr. Charles Alfred Barber
Nasarwanji Navroji Wadia
Brig.-General Robert George Strange
Brig.-General Robert Montague Poore
Brig.-General Cyril Frank Templer
Colonel Alfred Joseph Caruana
Lieut.-Col. Herbert Austen Smith
Lieut.-Col. F. A. F. Barnardo, I.M.S.
Captain Seymour Douglas Vale, R.I.M.
Arthur Cecil McWatters
Major Davis Heron
Major Edmund Tillotson Rich
A. V. Venkataramana Alyar
Major-General Farman Ali Khan Sardar Bahadur
Lieut.-Qadir Baksh Khan Bahadur
Roderick Korneli Biernacki
Colonel Robert Fox Sorsbie
Brig.-General A. B. Hawley Drew
Colonel Herbert James Barrett
Brev.-Colonel The Earl of Radnor
Colonel Harry John Mahon
Lieut.-Col. F. W. Bagshawe

Lieut.-Col. F. E. Geoghegan
Lieut.-Col Harold Whiteman Woodall
Lieut.-Col. Herbert Grenville LeMesurier
Lieut.-Col. Rollo St. John Gillespie
Lieut.-Col. Walter Fellowes Cowan Gilchrist
Lieut. Francis Beta Davern
Captain A. G. Bingham
Lieut.-Col. Frederick William Gee, I.M.S.
Lieut.-Col. the Lord Belhaven and Stenton, I.A.
Llewellyn William Lewis
Lieut.-Col. George McPherson

Lieut.-Col. Norman Emil Henry Scott, I.M.S.
Lieut.-Col. W. R. J. Scroggie, I.M.S.
Major Stewart George Cromartie Murray
Major Arthur Mowbray Berkeley
Guy Sutton Bocquet
Lieut.-Col. Cuthbert Vivian Bliss
Colin Campbell Garbett
Lieut.-Col. Wyndham Madden Wood
John Brown Sydney Thubron
L. S. Steward O'Malley
Provash Chandra Mitter
James George Jennings
Samuel Perry O'Donnell
E. M. Cook.
Christian Tindall

Arthur Innes Mayhew
William Crooke
Austin Low
Lieut.-Col. Andrew Alexander Irvine
Hubert Digby Watson
George Ernle Chatfield
Lieut.-Col. John Telfer Calvert
Charles Gilbert Rogers
Bernard D Olier Darley
Thomas Reed Davy Bell
Walter Francis Perree
Bertram Beresford Osmaston
Lieut.-Col. John Hanna Murray
The Rev. Dr. William Skinner
Brig.-General Herbert Augustus Lgulden
Col. Richard Stukeley St. John
Brevet-Lieut.-Col. S. S. W. Paddon
Lieut.-Col. Walter Mason
William Alfred Rae Wood
John Carlos Kennedy Peterson
Lieut.-Col. Andrew Louis Charles McCormick
Lieut.-Col. F. E. Swinton
Lieut.-Col. J. C. Lamont
Capt. Charles James Cope Kendall
Lieut.-Col. Muhammad Afzal Khan
Ernest Albert Seymour Bell
Lieut.-Col. Francis Richard Soutter Gervers
Colin John Davidson
Albert Harlow Silver
Frederick William Hanson
Nawab Maula Baksh
Colonel Vindeshri Prasad Singh

Sardar Lakhamgouda Basava Prabhu Sir Desai
Col. W. W. Clemesha, I.M.S.
Brevet-Lt.-Col. Napier George Barrow Goodfellow
Lieut.-Col. P. Francis Chapman
Major H. J. Crossley
Lieut.-Col. (temporary Col.) W. A. Gordon
Lieut.-Col. J. D. Graham
Lieut.-Col. C. E. Alexander
Major and Brevet-Lieut.-Col. W. H. Hamilton
Lieut.-Col. C. A. Sprawson
Major H. C. Prescott
Temporary Major (temporary Col.) J. C. Ward
Temporary Major C. F. Macpherson
Captain F. C. C. Balfour

Captain P. L. Bowers
H. A. Sams
H. F. Forbes
Major C. L. Peart
Col. H. De C. O'Grady
Lieut.-Col. A. de V. Willcughby-Osborne
Lieut.-Col. F. McConaghey
Hon. Brigadier-General J. R. Gaussen
Major G. B. Murray
Purushottamdas Thakurdas

Khan Bahadur Khwaja Yusaf Shah
N. E. Marjoribanks
Atul Chandra Chatarji
R. D. Bell
Rai Bahadur Rala Ram
Lieut.-Col. H. C. Beadon
H. C. Barnes
H. Clayton
C. B. Petman
F. A. M. H. Vincent
R. Clarke
M. J. Cogswell
Lieut.-Col. J. J. Bourke

Lieut.-Col. J. Stephenson
H. H. Haines
R. S. Hole
Cursetji Nowroji Wadia
E. Teichman
D. Clouston
Raja Bahadur Rao Jogendra Narayan Ray
W. J. Bradshaw
Lieut.-Col. R. A. Needham
J. Crosby
C. A. Innes
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Captain E. I. M. Barrett
S. F. Stewart
Lieut.-Col. P. L. O'Neill
Major G. G. Jolly
Major A. P. Manning
H. H. F. M. Tyler

Col. H. W. R. Senior
Lieut.-Col. R. H. Maddox
Col. H. W. Bowen
Col. J. B. Keogh
Brevet-Lieut.-Col. E. A. Porch

Lieut.-Col. A. B. Fry
Lieut.-Col. A. V. W. Hope
Lieut.-Col. L. E. Gilbert
Lieut.-Col. W. D. A. Keys
Lieut-Col. W. M. Anderson

Major H. Murray.
Major C. de L. Christopher
Captain and Brevet-Major F. M. Carpendale
Major (temporary Lieut.-Col.) A. H. C. Trench
Temporary Major L. F. Nalder
Major C. G. Lloyd

Temporary Captain R. Marrs
Lieut. (temporary Col.) G. Evans
Lieut.-Col. S. H. Slater
Agha Mirza Muhammad
Sir E. Bonham-Carter
Brevet-Lieut.-Col. J. H. Howell Jones
Lieut.-Col. W. E. Wilson-Johnston
Major W. S. R. May
Temporary Captain (temporary Col.) W. R. Dockrill
Temporary Lieut. (temporary Major) G. M. O'Rorke
Capt. C. R. Watson
Capt. C. Mackenzie

Capt. J. B. Hanafin
Major M. C. Raymond
W. H. J. Wilkinson
Lieut.-Col. J. B. Jameson
Brevet.-Col. (temporary Brigadier-Genl.) A. G. Wauchope
Col. (temporary Brigadier-Genl.) G. F. White
R. W. Hildyard-Marris
Hon. Lieut. Mehr Mohammad Khan Bahadur
Brigadier-General R. M. Betham
Major-General W. C. Black
Col. E. R. P. Bolleau
Lieut.-Col. W. L. J. Carey
Lieut.-Col. J. A. Cherry
Col. (temporary Brigadier-Genl.) G. Christian
Col. (temporary Brigadier-Genl.) H. R. Cook
Col. (temporary Brigadier-Genl.) F. W. H. Cox
Col. G. M. Duff
Major (temporary Lieut.-Col.) E. G. J. Hall
Major D. R. Hewitt
Lieut.-Col. L. Hirsch
Lieut.-Col. C. Hodgkinson
Major (temporary Lieut.-Col.) G. Howson
Lieut.-Col. K. M. Kirkhope
Lieut.-Col. F. C. Lane
Col. J. H. Lawrence-Archer
Col. R. S. Maclagan
Major G. G. C. Maclean
Lieut.-Col. C. N. Moberley
Col. (temporary Brigadier-Genl.) H. C. Nanton
E. P. Newnham
Lieut.-Col. S. J. Rennie
Lieut.-Col. J. R. Reynolds
Lieut.Col. L. Stuart
Lieut.-Col. J. W. Watson
Captain R. B. Wilson
Major-Gen. N. G. Woodyatt
Lieut.-Col. H. N. Young
Lieut.-Col. E. L. Mackenzie
Col. (temporary Brigadier-General) F. W. D. Quinton
Lieut.-Col. C. N. Watney
Ressalder Habibur Rahman Khan, Khan Sahib
Col. Charles Fairlie Dobbs
Major George Stuart Douglas
Major Charles Edward Edward-Collins
Brevet Col. Hugh Edward Herdon
Major Harold Berridge
Col. M. R. W. Nightingale
Sardar Bahadur Sardar Sundar Singh
H. Moncrieff Smith
F. St. J. Gebbie
Khan Bahadur Pir Baksh Walad Mian Muhammad
S. S. Ayyangar
J. A. Richey
F. W. Woods
A. T. Holme
G. G. Sim
Lieut.-Col. C. A. Smith
Lieut.-Col. F. R. Nethersole
R. S. Troup
K. B. W. Thomas
Lieut.-Col. J. A. Stevens
A. Brebner
V. Dawson
G. Anderson
Col. Rao Bahadur Thakur Sadul Singh
Saiyid Nur-ul-Huda
Col. John Anderson Dealy
Major-General Harry Christopher Tytler
Col. A. L. Tarver
Col. Cyril Norman Macmullen
Col. (temporary Col. Commandant) Harry Beauchamp Douglas Baird
Col. Cecil Norris Baker
Lieut.-Col. Harry Dixon Packer
Temporary Lieut.-Col. John Francis Haswell
Brevet-Lieut.-Col. Henry Charles Swinburne Ward
Brevet-Lieut.-Col. Henry Francis Wickham
Lieut.-Col. Duncan Ogilvie
Major (temporary Lieut.-Col.) James Scott Pitkeathly
Major Charles Edward Bruce
Major Alexander Frederick Babonau
2nd-Lieut. (temporary Lieut.-Col.) Arthur Vernon Hawkins
Ernest William Tomkins
Colonel Campbell Coffin
P. Harrison
W. C. Renout
Abdul Majid (Assam)
Sorabji Bezonji Mehta
Lt.-Col. R. Verney
E. C. S. Shuttleworth
Lt.-Col. C. R. A. Bond
J. Reid
W. P. Cowie
C. W. E. Cotton
C. M. Hutchinson
Major F. H. Humphrys
Major F. W. Gerrard
R. S. Pearson
Khan Bahadur Raja Sifat Bahadur
Khan Bahadur Muhammad Habibulla
C. T. Allen
C. B. Labouche
Cawasji Jehangir
A. K. Maitra
Col. Leslie Waterfield Shakespeare
Col. C. E. E. Francis Kirwan Macquoid
Capt. E. J. Calveley Hordern
John Comyn Higgins
John Henry Hutton
John Brown Marshall
Major Clendon Turberville Daukes
Nawab Mahammad Khurshaid Ali Khan of Dujana
Khan Bahadur Sayid Mehdi Shah
Diwan Bahadur Diwan Daulat Rai
Col. (temporary Brigadier-General) G. P. Campbell
Lieut.-Col. H. L. Crosthwait
C. Latimer
Lieut.-Col. E. H. Payne
Major (temporary Lieut.-Col.) C. E. B. Steel
Col. T. Stodart
Major (temporary Lieut.-Col.) E. C. W. Conway Gordon
Lieut.-Col. C. Hudson
Lieut.-Col. H. Ross
Lieut.-Col. D. M. Watt
Lieut.-Col. Ikbal Muhammad Khan
Machael Keane
James David Sifton
Lieut.-Colonel Philip Sykes Murphy Burlton
Charles Morgan Webb
David Thomas Chadwick
Harry William Maclean Ives
Charles Maurice Baker
William Alexander Marr
Geoffrey Letham Corbett
Lieut.-Col. Edmund Henry Salt James
John Tudor Gwynn
Lieut.-Col. David Macdonald Davidson

Lieut.-Col. Frederick O'Kinealy
Lieut.-Col. William Frederick Harvey
Honorary-Col. Lionel Augustus Grimston
Lieut.-Col. John Lawrence Van Geyzel
Colonel Sydney Frederick Muspratt
Major Henry George Vaux
Arthur Charles Rumboll
Hugh Charles Sampson
Doctor Edwin John Butler

Alexander Waddell Dods
Dadiba Merwanji Dalal
Rai Bahadur Gopal Das Bhandari
Rai Bahadur Jadu Nath Muzumdar
Jehangir Behramji Murzban
Narayen Malhar Joshi
Hamid Khan
Harry Evan Auguste Cotton
Frank Herbert Brown
Colonel Arthur Holroyd Bridges
Lieut.-Col. Brian Maurice Carroll
Colonel Clement Arthur Milward
Colonel Arthur Hugh Morris
Lieut.-Col. Henry Warwick Illius
Major Frederick Lawrence Gore
Major Alexander Henderson Burn
Lieut.-Col. Alfred Eugene Berry
Lieut.-Colonel Maxwell McKelvie,
Major and Brevet-Lieut.-Col. Charles Harold Amys Tuck
Colonel Henry George Young
Lieut.-Col. Sir Malcolm Donald Murray

Colonel Sir Edward Scott Worthington
John Edwin Clapham Jukes
Ernest Burdon
Nawab Muhammad Ahmad Said Khan
Herbert Edward West Martindell
Alexander Montgomerie
Evelyn Robins Abbott
James Cowlishaw Smith
John Richard Cunningham
Stephen Cox
Leslie Maurice Crump
Hugh Kynaston Briscoe
Major (temporary Col.-on-the-Staff) Henry Rivers Nevill
Major-General Benjamin Hobbs Deare
Henry Vernon Barstow Hare-Scott
Robert William Church

Major Lewis Macclesfield Heath
Major Lionel Edward Lang
Rai Bahadur Milkhi Ram
Rao Bahadur Kesho Govind Damle
James Walls Mackison
Arthur Lambert Playfair
Maganlal Thakordas Balmukundas Modi
Doctor Mohendra Nath Banarjee
Col. (Honorary Brigadier-General) Henry Arthur Lane
Basil John Gould

Major-General John Blackburn Smith
Lt.-Col. Francis Hope Grant Hutchinson
Francis Pepys Rennie
Lt.-Col. Stewart Blakely Agnew Patterson
Malcolm Caird McAlpin
Edward Arthur Henry Blunt
Lieut.-Col James Eutrican
Alexander Carmichael Stewart
Walter Frank Hudson
Adrian James Robert Hope
John Willoughby Meares
Lieut.-Colonel Robert Fraser Standage

Major Kenneth Oswald Goldie
Edward Francis Thomas
Edward Luttrell Moysey
Thomas Stewart Macpherson
Maung Po Ila
Arthur Campbell Armstrong
Horace Williamson
Alexander Newmarch
Gerard Anstruther
Khan Bahadur Mir Sharbat Khan
Natha Singh Sardar Bahadur
Raja Maniloll Singh Roy
Khan Bahadur Nasarvanji Hormasji Choksy
Raja Chandra Chur Singh, of Atra Chandapur.
William Scott Durrant
Archibald Gibson McLagan
Alexander Marr
Lawrence Morley Stubbs
Colonel Robert St. John Hickman
James Macdonald Dunnett
Lieut.-Col. Michael Lloyd Ferrar
Levett Mackenzie Kaye

Coryton Jonathan Webster Mayne
Walter Swain
Cyril James Irwin
Lancelot Colin Bradford Glascock
Richard Howard Hitchcock
Edwin Lessware Price
Rai Bahadur Chuni Lal Basu
Cecil Frank Beadel
Gavin Scott
Horace Mason Haywood
Captain the Honourable Piers Walter Legh
Harry Tonkinson
Chetput Pattabhirama Ayyar Ramaswami Ayyar
Arthur Edward Nelson
Alexander Shirley Montgomery
Kunwal Jagdish Prasad
Doctor Nelson Annandale
Lieut.-Col. Andrew Thomas Gage
Lieut.-Col. John Phillip Cameron
Lieut.-Col. Charles Eckford Luard
Frederick Alexander Leete
Lieut-Col. Henry Ross
Captain Victor Felix Gamble
Lieut.-Col. Alfred Hooton
Arnold Albert Musto
Abdoor Rahim
John Arthur Jones
The Reverend Canon Edward Guilford
Keshab Chandra Roy
Pringle Kennedy
Major Henry Benedict Fox
U. Po Tha
Captain Albert Gottlieb Pucch

Naoroji Bapooji Saklatwala
William Stanttall
Khan Bahadur Diwan Abdul Hamid
Rao Bahadur Thakur Hari Singh
W. Alder
J. R. Martin
D. J. Mitchell
E. G. B. Peel
F. F. Sladen
Lt.-Col. R. H. Chenevix Trench
A. F. L. Brayne
E. C. Handyside
C. G. Barnett
Lt.-Col. A. Leventon
Lt.-Col. T. Hunter
Lt.-Col. R. McCarrison

J. W. Bhore
H. G. Haig
Khan Bahadur Mulhammad Bazullah Sahib
R. M. Maxwell
J. H. Hechle
Major D. P. Johnstone
Khan Bahadur Mohammad Seer Bazi Khan
Khan Bahadur Muhammad Hayat Khan Kureshi of Sobbowal
Rev. G. D. Barnes
J. Evershed
Saw Hke Swaba
D. Graham
C. A. H. Townsend
E. W. Beg
H. P. Duval
J. C. Ker
F. F. Blon
W. S. Bremner
P. S. Keelan
C. Douchars
Colonel W. M. Coldstream
C. W. Gwynne
R. B. Ewbank
Dr. B. L. Dhingra
Srimant Jagdeo Rao Puar
Maulvi Nizam-ud-Din Ahmed
Sahibzada Sultan Ahmed Khan
P. G. Rogers
C. W. Dunn
R. E. Gibson
Major G. H. Russell
B. J. Glancy
Diwan Bahadur L. D. Pillai
H. B. Clayton
B. W. P. Sims
Khan Bahadur Muhammad Abdul Karim Khan
Maung Maung By A.
Sardar Bahadur Sheo Narayana Singh

OFFICERS OF THE ORDER.

Secretary, The Hon. Mr. J. P. Thompson, C.S.I., I.C.S.
Registrar, The Hon. George A. C. Crichton, C.V.O.

The Imperial Order of the Crown of India.

This Order was instituted Jan. 1, 1878, and for a like purpose with the simultaneously created Order of the Indian Empire. It consists of the Queen and Queen Mother with some Royal Princesses, and the female relatives of Indian Princes or of persons who have held conspicuous offices in connection with India. Badge, the Royal Cypher in jewels within an oval surmounted by an Heraldic Crown and attached to a bow of light blue watered ribbon, edged white. Designation, the letters C. I.

Sovereign of the Order.

THE KING-EMPEROR OF INDIA.

Ladies of the Order (C. I.)

Her Majesty The Queen
H. M. Queen Alexandra
H. M. the Queen of Norway
H. R. H. the Princess Royal
H. R. H. the Princess Victoria
H. R. H. the Princess Christian of Schleswig-Holstein
H. R. H. the Princess Louise (Duchess of Argyll)
H. R. H. Princess Henry of Battenberg
H. R. H. the Duchess of Albany
H. R. H. the Princess Frederica Baroness of von Pawel-Rammingen
H. H. Princess Helena Victoria
H. I. & R. H. the Grand Duchess Cyril of Russia
H. H. the Princess Marie-Louise
Baroness Kinloss
Lady Jane Emma Crichton
Dowager Countess of Lytton
Lady Temple
Dowager Baroness Napier of Magdala
Dowager Marchioness of Dufferin and Ava
H. H. Maharani of Cooch-Behar
Marchioness of Lansdowne
Baroness Harris
Constance Mary Baroness Wenlock
H. H. Maharani Sahib Chimna Bai Gackwar
H. H. Rani Sahib of Gondal
H. H. the Dowager Maharani of Mysore
Lady George Hamilton
H. H. the Maharani Sahiba of Udaipur
Alice, Baroness Northcote
Amelia Maria, Lady White
Mary Katherine, Lady Lockhart
Baroness Ampthill
The Lady Willingdon
Countess of Minto
Marchioness of Crewe
H. H. Begum of Bhopal
Lady Victoria Patricia Helena Ramsay
Frances Charlote, Lady Chelmsford
H. H. Maji Sahiba Girraj Kuar of Bharatpur
Countess of Reading.

THE KAISAR-I-HIND MEDAL.

This decoration was instituted in 1900, the preamble to the Royal Warrant—which was amended in 1901 and 1912—being as follows:—"Whereas We, taking into Our Royal consideration that there do not exist adequate means whereby We can reward important and useful services rendered to Us in Our Indian Empire in the advancement of the public interests of Our said Empire, and taking also into consideration the expediency of distinguishing such services by some mark of Our Royal favour: Now for the purpose of attaining an end so desirable as that of thus distinguishing such services aforesaid, We have instituted and created, and by these presents for Us, Our Heirs and Successors, do institute and create a new Decoration." The decoration is styled "The Kaisar-i-Hind Medal for Public Service in India" and consists of two classes. The Medal is an oval shaped Badge or Decoration—in gold for the First Class and in silver for the Second Class—with the Royal Cypher on one side and on the reverse the words "Kaisar-i-Hind for Public Service in India;" it is suspended on the left breast by a dark blue ribbon.

Recipients of the 1st Class.

Abdus Samad Khan of Rampur
Acharlyar, Diwan Bahadur Tirumalai Desik
Advani, M. S.
Ahmad, Khan Bahadur Qazi Khalil-ud-Din
Alexander, A. L.
Allnut, The Rev. Samuel Scott
Amarchand, Rao Bahadur Ramnarayan
Ampthill, Margaret, Baroness
Anderson, The Rev. H.
Annie, Sister Blanche
Ashton, Albert Frederick
Balfour, Dr. Ida
Banerji, Sir P. C.
Banks, Mrs. A. E.
Barber, Benjamin Russell
Barnes, Major Ernest
Basu, Sir Kailas Chandra, Rai Bahadur
Beals, Dr., American Marathi Mission, Bombay
Bear, Mrs. Georgiana Mary
Beaty, Francis Montagu Algernon
Beck, Miss Emma Josephine
Bell, Lt.-Col. Charles Thornhill
Benson, Doctor (Miss) A. M.
Benson, Lady
Bentley, Dr. Charles Albert
Bertram, Rev. Father F.
Bhandari, Rai Bahadur Gopal Das
Bikanir, Maharaja of
Bingley, Major-General Alfred
Blowers, A. R.
Biwalkar, Sardar Parashram Krishnarao
Bhola Nath Baroosh.
Bonig, Max Carl Christian
Booth-Tucker, Frederick St. George de Lautour
Bosanquet, Oswald Vivian
Bott, Captain R. H.
Bramley, Percy Brooke
Bray, Denys DeSaumarez
Broadway, Alexander
Brown, Rev. A. E.
Brown, Dr. Miss E.
Brown, Rev. W. E. W.
Brunton, James Forest
Buchanan, Rev. John
Buckley, Miss. M. E.
Bull, Henry Martin
Burn, Richard
Burnett, General Sir Charles John
Caleb, Dr. C. C.
Calnan, Denis
Campbell, Colonel Sir Robert Neil
Campbell, Dr. Miss S.
Campion, John Montriou
Carleton, Marcus Bradford
Carlyle, Lady
Carmichael, Lady
Carter, Edward Clark
Castor, Lieut.-Col. R. H.
Chand, Sakhi, Rai Bahadur
Chandra, Rai Bahadur Hari Mohan
Chapman, R. A. B.
Chatterton, Alfred
Chatterton, Mrs. L.
Chaudhuri, Raja Sarat Chandra Rai
Chetty, Dewan Bahadur K. P. Puttanna
Chinai, Ardeshir Dinshaji
Chitnavis, Shankar Madho
Coldstream, William
Comley, Mrs. Alice
Copeland, Theodore Benfey
Cornelia Sorabji, Miss (Bar to Kaisar-i-Hind Gold Medal)
Cousens, Henry
Cox, Arthur Frederick
Crawford, Francis Colomb
Crosthwaite, the Rev. C. A.
Crouch, H. N.
Currimbhoy, Mahomedbhoy
Dane, Lady
Darbhanga, Maharaja of
Darbyshire, Miss Ruth
Das, Ram Saran
Davies, Arthur
Davies, Rev. Can. A. W.
Davies, Mrs. Edwin
Davis, Miss Gertrude
Dawson, Brevet-Colonel Charles Hutton
Dayal Seth Jay
Deane, Lieutenant-Colonel Herbert Edward
Debi, Ravi Murari Kumari
deLotbiniere, Lieutenant-Colonel Alain C. Joly
Der Schueren, Father T. V.
Devdhar, G. K.
Dewas (Junior Branch), Maharaja of
Dhar, Her Highness the Rani Sahiba Luxmibai, Pavar of
Dhingra, Dr. Behari Lal
Dobson, Mrs. Margaret
DuBern, Amedee George
DuBern, Jules Emile
Dyson, Colonel Thomas Edward
Earle, The Hon'ble Sir Archdale
Evans, The Rev.
Ewing, The Rev. Dr. J. C. R.
Fatima Sidhika, Begum Saheba
Ferard, Mrs. Ida Margaret
Fosbrooke, Mrs. M. E. A.
Francis, Edward Belcham
Garu, Diwan Bahadur Agaram Subbarayalu Reddiyar
Garu, Diwan Bahadur M. Ramachandra Rao Pantulu
Ghosal, Mr. Jyotsnanath
Glazebrook, N. S.
Glenn, Henry James Heamey
Gillmore, The Rev.
Gonzaga, Rev. Mother
Graham, The Rev. John Anderson
Graham, Mrs. Kate
Grattan, Colonel Henry William
Guilford, The Rev. E. (with Gold Bar)
Gwalior, Maharaja of
Gwyther, Lieut.-Colonel Arthur
Hahn, The Rev. Ferdinand
Haig, Lieutenant-Colonel Patrick Balfour
Hall, Harold Fielding Patrick
Hamilton, Major Robert Edward Archibald
Hankin, E. H.
Hanson, The Rev. O.
Harper, Dr. R.
Hart, Dr. Louisa Helena
Harvest, Lieut.-Colonel Herbert de Vere
Hatch, Miss Sarah Isabel
Hildesley, The Rev. Alfred Herbert
Higginbotham, S.
Hoeck, Rev. Father L. V.
Hodgson, Edward Marsden
Hogan, W. J. Alexander
Holderness, Sir Thomas William
Home, Walter
Hopkins, Mrs. Jessie
Howard, Mrs. Gabrielle Louise Caroline
Hoyland, John Somerwell.

Hume, The Rev. R. A.
Husband, Major James
Hutchinson, Sir Sydney Hutton Cooper
Hutchinson, Major William Gordon
Hutwa, The Maharani Jhan Manjari Kuari of
Hydari, Mrs. Amina
Irvine, Lieutenant-Colonel Thomas Walter
Ismail, Muhammad Yusaf
Ives, Harry William Maclean
Jackson, Rev. James Chadwick
James, Lieutenant-Colonel Charles Henry
Jankibai
Josephine, Sister
Kapur, Raja Ban Bihari
Kaye, G. R.
Kelly, The Rev. E. W.
Kerr, Mrs. Isabel
King, Mrs. D.
Klopsch, Dr. Louis
Knox, Lady (Bar to Kaisar-i-Hind Gold Medal)
Ko, Taw Sein
Kothari, Sir. Jehangir Hormusji
Lamb, The Hon'ble Sir Richard Amphlett
Lela Tara Chand
Lindsay, D'Arcy
Ling; Miss Catharine Frances
Lonbiere, Rev. Father E. F. A.
Lovett, The Hon'ble Mr. Harrington Verney
Luck, Wilfred Henry
Lukis, Lady
Lyall, Frank Frederick
Lyons, Surgeon-General Robert William Steele
MacKenzie, Rev. G. R.
MacLean, Rev. J. H.
Marie, The Rev. Mother
Macwatt, Lieutenant-Colonel Robert Charles
Madhav Rao, Vishwanath Patankar
Mahant of Emar Math, Puri
Malegaon, Raje of
Malvi Tribhuvandas Narottamdas
Maneckchand, Seth Motilal
Mann, Dr. Harold
Manners-Smith, The Hon'ble Mr. Francis St. George
Mary of St. Pauls, Rev. Mother
Matthews, Rev. Father.
Mayes, Herbert Frederick
McCarrison, Major Robert
McCloghry, Colonel James
McNeel, The Rev. John
Mcdougall, Miss E.
Mehta, Dr. D. H.
Meiklejohn, Miss W. J.
Meston, Rev. W.
Millard, Walter Samuel
Miller, The Rev. William
Minto, Mary Caroline
Monahan, Mrs. Ida
Monahan, Mrs. Olive
Moolgaokar, Dr. S. R.
Morrison, F. E.
Morgan, George
Muhammad Yahia, Khan Bahadur A. N.
Muir, Rev. E.
Muir Mackenzie, Lady Therese
Mulye, V. Krishnarao
Nariman, Dr. Temulji Bhikaji
Narsinghgarh, Her Highness the Rani Shiv Kunwar Sahiba of
Nayudu, Diwan Bahadur R. Venkataratnam
Nepalla, Rani of Tehri
Neve, Dr. Arthur
Neve, Dr. Earnest
Nichols, the Rev. Dr. Charles Alvord
Nicholson, Sir Frederick Augustus
Nisbet, John
Noble, The Rev.
Noyce, William Florey
O'Byrne, Gerald John Evangelist
Oh, Maung and Ba (*atas*) Ahmedullah
Oldham, Charles Evelyn Arbuthnot William
O'Donnel, Dr. Thomas Joseph
O'Meara, Major Eugene John
Panna, Maharani of
Parakh, Dr. N. N.
Paranjpye, Dr. Raghunath Purshottam
Pears, S. D. A. D.
Pedley, Dr. Thomas Franklin
Pennell, Mrs. A. M.
Pestonji, Dhunjishaw
Pettigara, Khan Bahadur Kavasji Jamshedji
Cooverji, Khan Bahadur
Phelps, Edwin Ashby
Pickford, Alfred Donald
Pitcher, Colonel Duncan George
Pittendrigh, Rev. G.
Plamonden, Rev. Mother S. C.
Plant, Captain William Charles Trew Grey Gambler
Platt, Dr. Kate
Pollen, Dr. J.
Poynder, Lieut.-Colonel John Leopold
Prasad, Lt.-Col. Kanta
Price, John Dodds
Ray, Rao Jogendra Narayan, Raja Bahadur.
Reed, Miss M.
Reid, Frederick David
Reid, R. N.
Reynolds, Leonard William
Richmond, Mr. Thomas
Rivington, The Rev. Canon, C. S.
Roberts, Dr. N. G.
Robson, Dr. Robert George
Rost, Lt.-Col. Ernest Reinhold
Row, Dr. Raghavendra
Roy, Babu Harendra Lal
Sallana, Raja of
Samthar, Maharaja of
Sanderson, Lady
Sarabhai Ambalal
Sawday, Rev. G. W.
Scott, Mary H. Harriot
Scott, Rev. Dr. H. R.
Scott, Rev. W.
Scudder, Rev. Dr. Lewis Rousseau
Scudder, Miss Ida
Sell, The Rev. Canon Edward
Semple, Lieut.-Colonel Sir David
Seshagiri Rao Pantulu Garu
Sharp, Henry
Sharpe, Walter Samuel
Shepherd, Rev. James
Sheppard, Mrs. Adeline B.
Sheppard, William Didsbury
Shillidy, The Rev. John
Shore, Lieut.-Colonel Robert
Shoubridge, Major Charles Alban Grevis
Simon, The Rev. Mother
Singh, Munshi Ajit
Singh, Raja Bhagwan Bakhsh
Singh, Rai Hira
Singh, Raja Kamaleshwari Pershad
Sinha, Purnendu Narayan
Skinner, The Rev. Dr. William
Skrefsrud, The Rev. Larsorsen

Smith, Lieut.-Colonel Henry
Solomon, Captain W. E.
Sorabji, Miss Cornelia
Southon, Major Charles Edward
Souza, Dr. A.
Spence, Christina Philippa Agnes
St. Leger, William Douglas
St. Lucie, Reverend Mother
Stanes, Robert
Starr, Mrs. L. A. (with bar)
Stokes, Dr. William
Sukhdeo Prasad, Pandit
Surat Kuár, Rani Sahiba
Sutherland, Rev. W. S.
Tabard, The Rev. Antoine Marie
Talati, Edalji Dorabji
Taylor, The Rev. George Pritchard
Taylor, Dr. Herbert F. Lechmere
Thakral, Lala Mul Chund
Thomas, The Rev. Stephen Sylvester
Thomas, The Rev.
Thompson, Miss E.
Thurston, Edgar
Tilly, Harry Lindsay
Tindall, Christian
Todhunter, Lady Ellis
Tucker, Major William Hancock
Tydeman, E.
Tyndale-Biscoe, The Rev. Cecil Earle
Tyrrell, Major Jasper Robert Joly
Vadakke Kurupam Parukutti Netyaramma
Vandyke, Frederick Reginald
Van Hoeck, Rev. Father Louis, S.J.
Vas, J.
Vaughan, Lieut.-Colonel Joseph Charles Staelke
Venugopala, Raja Bahadur
Vernon, Mrs. Margaret
Victoria, Sister Mary
Wadhwan, The Rani Sahib Sita Bai of
Wadia, Sir Hormasji Ardeshir
Wagner, Rev. Paul
Wake, Lieut.-Colonel Edward St. Aubyn (with Gold Bar)
Wakefield, George Edward Campbell
Walker, Lady Fanny
Walter, Major Albert Elijah
Wanless, Mr. W. J.
Ward, Major Eliacott Leamon
Waterhouse, Miss Agnes May
Webb, Miss M. V.
Westcott, The Rt. Rev. Dr. Foss.
Wheeler, The Rev. Edward Montague
Whitehead, Mrs. J.
Wilkinson, Lieut.-Colonel Edmund
Willingdon, The Lady
Wilson-Johnston, Joseph
Winter, Edgar Francis Latimer
Wood, Arthur Robert
Yain, Lee Ah
Young, The Rev. John Cameron
Younghusband, Arthur Delaval
Younghusband, Lieut.-Col. Sir Francis Edward

Recipients of the 2nd Class.

Abul Fath Moulvi Saiyed
Abdul Ghani
Abdul Hussain, Mian Bhai
Abdul Hussein
Abdul Kadir
Abdul Majid Khan
Abdur Razzak Khan, Subadar
Abinash Chandra Banerjee, Rai Bahadur
Acharlyar, Mrs. Sita Tiruvenkata
Achariyar, M. A. P. Tirunarayana
Adelaide, Doctor Miss
Advani, Mrs. Motiram
Agha Mohamed Khalil-Bin-Mohamed Karim
Ahmad, Capt. Dabiruddin
Ahmad, Mr. Mukhtar
Alfred, Miss A.
Allen, Miss Fannie
Allen, Mrs. M. O.
Ali Shabash, Shaikh, Khan Saheb
Allen, Rev. Frank Van
Ammal Rishiyr Suorahmanya Ayyar Subbu, Lakshmi
Amar Nath, Lala
Amar Singh
Anandnath Chatterji.
Anastasie, Sister
Anderson, Andrew
Andrew, The Rev. Adam
Anscomb, Major Allen Melleis
Antia, Jamshedji Merwanji
Ardeshir Navroji, Khan Bahadur
Arnelda, Rev. Mother
Asdulla, Miss Isabella
Ashton, Dr. Robert John
Askwith, Miss Anne Jane
Atkinson, John William
Atkinson, Lady Constance
Augustin, The Rev. Father
Aung, Mrs. Hla
Aziz Husain, Khan Sahib Mir
Badri Parshad
Baker, Honorary Major Thomas
Ball, Miss Marguerite Dorothy
Banerji, Professor Jamini Nath
Banks, Dr. Charles
Bapat, Risaldar Sadashiva Krishna
Barbara, Mother
Barclay, Mrs. Edith Martha
Bardsley, Miss Jane Blissett
Bari, Mrs. Ghulam
Barnabas, Mr., Burma
Barnett, Miss Maude
Barstow, Mrs. Melaine
Barton, Mrs. Sybil
Baw, Maung Kan
Bawden, Rev. S. D.
Bayley, Lieut.-Colonel Edward Charles
Beatson-Bell, Sir Nicholas Dodd
Beadon, Dr. M. O'Brien
Beg, Mirza Kalich Beg Faridun
Benjamin, Mrs.
Best, James Theodore
Beville, Lieut.-Colonel Francis Granville
Bhagwandas, Bai Zaoerbai
Bhajan Lal
Bhan, Lala Udhai
Bhatia, Mr. Biharilal
Bhide, Raoji Janardhan
Bhutt, Chhotelal Goverdhan
Bihari Lal
Birla, Rai Bahadur Baldeo Das
Bisheshwar Nath, Lala
Bissett, Miss Mary Ronald
Biswas, Babu Ananda Mohan
Biyale Ram, Lala
Blackham, Lieut.-Colonel Robert James
Blackwood, John Ross
Blake, The Rev. William Henry
Blenkinsop, Edward Robert Kayo
Booth, Miss Mary Warburton
Bolster, Miss Anna

Borah, Balinarayan
Bose, Miss Kiroth
Bose, Miss Mona
Botting, W. E.
Bowen, Griffith
Brahmanand, Pundit
Brander, Mrs. Isabel
Bray, Lady
Bremner, Lt.-Col. Arthur Grant
Brentnall, Miss Nina Tillotson
Brock, Miss Lilian Winifred
Brough, The Rev. Anthony Watson
Browne, Charles Edward
Brown, Dr. Edith
Bucknall, Mrs. Mary
Burt, Bryce Chudleigh
Butt, Miss L.
Cain, Mrs. Sarah
Caleb, Mrs. M.
Callaghan, H. W.
Campbell, The Rev. Andrew
Campbell, Miss Gertrude Jane.
Campbell, Miss Kate
Campbell, Miss Susan
Campbell, Miss Mary Jane
Campbell, The Rev. Thomas Vincent
Carmichael, Miss Amy Wilson
Carr, Miss Emma
Carr, Thomas
Cassels, Mrs. Laura Mary Elizabeth
Catherine, Sister
Cattell, Major Gilbert Landale
Cecilia, Sister Fannie
Chamberlain, The Rev. William Isaac
Chandler, The Rev. John Scudder
Chetty, Mr. Carnapaty Vankata Krishnaswami
Chettl, Mrs. C. K.
Chirag Din, Seth
Chitale, Ganesh Krishna
Chogmal, Karnidhan
Churchward, P. A.
Chye, Leong
Clackmore, Mr.
Clancey, John Charles
Clark, Herbert George
Clerke, Honorary Major Louis Arthur Henry
Clutterbuck, Peter Henry
Commissariat, Miss S. H.
Coombs, George Oswald
Coombes, Josiah Waters
Cooper, Dosabhai Pestonji, Khan Bahadur
Cooper, Miss W. G.
Correa, Miss Marie
Corthorn, Miss Alice
Corti, The Rev. Father Fanshi, S.J.
Cottle, Mrs. Adela
Cox, Mrs. E.
Coxon, Stanley William
Crow, Charles George
Cumming, James William Nicol
Cummings, The Rev. John Ernest
Cutting, Rev. William
D'Albuquerque, Mr. C. F.
DaCosta, Miss Zilla Edith
Dadabhoy, Mrs. Jerbanoo
Dalal, Dr. Ratanji Dinshah
Dalrymple-Hay, Charles Vernon
Daniel, J.
Daniels, Miss
Dann, Rev. George James
Das, Ram, Lala
Das, Mathura, Lala
Das, Niranjan
Dass, Balbhadra
Dass, Mallik Narain
Datta, Dr. Dina Nath Pritha
Davidson, Captain B. J.
Davies, Miss Harriet
Davis, Miss B. E.
Davys, Mrs. M. L.
Dawe, Miss Ellen
Dawson, Alexander Thomas
Dawson, Mrs. Charles Hutton
Deane, George Archibald
Deoji, Hazi Ahmed, Khan Sahib
DeKantzow, Mrs. Mary Aphrasia
DeLa Croix, Sister Paul
Desmond, J.
Daniels, Miss
Devi, Bibi Kashmiri
Dew, Mrs. A. B.
DeWachter, Father Francis Xavier
Dewes, Lieut.-Colonel Frederick Joseph
Dexter, T.
Dharm Chand, Lala
Dilshad Begum
Dip Singh, Thakur
Dodson, Dr. E. I.
Drummond, Rev. C. C.
Drysdale, Mrs. Christiana Mary
Dube, Bhagwati Charan
Dundas, Charles Lawrence
Dunlop, Alexander Johnstone
Dunn, Miss L. E.
Durjan Singh, Thakur
Dutta, Mehta Harnam
Duval, Mrs. Ethel Aldersey
Dwane, Mrs. Mary
Eagles, Thomas Cazaly
Eaglesome, George
Edgell, Lieut.-Colonel Edward Arnold
Edward, R.
Elliot, Mrs. I. B.
Ellis-Thompson, Mrs.
Elwes, Mrs. A.
Emanuel, Mrs.
Evans, The Rev. John Ceredig
Evans, Miss Josephine Annie
Fane, Lady Kathleen Emily
Faridoonji, Mrs. Hilla
Farrer, Miss Ellen Margaret
Farzand Ahmad, Khan Bahadur, Kazi Saiyid
Fazal Elahi, Mrs. R. S.
Fernandez, A. P.
Ffrench, Lieut.-Colonel Thomas
Fisher, Dr. R. W.
Fitzgerald, Mr. E. H.
Flashman, Thomas Charles
Fleming, James Francis
Fletcher, Miss
Flint, Dr. E.
Foglieni, Rev. J. P.
Forman, The Rev. Henry
Forrester, G.
Foulkes, R.
Fox, Alfred Charles
Frances, Sister Jane
Francis, W.
Fraser, Robert Thomson
Fyson, Hugh
Gajjar, Mrs. Shivagauri
Gaibibai, Bai
Gandhy, Mr. Pestonji Jamsetji
Garthwaite, Liston
Gass, Rev. J.
Gaskell, W.

Gateley, Thomas Joseph
George, Miss Jessie Eleanor
Ghose, Babu J. N.
Ghose, Mahatap Chandra
Giffard, Mrs. Alice
Gilman, Edward P. Reuben
Gilmore, R. J.
Godfrey, Thomas Leonard
Goldsmith, The Rev. Canon Malcolm George
Goodbody, Mrs.
Gorman, Patrick James
Goswami, Sri Sri Naradev Dakhinpat Adhikar
Gowardhandas, Chatrabhuj
Govind Lal, Lala
Grant, Lieut.-Colonel John Weymis
Grant, Mrs., *nee* Miss Lilian Blong
Grant, Miss Jean
Grant, The Rev. John
Grant, Dr. Lilian Wemyss
Grant, Miss Maria Alice
Gray, Mrs. Hester
Gray, Commissary William David
Greany, Peter Mawe
Greenfield, Miss R.
Greenwood, D. S.
Greg, L. H.
Griessen, Albert Edward Pierre
Gulliford, The Rev. Henry
Gumbley, Mr. Douglas
Gune, Trimbak Raghunath
Gyi, Maung Pet
Hadow, Rev. Frank Burness
Hayati Malik
Hanrahan, W. G.
Harding, Miss C.
Harris, Miss. A. M.
Harris, Dr. B.
Harris, Miss S.
Harrison, Henry
Harrison, Mrs. M. F.
Harrison, Robert Tullis
Hart, Miss Louisa
Harvey, Miss Rose
Harvey, Miss S. E.
Haworth, Major Lionel Berkeley Holt
Hayes, Miss Mary Lavinia
Hayes, Captain P.
Henderson, Miss Agnes
Hickman, Mrs. Agnes
Hicks, Rev. G. E.
Higgins, Andrew Frank
Hill, Elliott
Hill, Henry Francis
Hodgson, Florence Amy
Hoff, Sister, W. J. K.
Hoffman, The Rev. Father John, S.J.
Holbrooke, Major Bernard Frederick Rope
Holden, Major Hyla Napier
Holland, Dr. Henry Tristram
Homer, Charles John
Hoogewerf, Edmund
Hope, Dr. Charles Henry Standish
Hopkyns, Mrs. E.
Houghton, Henry Edward
Hughes, Frank John
Hughes, Miss Llabeth Bell
Hunter, Honorary Captain James
Hutchison, Dr. John
Ibrahim, Maulvi Muhammad
Ihsan Ali
Inglis, Mrs. Ellen
Jackson, Mrs. Emma
Jackson, Mrs. K.
Jaijee Bai (Mrs. Petit)
Jainath, Atal Pandit
Jambusarvala, A. Hargovandas
Jamshed Alikhan, Lieut. Kunwar
Jivanandan
Joglekar, Rao Bahadur Ganesh Venkatesh
John, Rev. Brother
Johnston, Augustus Frederick
Johnstone, Mrs. Rosalie
Jones, The Rev. John Peter
Jones, The Rev. Robert
Jones, The Rev. John Pengwern
Jones, Mrs. A. V.
Jones, Mrs. V. R. B.
Joshi, Mr. Keshavlal Durgashankar
Joshi, Narayan Malhar
Joshi, Trimbak Waman
Joss, Miss F.
Joti Prasad, Lala
Joti Ram
Joyce, Mrs. E. L.
Judd, C. R.
Jugaldas, M.
Jung, Sher, Khan Bahadur
Jwala Prasad, Mrs.
Jwala Singh, Sirdar
Kalubava, Azam Kesarkhan
Kanow, Yasuf
Kapadia, Miss Motibai
Karanjia, Mr. B. N.
Karve, Dhondo Keshav
Keene, Miss H.
Kelavkar, Miss Krishnabai
Kelly, Claude Cyril
Kelly, Miss Eleanor Sarah
Ker, Thomas
Kharshedji, Miss S. K.
Khujoorina, Nadirshah Nowrojee
Kidar Nath, Lala
King, Rev. Dr. R. A.
King, Robert Stewart
Kirloskar, Lakshman Kashinath
Kirloskar, L. K.
Kitchin, Mrs. M.
Knight, H. W.
Knollys, Major Robert Walter Edmond
Knox, Major Robert Welland
Kothewala, Mulla Yusuf Ali
Kreyer, Lieut.-Colonel Frederick August Christian
Krishnan, Rao Bahadur Kottayi
Kugler, Miss Anna Sarah
Kumaran, P. L.
Kyaw, Maung Htim
Lajja Ram
Lal, Bihari
Lal, Pandit Nand
Lamb, Dr. J.
Lambourn, G. E.
Lang, John
Langhorne, Frederick James
Lankester, Dr. Arthur Colborne
Latham, Miss J. L.
Laughlin, Miss L. H. M.
Lawrence, Captain Henry Rundle
Lawrence Henry Staveley
Laxmidas Pitambardas
Lear, A. M.
Leslie-Jones, Leycester Hudson
Little, Mr. M.
Lloyd, Miss Ellizabeth
Lloyd, Mrs. E. M.

Locke, Robert Henry
Low, Charles Ernest
Luce, Miss L. E.
Luck, Miss Florence Ada
Lund, George

MacAlister, The Rev. G.
Mackay, Rev. J. S.
Mackenzie, Alexander McGregor
Mackenzie, Howard
Mackenzie, Miss Mina
Mackinnon, Miss Grace
Macleod, Lieut.-Colonel John Norman
Mac Kellar, Dr. Margaret

McIlwrick, L.
Macnaghten, Hon. Florence Mary
Macphail, Miss Alexandrina Matilda
Macphail, The Rev. James Merry
Macrae, The Rev. Alexander
Madan, Mr. Rustamji Hormasji
Maddox, Lieut.-Colonel Ralph Henry
Madeley, Mrs. E. M.
Mahadevi, Srimati
Mahommed Allanur Khan
Mahomed Salamtullah, Captain, I.M.S.
Malden, J. W.

Maitra Babu Bhuban Mohan
Mallik, Sashi Bhusan
Maracan, Esmail Kadir
Margaret Mary, Sister
Marler, The Rev. Frederick Lionel
Marshall, W. J.
Mary of St. Vincent, Sister
Mary, Sister Eleanor
Masani, Rustam Pestonji
Mathias, P. F.
Maung Maung
McCowen, Oliver Hill
McDonald, Joseph James
McGregor, Duncan
McIlwrick, Leslie
McKenzie, Miss Alice Learmouth
Mead, Rev. Cecil Silas
Mehta, Khan Saheb M. N.
Mehta, Valkuntrai Lallubhai
Mill, Miss C. R.
Misra, Miss Sundri Singh
Mitchcson, Miss
Mitter, Mrs.
Moens, Mrs. Agnese Swettenham
Mohammed Khan
Mokee, Rev. W. J.
Moitra, Akhoy Kumar
Monica, The Rev. Mother

Moore, Mother T.
Moore, Nursing Sister Dora Louisa Truslove
Moore, Miss Eleanor Louisa
Morgan, Miss Elizabeth Ellen
Morris, Major Robert Lee
Motilal, Seth of Piparia
Mount, Captain Alan Henry
Moxon, Miss Lais
Mozumdar, Jadu Nath
Mudaliar, Bangalore Perumal Annaswami
Mudali, Valap akkam Dalvasigomoni Thandavaroyan
Muhammad Usman Sahib.
Muhammad Yusuf, Shams-Ul-Ulama, Khan Bahadur
Mukharji, Babu Jogendra Nath
Mukerji, Babu A. K.
Muller, Miss Jenny
Munshi Abdul Haqq, Khan Bahadur
Munsiff, Dr. J. D.
Murphy, Edwin Joseph

Nag, Mrs. Sasi Mukhi
Nalmullah, Mohamed
Noemi, Rev. Mother
Naoum Abbo
Napier, Alan Bertram
Narain, Har
Narayanjee Laljee
Narayan Singh, Rai Sahib
Narayanrao Yeshwant Mirikar
Nariman, Khan Bahadur Manekji Kharsedji
Narpat Singh, Babu
Nasrulla Khan, Mirza
Naylor, Miss N. F.
Nicholson, Rev.
Newton, Miss Jeanie
Norris, Miss Margaret
Oakley, Mrs. Winfred Nelly Vale

O'Maung Po
O'Brien, Lieut.-Colonel Edward
O'Conor, Brian Edward
O'Hara, Miss Margaret
Old, Frank Shepherd
Oldreive, Rev. F.
Orman, Honorary Captain Charles Henry
Orr, Adolphe Ernest
Orr, James Peter
Orr, Mrs. Amy
Outram, The Rev. A.

Owen, Major Robert James
Owen, C. B.
Owens, Miss Bertha
Pal, Babu Barada Sundar
Palin, Major Randle Harry
Pandit, Vasudeo Ramkrishna
Parbati Bai
Park, The Rev. George W.
Parker, Miss Ada Emma
Parker, Dr. (Miss) H. E.
Parker, Mrs. R. J
Parsons, Ronald
Patch, Miss K.
Patel, Barjorji Dorabji
Patel, Jeona
Pathak, Ram Sahai
Paterson, Miss Rachel
Patrick, Sister
Pearce, W. R.
Pearson, E. A.
Penn, The Rev. W. C.
Perroy, Rev. Father
Pershad, Pundit Thakur
Peters, Lieut.-Colonel Charles Thomas
Petigara, R. J.
Pettigrew, The Rev. William
Phadke, V. K.
Phallbus, Miss Rose Margaret
Phelps, Mrs. Maude Marion
Philip, Mrs. A. J.
Pidikar, S. V.
Pierce, Miss Ada Louise
Pillay, Chinnappa Singaravalu
Pim, Mrs. Ranee
Pinney, Major John Charles Digby

Pinto, Miss Preciosa
Plowden, Lt.-Col. Trevor Chichele
Posnelt, Miss E.
Powell, John
Prabhu, Anantrao Raghunath
Prance, Miss G.

Prasad, Capt. Tulsi of Nepal
Pribhdas Shevakram
Price, The Rev. Eustace Dickinson
Prideaux, Frank Winckworth Austice
Provost, Father F.
Purshotamdas Thakurdas
Pyo, Maung Tet
Rai, Babu Ram Kinkar
Raikes, Mrs. Alice
Ralt, Miss Helen Anna Macdonald
Rajadnya, R. N.
Raj Bahadur, Pandit
Rajendra Pal, Tika Rani
Ram, Mr. Bhagat
Ramchandra, Daji
Ramgopal, Mallani, Seth
Ram Singh, M.V.O.
Ranade, Mrs. Ramabai
Ranjit Singh
Rao, Narayan Cawasji
Rattan Chand
Rattansi Mulji
Raushan Lal
Ray, Babu Sarat Chandra
Ray, Harendra Nath
Reed, Lady
Richards, Mrs. H. F.
Richardson, Mrs. Catherine Stuart
Rita, Stiffani Edward
Rivenburg, The Revd. Dr.
Robarts, Captain Charles Stuart Hamilton
Roberts, Miss Adelaide Pollette
Roberts, The Rev.
Robinson, James
Robinson, Lieut.-Colonel William Henry Banner
Robson, J.
Rocke, Captain Cyril E. A. Spencer
Roe, Colonel Cyril Harcourt
Roe, Mrs. Edith Mary
Rose, Miss Maude
Rukhmabai, Dr.
Rulach, Rev. George Bernard
Rustomji Faridoonji
Rutherford, Miss Mary Elizabeth
Sadiq, Shams-ud-din
Sadlier, A. W. Woodward
Sahai, Ram
Sahan Ram Kali
Sahay, Lala Deonath
Sallo, K.
Saint Monica, The Rev. Mother
Salkield, Tom
Samarth, Wasudeo Mahadeo
Samuels, Joseph
Sankara Kandar Kandaswami Kandar
Savidge, Rev. Frederick William
Saw Ba La
Sawhney, Lala-Isher Das
Schultze, The Rev. Frederick Volkomor Paul
Scotland, Lieut.-Colonel David Wilson
Shah, Babu Lal Behari
Shah, Mohamed Kamal.
Shah, Mohammad Nawaz
Shah Nawaz Ghulam Murtaza Bhatto, Khan Bahadur
Shah, Reverend Ahmad
Shamnath Rai Bahadur
Shankar, Mr. C. P. V.
Shaw, Mrs. Hawthorne
Sheard, Mr. E.
Shircore, William
Shroff, Dr. E. D.
Shyam Rikh, Raja Francis Xavier
Shyam Sunder Lall
Simcox, Arthur Henry Addenbrooke
Simkins, Charles Wylkins
Simon, Sister M.
Simonsen, J. L.
Simpson, Miss J. P.
Sinclair, Reginald Leaby
Singh, Apji Dhul
Singh, Makkhan
Singh, Rev. P L.
Singh, Babu Ramdhari
Singh, Bhai Ganga
Singh, Rai Bahadur Sundar
Singh, Rukhmina
Singh, Bhai Lehua
Singh, Bhai Takhut
Singh, Risaldar Major, Hanwant
Singh, Sitla Baksh
Singh, G. Sher
Singh, Sohan
Sinzhe, Miss L. N. V.
Sisingi, J.
Small, Miss J. M.
Smith, Miss Katherine Mabel
Smith, Miss Ellen
Smith, E. G.
Smith, The Rev. Frederick William Ambery
Smith, Mrs. Henry
Smith, Miss Annie Caroline
Sommerville, The Rev. Dr. James
Spencer, Mrs. E. M.
Sri Ram Kunwar
Starte, Oliver Harold Baptist
Steel, Alexander
Steele, The Rev. John Ferguson
Stephens, John Hewitt
Stephens, Mrs. Grace

Stevens, Mrs. (Ethel)
Stevenson, Surgeon-General Henry Wickham
Stewart, Miss E. F.
Stewart, Major Hugh
Stewart, Mrs. Lilian Dorothea
Stewart, Thomas
St. Joseph, J. D.
Stockings, The Rev. H. M.
Strip, Samuel Algernon
Strong, Mr. W. A.
Strutton, Rev. H. H.
Stuart, Dr. (Miss) Gertrude
Sultan Ahmed Khan
Sunder Lal
Sundrabai, Bai
Swain, Mrs. Walker
Swainson, Miss Florence
Swiss, Miss Emily Constance
Talcherkar, Mr. H. C. A.
Talyarkhan, Mrs. M.
Taleyarkhan, Mr. Manckshah Cawasha
Talib Mehdi Khan, Malik
Tambe, Dr. Gopal Rao Ramchandra
Tarafdar, Mr. S. K.
Tara Dutt Gairola
Tarapurwalla, Fardunji Kuvarji
Taylor, Rev. Alfred Prideaux
Taylor, Mrs. Florence Prideaux
Taylor, John Norman
Tha, Maung Po
Tha, Maung Shwe
Thein, Maung Po
Theobald, Miss
Thomas, Mrs. Mabel Fox
Thomas, Samuel Gilbert
Thompson, R. C.
Thomssen, The Rev. G. Nicholas
Thorn, Miss Bertha
Thoy, Herbert Dominick
Timothy, Samuel
Todd, Capt.
Tomkins, Lionel Linton
Tudball, Miss Emma
Turner, Mrs. Vera
Udipi Rama Rao
Umar Khan, Malik Zorawar Khan
Vajifdar, Mrs. Hormusji Maneckji
Vale, Mrs. K.
Valpy, Miss K.
Vaughan-Stevens, Dudley Lewis
Vijayaraghava Acharyar
Vines, Thomas Humphrey
Visvesvaraya, Mokshagundam
Walt, Robert William Hamilton
Wakefield, George Edward Campbell
Walayatullah, Khan Bahadur Haxz Muhammad
Walewalker, P. Baburao
Waller, Frederick Chighton
Waniess, Dr. William James
Ward, Mr. W. A. P.
Wares, Donald Horne
Webb-Ware, Mrs. Dorothy
Weighell, Miss Anna Jane
Welsh, The Rev. T. W. Reese
Western, Miss Mary Priscilla
White, Miss J.
Wildman, Miss Elizabeth Annie
Wilkinson, Mrs. A.
Wilson, Miss Anna Margaret
Wilson, Mrs. E. R. B.
Wince, Miss Jane
Wiseman, Capt. Charles Sheriffe
Woerner, Miss Lydia
Wood, The Rev. A.
Wylie, Miss Iris Eleanor
Wyness, Mrs. Ada
Yaw, Maung
Yerbury, Miss J.
Young, Dr. M. Y.
Zahur-ul-Husain Muhamma

Indian Names and Titles.

There is a bewildering multiplicity of Indian titles, made all the more difficult inasmuch as there is a difference of nomenclature between the titles of Hindus and Mahomedans. Some titles are hereditary and represent ruling chiefs or those nominally such (and of these there are no less than some 620, whilst of the titles themselves some 200 are known); others are personal honours conferred on individuals by the Indian Government, and even then sometimes made hereditary. Yet again, there are numerous complimentary titles, or specifications of office, expressed in Hindu phrases, of which we have occasionally supplied the interpretations. It must be added that though *caste* is often figuring in the names it has nothing whatever to do with the titles. Amir, Khan, Mir, Sultan, Sri, &c., are confusingly used as both titles and names.

The order of rank is thus given by Sir R. Lethbridge in "The Golden Book of India."

Hindu—Maharaja Bahadur, Maharaja, Raja Bahadur, Raja, Rai Bahadur, Rai Saheb, Rai.

Mohammedan—Nizam, Nawab Bahadur, Nawab, Khan Bahadur, Khan Saheb, Khan.

Parsis and Bene-Israelites—Khan Bahadur, Khan Saheb.

Afsur—a corruption of the English "officer."

Ahluwalia—name of a princely family resident at the village of Ahlu, near Lahore.

Akhundzada—son of a Head Officer.

Alijah (Sindhi)—of exalted rank.

Ali Raja—Sea King (Laccadives).

Amir (corruptly *Emir*)—a Mohammedan Chief often also a personal name.

Asaf—a Minister.

Baba—lit. "father;" a respectful "Mr." Irish "Your Honour."

Babu—strictly a 5th or still younger son of a Raja, but often used of any son younger than the heir, whilst it has also grown into a term of address=Esquire. There are, however, one or two Rajas whose sons are known respectively as—1st, Kunwar; 2nd, Diwan; 3rd, Thakur; 4th, Lal; 5th, Babu.

Bahadur—lit. "brave" or "warrior:" a title used by both Hindus and Mohammedans, often bestowed by Government; added to other titles it increases their honour, but alone it designates an inferior ruler.

Bakhshi—a revenue officer or magistrate.

Begum or *Begam*—the feminine of "Nawab" combined in Bhopal as "Nawab Begum."

Besar—apparently a large land-owner.

Bhonsle—name of a Maratha dynasty.

Bhup—title of the ruler of Cooch Behar.

Bhugti—name of a Baluch tribe.

Chhatrapati—one of sufficient dignity to have an umbrella carried over him.

Dada—lit. "grandfather" (paternal); any venerable person.

Dauła and *Daulat*—State, also one in office.

Deb—a Brahminical priestly title; taken from the name of a divinity.

Dhiraj—"Lord of the Lands:" added to "Raja," &c., it means "paramount."

Diwan—a Vizier or other First Minister to a native Chief, either Hindu or Mohammedan, and equal in rank with "Sardar," under which see other equivalents. The term is also used of a Council of State.

Elaya Raja—title given to the heir of the Maharaja of Travancore.

Farzand (with defining words added)—"favorite" or "beloved."

Fateh—"victory."

Fath Jeang—"Victorious in Battle" (a title of the Nizam).

Gaekwar (sometimes *Guicowar*)—title with "Maharaja" added of the ruler of Baroda. It was once a caste name and means "cowherd," *i.e.*, the protector of the sacred animal; but later on, in common with "Holkar" and "Sindhia," it came to be a dynastic appellation and consequently regarded as a title. Thus, a Prince becomes "Gaekwar" on succeeding to the estate of Baroda; "Holkar," to that of Indore and "Sindhia," to that of Gwalior.

Hafiz—guardian.

Haji—one who has made pilgrimage to Mecca.

Hiera Lal—"diamond ruby."

Holkar—see "Gaekwar."

Jah—a term denoting dignity.

Jam (Sindhi or Baluch)—Chief.

Kazi—(better written *Qazi*)—a Mohammedan magistrate.

Khan—originally the ruler of a small Mohammedan State, now a nearly empty title though prized. It is very frequently used as a name, especially by Afghans and Pathans.

Khwaja—a Persian word for "master," sometimes a name.

Kunwar or *Kumar*—the heir of a Raja.

Lal—a younger son of a Raja (strictly a 4th son, but see under "Babu").

Lokendra or *Lokindra*—"Protector of the World," title of the Chiefs of Dholpur and Dattia.

Mahant—a feudal title borne by the heads of a Hindu religious body.

Maharaja—the highest of hereditary rulers among the Hindus, or else a personal distinction conferred by Government. It has several variations as under "Raja," with the addition of *Maharaj Rana*; its feminine is *Maharani* (*maha*=great).

Malik—master, proprietor.

Mian—title of the son of a Rajput Nawab resembling the Scottish "Master."

Mir—a leader, an inferior title which, like "Khan," has grown into a name, especially used by descendants of the Chiefs of Sind.

Mirza—if prefixed, "Mr." or "Esquire."

Mong, Moung, or *Maung* (Arakanese)—leader.

Moulvi or *Maulvi*—a learned man or teacher.

Mudaliyar or *Mud-liar*—a personal proper name, but implying "steward of the lands."

Mumtaz-ud-Daula—distinguished in the State *Mulk*, in the country.

Munshi—president, or presiding official.

Myowun—"Mr."

Nawab—originally a Viceroy under the Moghal Government, now the regular leading title of a Mohammedan Prince, corresponding to "Maharaja" of the Hindus.

Nazim—a ruler (not to be confused with following).

Nizam—the title of the ruler of Hyderabad, the one Mohammedan Prince superior to Nawab.

Nono (Thibetan)—the ruler of Spitta.

Pandi or Pundi—a learned man.

Peshkup—manager or agent.

Prince—term used in English courtesy for "Shahzada," but specially conferred in the case of "Prince of Arcot" (called also "Armin-i-Arcot").

Raja—a Hindu Prince of exalted rank, but inferior to "Maharaja." The feminine is *Rani* (Princess or Queen), and it has the variations *Raj, Rana, Rao, Rai, Rawal, Rawat, Raikwar, Raikbar,* and *Raikat.* The form *Rai* is common in Bengal, *Rao* in S. & W. India.

Raj Rajeshwar— King of Kings.

Risaldar—commander of a troop of horses.

Saheb—the Native Hindu term used to or of a European ("Mr. Smith" would be mentioned as "Smith Saheb," and his wife "Smith Mem-Saheb," but in *addressing* it would be "Saheb," fem. "Saheba," without the name); occasionally appended to a title in the same way as "Bahadur," but inferior (=master). The unusual combination "Nawab Saheb" implies a mixed population of Hindus and Mohammedans.

Sahibzada—son of a person of consequence.

Said, Sayid, Saiyid, Sidi, Syed, Syud—various forms for a title adopted by those who claim direct male descent from Mohammed's grandson Husain.

Sardar (corrupted to *Sirdar*)—a leading Government official, either civil or military, even a Grand Vizier. Nearly all the Punjab Barons bear this title. It and "Diwan" are like in value and used by both Hindus and Mohammedans. So, but Mohammedans only, are "Wali," "Sultan," "Amir," "Mir," "Mirza," "Mian," and "Khan."

Sawai—a Hindu title implying a slight distinction (lit. one-fourth better than others).

Saubwa (Burmese)—a Chief.

Shahzada—son of a King.

Shaikh or *Sheikh* (Arabic)—a Chief.

Shams-ul-Ulama—a Mohammedan title denoting "learned."

Shamshir-Jang—"Sword of Battle" (a title of the Maharaja of Travancore).

Sidi—a variation of "Said."

Sindhia—see under "Gaekwar."

Sri or *Shri*—lit. fortune, beauty: a Sanscrit term used by Hindus in speaking of a person much respected (never addressed *to* him; nearly="Esquire"): used also of divinities. The two forms of spelling are occasioned by the intermediate sound of the *s* (that of *s* in the German *Stadt*).

Subadar—Governor of a province.

Sultan—like "Sardar."

Syed, Syud—more variations of "Said."

Talukdar—an Oudh landlord.

Talpur—the name of a dynasty in Sind.

Thakur—a Hindu term equivalent to "Bahadur," whether as affix or alone.

Tumandar—a Persian word denoting some office.

Umara—term implying the Nobles collectively.

Wali—like "Sardar." The Governor of Khelat is so termed, whilst the Chiefs of Cabul are both "Wali" and "Mir."

Zemindar or *Zamindar*—a landowner; orig. a Mohammedan collector of revenue.

Distinctive Badges.—An announcement was made at the Coronation Durbar in 1911, that a distinctive badge should be granted to present holders and future recipients of the titles of 'Diwan Bahadur', 'Sardar Bahadur', 'Khan Bahadur', 'Rai Bahadur', 'Rao Bahadur', 'Khan Sahib', Rai Sahib' and 'Rao Sahib'. Subsequently the following regulations in respect of these decorations were issued:—(1) The decoration to be worn by the holders of the titles above mentioned shall be a badge or medallion bearing the King's effigy crowned and the name of the title, both to be executed on a plaque or shield surrounded by a five-pointed star surmounted by the Imperial Crown, the plaque or shield being of silver gilt for the titles of Diwan, Sardar, Khan, Rai and Rao Bahadur, and of silver for the titles of Khan, Rai, and Rao Sahib. (2) The badge shall be worn suspended round the neck by a ribbon of one inch and a half in width, which for the titles of Diwan and Sardar Bahadur shall be light blue with a dark blue border, for the titles of Khan, Rai and Rao Bahadur light red with a dark red border, and for the titles of Khan, Rai and Rao Sahib dark blue with light blue border.

A Press Note issued in November, 1914, states:—The Government of India have recently had under consideration the question of the position in which **miniatures** of Indian titles should be worn, and have decided that they should be worn on the left breast fastened by a brooch, and not suspended round the neck by a ribbon as prescribed in the case of the Badge itself. When the miniatures are worn in conjunction with other decorations, they should be placed immediately after the Kaiser-i-Hind Medal.

Indian Distinguished Service Medal.—This medal was instituted on June 28th, 1907, by an Army Order published in Simla as a reward for both commissioned and non-commissioned officers of the regular and other forces in India. It bears on the obverse the bust of King Edward VII, and on the reverse a laurel wreath encircling the words For Distinguished Service. The

medal, 1⅝ inches in diameter, is ordered to be worn immediately to the right of all war medals suspended by a red ribbon 1¾ in. wide, with blue edges ⅛ in. wide. This medal may be conferred by the Viceroy of India.

Indian Order of Merit.—This reward of valour was instituted by the H. E. I. Co. in 1837, to reward personal bravery without any reference to length of service or good conduct. It is divided into three classes and is awarded to native officers and men for distinguished conduct in the field. On the advancement from one class to another the star is surrendered to the Government, and the superior class substituted, but in the event of the death of the recipient his relatives retain the decoration. The order carries with it an increase of one-third in the pay of the recipient, and in the event of his death the allowance is continued to his widow for three years. The First Class consists of a star of eight points, 1⅝ in. in diameter, having in the centre a ground of dark blue enamel bearing crossed swords in gold, within a gold circle, and the inscription Reward of Valour, the whole being surmounted by two wreaths of laurel in gold. The Second Class star is of silver, with the wreaths of laurel in gold; and the Third Class entirely of silver. The decoration is suspended from a simple loop and bar from a dark-blue ribbon 1¼ in. in width with red edges, bearing a gold or silver buckle according to class.

Order of British India.—This order was instituted at the same time as the Order of Merit, to reward native commissioned officers for long and faithful service in the Indian Army. Since 1878, however, any person European or native, holding a commission in a native regiment, became eligible for admission to the Order without reference to creed or colour. The First Class consists of a gold eight-pointed radiated star 1¼ in. in diameter. The centre is occupied by a lion statant gardant upon a ground of light-blue enamel, within a dark-blue band inscribed Order of British India, and encircled by two laurel wreaths of gold. A gold loop and ring are attached to the crown for suspension from a broad ornamental band $\frac{5}{16}$ in. in diameter, through which the ribbon, once blue, now red, is passed for suspension from the neck. The Second Class is $1\frac{7}{16}$ in. in diameter with dark-blue enamelled centre: there is no crown on this class, and the suspender is formed of an ornamental gold loop. The reverse is plain in both classes. The First Class carries with it the title Sirdar Bahadur, and an additional allowance of two rupees a day: and the Second the title of Bahadur, and an extra allowance of one rupee per day.

Indian Meritorious Service Medal.—This was instituted on July 27th, 1888, and on receipt of the medal the order states "a non-commissioned officer must surrender his Long Service and Good Conduct medal": but on being promoted to a commission he may retain the M. S. medal, but the annuity attached to it will cease. On the obverse is the diademed bust of Queen Victoria facing left, with a veil falling over the crown behind, encircled by the legend Victoria Kaisar-i-Hind. On the reverse is a wreath of lotus leaves enclosing a wreath of palm tied at the base, having a star beneath; between the two wreaths is the inscription for meritorious service. Within the palm wreath is the word India. The medal, 1⅝ in. in diameter, is suspended from a scroll by means of a red ribbon 1¼ in. wide. The medals issued during the reigns of Queen Victoria's successors bear on the obverse their bust in profile with the legend altered to EDWARDVS or GEORGIVS.

Domestic Servants.

The relationship of master to servant in India is a subject to which attention is frequently directed in the Press by complaints about the alleged deterioration of domestic servants and the hardships to which employers are subjected by the boycotting action of discharged servants. The remedy most commonly propounded for misbehaviour on the part of servants is registration with a view to checking the use of false testimonials, or "chits," and to enabling masters to obtain certain information as to the character of the persons they employ. This mode of procedure is of German origin, for the old Prussian Servants' Ordinances (Gesindeordnung) were supplemented in 1854 by a law, applying only to agricultural labourers and domestic servants, which punishes breach of contract, and since then various State laws dealing with domestic servants have been passed in Germany. The conditions are not, however, analogous for the servant keeping class in India is proportionately larger than in Europe, as also is the number of servants kept by each individual.

The first attempt in the East to deal with the problem by legislation was made in **Ceylon.** The act dealing with the registration of domestic servants in that Colony is comprised in Ordinance No. 28 of 1871. It extends to all classes of domestic servants, hired by the month or receiving monthly wages, and the word 'servant' means and includes head and under-servants, female servants, cooks, coachman, horsekeepers and house and garden coolies. The Act came into operation in 1871 and empowered the Governor to appoint for the whole of the Island or for any town or district, to which the Ordinance is made applicable, a registrar of domestic servants, who is to be under the general supervision and control of the Inspector-General of Police. A registry is kept by the registrar of all domestic servants employed within his town or district, and he has to enter therein the names of all the servants, the capacities in which they are employed at the time of such registration, the dates of their several engagements and such memorandum of their previous services or antecedents as they may desire to have recorded in the register. But the registrar must, previous to his entering all these details, satisfy himself as to the credibility of the statements made to him. Any person, who may not have been a domestic servant before, but who is desirous of entering domestic service, has to submit an application to the registrar, and if the registrar is satisfied that there are reasonable grounds to believe that the applicant is a fit and proper person to enter domestic service he shall enter his name in the register, recording what he has been able to learn respecting the person's antecedents together with the names of any persons who are willing to certify as to his respectability. If the applicant is unable to produce satisfactory or sufficient evidence as to his fitness for domestic service, the registrar may grant him "provisional" registration, to be thereafter converted into "confirmed" registration according to the result of his subsequent service. If the registrar is satisfied that the applicant is not a fit and proper person he should withhold registration altogether, but in such a case he must report his refusal to register to the Inspector-General of Police.

Every person whose name has been registered in the general registry is given a pocket register containing the full particulars of the record made in the general registry. No person can engage a servant who fails to produce his pocket register or whose pocket register does not record the termination of his last previous service, if any. On engaging a servant the master has to enter forthwith in the pocket register the date and capacity in which such servant is engaged and cause the servant to attend personally at the registrar's office to have such entry inserted in the general registry. Similarly, in case the master discharges a servant he must insert in the pocket register the date and cause of his discharge and the character of the servant. Provided that if for any reason he be unwilling to give the servant a character or to state the cause of his discharge he may decline to do so. But in such a case he must furnish to the registrar in writing his reasons for so refusing. If the servant on dismissal fails to produce his pocket register the master must notify that fact to the registrar. Whenever any fresh entry is made in the pocket register the servant is bound to attend the registrar's office to have such an entry recorded in the general registry. Every servant whose name is registered shall, if he subsequently enters service in any place not under the operation of the Ordinance, attend personally at the nearest police station on his entering or leaving such service and produce his pocket register to the principal officer of police at such station in order to enable the police officer to record the commencement or termination of the service. The police officer has then to communicate it to the registrar of the town or district in which such servant was originally registered.

Various **penalties of fine** as well as of imprisonment are imposed for violation of any of the acts required to be done or duties imposed by the Act on the various persons mentioned below. As respects masters if they fail to fulfil any of the duties imposed on them by the Act they expose themselves to a liability of their being fined to the extent of Rs. 20. Similarly a servant, who fails to fulfil any of the duties imposed on him by the Act is liable to pay a fine not exceeding Rs. 20. But in case he gives any false information to the registrar or to any other person on matters in which he is required by this Ordinance to give information, he is liable to a fine not exceeding Rs. 50 or to imprisonment, with or without hard labour, not exceeding 3 months. A fee of 25 cents is charged to the master on engaging a new servant, a like fee of 25 cents is charged to the servant on his provisional registration, or on registration being confirmed, or for registration of previous service or antecedents. But in case of loss or destruction of the pocket register the servant has to pay one rupee for the issue of a duplicate pocket register.

A similar Ordinance (No. 17 of 1914) has been introduced in the **Straits Settlements,** where its operation has been limited to such local areas as may be declared by the Governor in Council, and its application within such areas has been restricted to the class of householders who are expected to desire the benefit of the provisions

Stock Exchanges.

There are about 446 Share and Stock Brokers in **Bombay**. They carry on business in the Brokers' Hall, bought in 1899 from the funds of the **Share and Stock Brokers' Association** formed to facilitate the negotiations and the sale and purchase of Joint Stock securities promoted throughout the Presidency of Bombay. Their powers are defined by rules and regulations framed by the Board of Directors and approved by the general body of Brokers. The Board has the power to fix the rates in times of emergencies. The official address of the Secretary is Dalal Street, Fort, Bombay.

At first the admittance fee for a broker was Rs. 5 which was gradually raised to Rs. 7,000. The fee for the Broker's card has increased and it was recently sold by public auction for Rs. 21,800. The rules of the Association were revised in October 1916 and from the New Year the purchaser of shares has to pay the stamp and transfer fee instead of the seller. There are two classes of Exchange Brokers, Europeans and Indians, the latter being certified for recognition by the native Stock Exchange. Business in Government Paper and all other Trustees' Authorised Securities is carried on under the rules of the Bombay Stock Exchange, but in the street outside the hall.

In November 1917 a second Stock Exchange was opened in Bombay, with its headquarters in Apollo Street, known as the **Bombay Stock Exchange, Ltd.** This separate Exchange came to an end in 1921, when it was merged in the older body; it was revived in 1922 but complaint was made that it did very little, if any, business.

Committee of Enquiry.—In 1923 the Government of Bombay appointed a Committee to enquire into the constitution, government, customs, practices, rules, regulations and methods of business of the Native Share and Stock Brokers' Association of Bombay and to investigate any such complaints of the public and to make any such enquiries with reference to any of the aforesaid matters or any other matter appertaining to the aforesaid Association as the Committee may deem proper and thereafter with a view to protect the investing public against the interested or irregular control of business to formulate such definite proposals for the future constitution, control, direction and regulation of the aforesaid Association as the Committee may deem proper.

The Committee was constituted as follows:—

Sir Wilfrid Atlay	Chairman.
Sir Fazulbhoy Currimbhoy,	Members.
Sir Purshotamdas Thakurdas	
Mr. R. Lindsay	
Capt. E. V. Sassoon	
Mr. Bhulabhai J. Desai	
Mr. Perozeshah M. Dalal	
Mr. G. Davis, I.C.S.	Secretary.

For many years the **Calcutta** Share Market had its meeting place in various gullies in the business quarter and was under no control except that of established market custom. In 1908 the **Calcutta Stock Exchange Association** was formed, a building was leased in New China Bazar Street now called Royal Exchange Place, a representative committee was formed, and the existing trade customs were focussed into rules drawn up for the conduct of business. Admittance as a member of the Stock Exchange is by vote of the committee, and the entrance fee is at present Rs 500. The market custom differs very materially from that of most other Stock Exchanges since there are no settlement days, delivery is due the second day after the contract is passed and sales of securities are effected for the most part under blank transfers. Another difference in procedure as compared with the London Stock Exchange is that there are no "Jobbers" in the Calcutta market. The Dealers who take their place, more or less, are not compelled to quote a buyer's and a seller's rate and are themselves Brokers as well as dealers, calling upon the Banks and other clients and competing with Brokers.

There are about 150 members, besides outside brokers, the former consisting of European, Jewish, Marwari, and Bengalee firms. The Marwaris predominate. The volume of *bona fide* Investment business is comparatively small and insufficient for the number of Brokers. The principal business transacted on the Calcutta Stock Exchange is connected with the shares in Jute Mills, Coal Companies, Tea Companies registered in India, Miscellaneous industrial concerns (such as Paper, Flour, Sugar), Railway and Transit Companies and Debentures, the latter comprising those of Industrial concerns and Trustees' Investment Securities, namely, Municipal and Port Trust Debentures. When speculative operations are being actively engaged in, which frequently take the form of forward contracts for delivery in three months' time, the value of securities changing hands may aggregate as much as a crore of Rupees per month, but since the trade is not constant and one year differs very much from another, it would be difficult to estimate what the average annual turn-over would amount to. The association has an honorary secretary and is not at present affiliated to the Bengal Chamber of Commerce.

The **Madras** Stock Exchange situated No. 9 Broadway (in Tata Industrial Bank Buildings) consists of about 100 Members of which 25 are working Members. It was opened on 6th April 1920 and deals principally in Mill shares. Business is regulated by rules drawn up by the Directors. There is a Board of arbitration. There is an admittance membership card of Rs. 1,000 and an annual subscription of Rs. 100. The original 100 members were elected by the first Directors and each of the working members have deposited a security of Rs. 3,000 which is held by the Stock Exchange Committee.

Industrial Arts.

The ancient industrial arts of India formed two distinct groups. The first included those allied to, and dependent upon, architecture; the second comprise those applied to articles devoted to religious ritual ; military weapons and trappings, domestic accessories ; and to personal adornment.

The articles of the first group were intended for some fixed and definite position, and the style of their design and the character of their workmanship were dictated by that of the building with which they were incorporated. Those of the second group were movable, and the range of their design was less constricted and their workmanship was more varied. Examples of work in both groups are so numerous, and the arts comprise such a diversity of application, that only a cursory survey can be attempted within the limits of a short review. Although the design and treatment differ in the two groups, the materials used were often the same. These materials cover a very wide range but space only permits of reference to work applied to the four materials upon which the Indian craftsman's skill has been most extensively displayed. These are stone, wood, metal and textiles.

Before dealing separately with each of these materials a few words upon the principal Indian styles are necessary. The two distinctive styles are Hindu and Mahomedan. The former may be termed indigenous, dating as it does from remote antiquity; the latter was a variation of the great Arabian style, which was brought into India in the fourteenth century, and has since developed features essentially Indian in character. The art of both Hindus and Mahomedans is based upon religion and the requirements of religious ritual. The obvious expression of this is shown in the different motifs used for their ornament. In Hindu art all natural forms are accepted and employed for decorative purposes; but in that of the Mahomedans, nearly all natural forms are rejected and forbidden. The basis of Mahomedan decoration is therefore mainly geometrical. In each of them, racial characteristics are strikingly exhibited. The keynote of Hindu work is exuberance, imagination and poetry ; that of Mahomedan, reticence, intellect and good taste. The Hindus are lavish, and often undiscriminating, in their employment of ornament ; the Mahomedans use more restraint. In fact the two styles may be compared, without straining the analogy, to the Gothic and classic styles in Europe. In both styles the fecundity of ideas and invention in design are marvellous, and the craftsmanship often reaches a very high standard. Hindu art had been subjected throughout the ages to many foreign influences, but the artistic instincts of the people have proved so conservative that, whether these alien ideas came from the east or the west, they have been absorbed, and are now stamped with a definite Indian character. Recognition of this fact alone should relieve the anxiety of those critics who fear that the penetration of Western art and culture into India at the present time will eventually rob Indian art of its national character.

Stone Work.—Carved stone work is the principal form of decoration employed in Hindu temples. In variety and scope it ranges from the massive figures in the Buddhist and Brahminical Cave Temples, and the detached sculpture of the temples of Southern India, to the delicately incised reliefs and elaborately fretted ornament of the Jain temples at Mount Abu. A curious fact in relation to Hindu work is that priority of date appears to have no relation to artistic development. It is not possible to trace, as in the case of Greek, Roman and Mediæval craftwork, the regular progressive steps from art in its primitive state to its culminating point and its subsequent decay. Styles in India seem to spring into existence fully developed; the earlier examples often exhibiting finer craftsmanship than those of a later date. There can be little doubt that stone carving in India was simply the application of the wood carvers' art to another material. The treatment of stone by the Hindu craftsmen, even in the constructive principles of their buildings, bears a closer resemblance to the practice of the wood-worker than to that of the stone mason. The earlier wooden examples from which the stone buildings and their decorations were derived have long since disappeared, but their influence is apparent. The keynote of Hindu design is rhythmic rather than symmetrical; that of their craftsmanship, vigour rather than refinement. In the carving of the human figure and of animals great power of expressing action is shown, and this spontaneous feeling is preserved despite the greatest elaboration and detail. The industry displayed is amazing, no amount of labour appears to have daunted the Hindu craftsmen in carrying out their huge and intricate schemes of decoration.

The stone carving on Mahomedan buildings, except where Hindu carvers have been allowed a free hand, is much more restrained than that on Hindu temples. The fact that geometrical forms were almost exclusively used, dictated lower relief and greater refinement in the carving; while the innate good taste of the designers prompted them to concentrate the ornament upon certain prominent features, where its effect was heightened by the simplicity of the rest of the building. The invention displayed in working out geometrical patterns for work screens, inlay, and other ornamental details appears to be inexhaustible; while wonderful decorative use has been made of Arabic and Persian lettering in panels and their framing. To obtain a rich effect the Hindus relied upon the play of light and shade upon broken surfaces, the Mahomedans to attain the same end used precious materials; veneering the surfaces of their buildings with polished marble which they decorated with patterns of mosaic composed of jade, agate, onyx and other costly stones. Although the art of inlaying and working in hard stones was of Italian origin, it proved to be one eminently suited to the genius of the Indian craftsman; and many wonderful examples of their skill in the form of book rests, tables, thrones, footstools, vases and sword handles are extant to show the height of proficiency they attained. The treatment of precious stones by Indian jewellers may here be referred

to. Sir George Birdwood states that " the Indian jeweller thinks of producing the sumptuous, imposing effect of dazzling variety of rich and brilliant colours and nothing of the purity of his gems." This is true in a general sense and "full many a gem of purest ray serene" was utterly ruined by crude cutting and piercing. But although as early as the sixteenth and seventeenth centuries diamonds and precious stones from the Indian mines were taken to Europe to be cut, many of the finest jewels found their way back to the treasure houses of Indian princes.

Wood Work.—With a fine range of timbers suitable for the purpose, wood has played a great part in the construction and decoration of Indian buildings. Unfortunately, most of the ancient wood work has been destroyed by the action of the climate and the teeming insectivorous life of India; and that which escaped these enemies was wiped out by fire and the sword. It is therefore only possible to conjecture the height of artistic development these buildings and their decorations displayed by the copies in stone which have been preserved. Few if any examples of a date earlier than the sixteenth century are to be found. Many of these, and specimens of a later date to be seen in towns and cities throughout the country, are masterpieces of design and craftsmanship. The carved timber fronts and inner courtyards of houses in Ahmedabad, Nasik, and other parts of Western India are notable for their picturesqueness and beauty; the structural beams, the overhanging balconies, with their screens and supporting brackets, being carved in a manner which unites richness of effect with good taste and propriety. Of furniture, as the term is now understood, few examples were in use in India before Europeans introduced their own fashions. These were confined to small tables and stools, book rests, clothes chests and screens, the designs of which conformed somewhat closely to the architectural style of the period. Many of these were decorated with inlays of coloured woods, ivory and metal; while in some cases the wooden basis was entirely plated with copper, brass or silver. In Southern India, where close grained sandalwood is grown, jewel cases and boxes are enriched with carving executed with the attention to detail and the finish generally associated with the carving of ivory. Coloured lac was freely used to decorate many articles of furniture, especially those turned on the lathe; and rich colour effects were obtained in this, perhaps the most distinctive and typically Indian development of decoration as applied to woodwork.

Metal Work.—With the exception of weaving, the metal working industry employed and still employs the greatest number of artistic craftsmen in India. Copper and brass have always been the two metals most widely used for domestic purposes by Mahomedans and Hindus. The shapes of many of these humble vessels are among the most beautiful to be found in the country. They exhibit that sense of variety and touch of personality which are only given by the work of the human hand; and the shapes are those which grow naturally from the working of the material with the simplest implements. In the technical treatment of brass and copper Indian craftsmen have shown a taste and skill unsurpassed by those of other nations, except in the department of fine casting. In this, and in the working of gold and silver, a higher standard of technical and constructive exactness has been reached by the metal workers of Europe and Japan. It may be taken as an axiom that the more beautiful the shape of an article is, and this especially applies to metal work, the less need exists for the decoration of its surface. It is equally true that the highest test of craftsmanship is the production of a perfect article without any decoration. The reason being that the slightest technical fault is apparent on a plain surface, but can be hidden or disguised of one which is covered with ornament. The goldsmiths and silversmiths of India were extremely skilful and industrious, but judged by this test their works often exhibit a lack of care and exactness in the structural portions and a completely satisfactory example of perfectly plain work from the hands of the gold and silversmiths of India is rarely to be met with. Much of the excessive and often inappropriate ornamentation of the articles that they produced owed its application as much to the necessity of hiding defective construction as it did to any purely decorative purpose. For many generations, ornaments of gold and silver were regarded in the light of portable wealth, a practice which naturally made for massiveness. These solid ornaments are most effective and picturesque; and, despite an enormous output of elaborate and delicate work from their hands, the most valuable contribution of the Indian metal workers to the sum total of man's artistic use of the precious metals will probably be found to lie in a certain barbaric note which distinguishes these pieces—a note not present in the craft work of other countries. In the design of Hindu gold and silver ornaments, religious symbols have been extensively used. The ornaments which bedeck the early sculptured figures, and those depicted in the paintings at the Cave Temples of Ajanta are precisely the same in design and use as similar articles made at the present time, thus affording a striking evidence of the inherent conservatism of the Hindu people and its effect upon an industrial art that makes a closer personal appeal than any other.

Textiles.—The textile industry is the widest in extent in India and is that in which her craftsmen have shown their highest achievements. Other countries, east and west of India have produced work equal, if not superior, in stone, wood, and metal; but none has ever matched that of her weavers in cotton and wool, or excelled them in the weaving of silken fabrics. Some of the products of the looms of Bengal are marvels of technical skill and perfect taste, while the plum bloom quality of the old Cashmere shawls is an artistic achievement which places them in a class by themselves. Weaving being essentially a process of repetition, was the first to which machinery was applied, and modern science has brought power loom weaving to such a state of perfection that filaments of a substance finer even than those of Dacca, which astonished our ancestors, are now produced in the mills of Lancashire. But

for beauty of surface and variety of texture, no machine-made fabrics have ever equalled the finest handwork of the ancient weavers of India. Many of the most beautiful varieties of Indian textile work have disappeared, killed by the competition of the power loom; and it is to be feared that under modern conditions they are never likely to be revived. In other branches of art as applied to textiles India does not hold so pre-eminent a position as in that of weaving. The printed silks and calicoes of the seventeenth and eighteenth centuries deservedly held a high place in the estimation of Western nations, whose craftsmen learnt many valuable lessons from the technical skill, and artistic taste they display. In embroidery and fine needlework the West and the Far East have more than held their own, while nothing approaching the tapestries made in Europe in the middle ages has been produced in India. The nearest approach to these is in carpets and rugs. This art was introduced from Persia; but Indian craftsmen have never succeeded in equalling the finest work of their instructors either in colour or design.

Modern Conditions.—In the foregoing sketch of the ancient industrial art of India, as applied to the four principal materials employed, only a general indication of its more striking characteristics has been possible. A volume would be required to give a detailed description of any one of them, and would leave many other minor arts to be considered. All these branches of art came into existence, were developed and flourished in India when social and economic conditions were vastly different from those of the present day. Like similar artistic crafts carried on in Europe up to the end of the eighteenth century, they were executed by hand labour. The processes involved had not been discovered by scientific inquiry, such as is now understood by the phrase, but were the outcome of generations of slowly built up experience. We now come to the effect upon them of the changed conditions which have revolutionised industrial art in Europe during the last century.

The invention of the steam engine, and the application of mechanical power and scientific research to industry in Europe, mark the dividing line between ancient and modern industrial art. Not only on its technical side is this so, but the effect of these changes has been to alter the character of the work itself and the spirit which animated the craftsmen. In place of the ancient ideal of variety in design and treatment, which meant a limited output, the modern one of uniformity and unlimited output has been substituted. The capitalist has displaced the master craftsman; the organised factory, the small workshop; specialisation and division of labour have taken the place of general proficiency among the artisans; the function of the designer has been separated from that of the craftsman; local markets have been extended to serve the whole world; and the skilled handicraftsman has, in a great measure, become a machine-minder. It took about one hundred years of gradual change for the craftsmen of Europe fully to adjust themselves to these altered conditions; and during the greater portion of that period India protected by the difficulties of transport, continued its immemorial practice. Fifty years ago this protective barrier was removed by the opening of the Suez Canal, and the handicraftsmen of India have since been struggling to avoid the same fate which overtook those of Europe half a century before. With less time to adapt themselves to the changed conditions the Indian craftsmen have had to meet the competition of European rivals already fully equipped with new and unknown weapons. Even before this period of intense competition, observers interested in Indian craftwork had noticed evidences of its deterioration. The falling off, both in design and workmanship, was attributed to the conservative practice of the craftsmen; to the gradual loss of foreign markets, and to the long period of internal disorder which had deprived them of both the patronage of the rulers of an earlier age and the stimulating contact with foreign craftsmen who had previously been attracted to the splendid courts at Delhi and Agra. During the same period, an even greater degradation in design had overtaken the craftwork of Europe. This was due to entirely different causes, namely, to the introduction of machinery. Attention had been so concentrated upon speedy production, mechanical accuracy and commercial organisation that beauty of design had been almost entirely neglected. This was so forcibly demonstrated at the International Exhibition of 1851 that efforts were at once made to bring art and industry together once more. Schools of Art and Museums were founded throughout England and the same system was copied in a tentative and timid fashion in India. The function of these institutions was accurately estimated in England, where the artistic industries were already highly organised and were commercially successful, and whose products were to be found in every market of the world. Their business was to assist these industries by training a body of efficient designers capable of furnishing the factories with suitable designs, new or old, and in any style, to satisfy the requirements of customers in any country. It was never supposed for an instant that a School of Art could lead an industry. In India their function was as completely misunderstood as were the causes of the depression in Indian craftwork. The schools were not only expected to lead the industries which were living, but to revive those which were moribund, and resurrect those which were dead. Archæologists ignoring the economic factor vainly conceived and propounded the idea that the salvation of the industrial arts was to be found in strict adherence to ancient methods of work and a repetition of the old patterns at a time when the home markets of the craftsmen were swamped with cheap machine-made goods printed in the old pattern which had been copied and adopted by European designers. In India, the cart was put before the horse, and, instead of first reorganising the artistic crafts, and placing them on a commercial basis that would have afforded them a decent chance of meeting Western competition, and then instituting art and craft schools in every industrial centre to assist them, an entirely inadequate number of art schools was founded and the crafts were left to shift for themselves. The Japanese have demonstrated the possibility of transforming a nation of

individual artistic craftsmen into one of co-operative industrial craftsmen; and however much one may regret the necessity, the only road to the economic revival of craftwork in India is that which has already been taken by Western nations and Japan. That work of the same quality, or even of a similar character to that which was done in the past, will be produced under the new system cannot be expected. Both in Europe and Japan the change has been followed by deterioration in design, and India cannot hope to escape where others have suffered. But the artistic instinct and a love of beautiful things are widespread and firmly rooted in the Indian character. The craftsmen possess powers of invention in design equal to that of any other people, but these have been suppressed for a century by the depressing conditions with which they have had to contend. If the artistic industries can be established upon a basis in conformity with, and not in antagonism to, modern economic conditions, the artistic instinct and technical skill of Indian craftsmen will revive and India will regain the honourable place she once held in the world of art. In the report of the Indian Industrial Commission the need for some State-aided system of industrial and commercial organisation of the industrial arts with an expanded scheme of technical and artistic instruction for the craftsmen has been recognised; and valuable suggestions were made by experts who gave their evidence when the Commission visited the different Provinces. The success of the scheme recommended by the Commission will depend entirely upon the energy with which it is applied, and the practical knowledge and the assistance required by each of the different crafts on the part of those who control it. If, in addition, the same financial assistance and encouragement are given by the Imperial and Local Governments to the Indian craftsmen that have been bestowed by their own Government upon the art workers of Japan, industrial art in India will quickly emerge from the cloud of depression, which has hung over it for a century past, into the sunlight of prosperity.

The Fisheries of India.

The fisheries of India, potentially rich, as yet yield a mere fraction of what they could were they exploited in a fashion comparable with those of Europe, North America or Japan. The fishing industry, particularly the marine section, has certainly expanded considerably within the last 50 years concurrently with improvement in the methods of transport and increase in demand for fish, cured as well as fresh, from the growing populations of the great cities within reach of the seaboard. The caste system, however, exerts a blighting influence on progress; fishing and the fish trade are universally relegated to low caste men who alike from their want of education, the isolation caused by their work and caste, and their extreme conservatism, are among the most ignorant, suspicious and prejudiced of the population, extremely averse from amending the methods of their forefathers and almost universally without the financial resources requisite to the adoption of new methods, even when convinced of their value. Higher caste capitalists have hitherto fought shy of association with the low caste fishermen, and, except in the case of joint stock companies to engage in large operations on new lines, these capitalists cannot be counted upon to assist in the development of Indian fisheries. As in Japan, it appears that the general conditions of the industry are such that the initiative must necessarily be taken by Government in the uplift and education of the fishing community and in the introduction and testing of new and improved apparatus and methods.

The first local Government to lead the way was that of Madras, which in 1905 initiated an investigation of the industry, both marine and fresh-water, appointing Sir F. A. Nicholson to supervise operations. Bengal followed suit in 1906, and from these beginnings have sprung the local Fisheries Departments of Madras, Bengal, and Behar and Orissa. Bombay, the remaining seaboard province, has comparatively small fresh-water interests compared with Madras and Bengal, and as it happens that her marine fisheries are favoured with good harbours and the most enterprising race of sea-fishermen in India, there was less urgent need for State help in the industry. Hence fisheries there are only now becoming the subject of Government solicitude, their care being apportioned to the newly created Department of Industries.

Madras.

The Madras coast line of 1,750 miles is marginced by a shallow-water area within the 100 fathom line of 40,000 square miles; outside of a mere fringe inshore, this vast expanse of fishable water lies idle and unproductive. The surf-swept East coast is singularly deficient in harbours whereon fishing fleets can be based, and so from Ganjam to Negapatam, the unsinkable catamaran, composed of logs tied side by side, is the only possible sea-going fishing craft. Its limitations circumscribe the fishing power of its owners and consequently these men are poor, and the produce of their best efforts meagre compared with what it would be if better and larger boats were available and possible. The West coast is more favoured. From September till April, weather conditions are good enough to permit even dugout canoes to fish daily. The people of this coast are fond of fish and, as no difficulty is found in beaching canoes and boats throughout this season, the fishing population is a large one. The 1911 Census gave 75,013 adults as subsisting on fishing industries in Malabar and S. Kanara, a small number after all, considering the immense wealth of these seas. The chief fishes are sardines, mackerel, catfishes and jewfishes (*kora* or *gol*); the two first overshadow all others. So greatly in excess of food requirements are the catches of sardines that every year large quantities are turned into oil and manure. Fishing outside the 5-fathom line is little in evidence, save by Bombay boats (Ratnagiri) which are engaged in drift netting for bonito, seer and other medium-sized fishes. These strangers are enterprising fishers and bring large catches into Malpe and Mangalore and other convenient centres; the material is largely cured for export.

Fish-curing is practised extensively everywhere on the Madras coasts; its present success is due primarily to Dr. Francis Day who, after an investigation during 1869-71 of the fisheries of the whole of India, pressed for the grant to fishermen of duty-free salt for curing purposes within fenced enclosures. He advocated much else, but the time was not ripe and the salt concession was the sole tangible result of his long and honourable efforts. His salt suggestions were accepted by the Madras Government, and from 1882 a gradually increasing number of yards or bonded enclosures were opened at which salt is issued free of duty and often at rates below the local cost of the salt to Government. At present about 140 of such yards are scattered along the coast and over 50,000 tons of wet fish are annually cured therein.

The **pearl** and **chank** fisheries in Palk Bay and the Gulf of Mannar are Government monopolies. The former are now of little value and no remedial measures seem possible; the latter have been brought to a high state of efficiency and bring in substantial returns; the net profit for 1920-21 was Rs. 37,196. Chanks or conches (*Turbinella pirum*) are handsome porcelain—white shells of great thickness and considerable size, much in demand in Bengal, particularly Dacca, where the industry centres, for manufacture into bangles.

The **inland fisheries** of Madras compare unfavourably with those of Bengal. Many of the rivers dry up in the hot season and few of the many thousands of irrigation tanks throughout the province hold water for more than 6 to 9 months. As a consequence inland fisheries are badly organized and few men devote themselves to fishing as their sole, or even main, occupation. The custom is to neglect or ignore the fishery value of these streams and tanks so long as they are full of water; only when the streams shrink to pools and the tanks to puddles do the owners or lessees of the fishing rights turn out to catch fish. The result is a dearth of fish throughout the greater part of the year,

a glut for a few days, and often much waste in consequence. The chief fresh-water fishes of economic importance are the murrel, notable for its virtue of living for considerable period out of water, various carps, and catfishes, the hilsa (in East Coast rivers only), and the catla. In the Nilgiris, the Rainbow trout has been acclimatised and thrives well. The Government working in conjunction with the Nilgiri Game Association maintain a hatchery at Avalanche, where quantities of fry are hatched and reared for the replenishment of the streams of the plateau.

The Madras Department of Fisheries.—As Government attention has been given in Madras over a longer period to the improvement of fisheries, and a larger staff concentrated upon the problems involved than elsewhere, this Presidency has now the proud position of knowing that her fisheries and collateral industries are better organized and more progressive than those in other provinces. The credit for the wonderful success which has been achieved and the still greater promise of the future, is due in large measure to the wise and cautious plans of Sir F. Nicholson, who from 1905 to 1918 had the guidance of affairs entrusted to him. In 1905 he was appointed on special duty to investigate existing conditions and future potentialities : in 1907, a permanent status was given by the creation of a Fisheries Bureau, and this in turn has developed into a separate Department of Government, now administered by Mr. James Hornell, F.L.S., as Director. The higher staff consists of a Marine Biologist, three Assistant Directors and a Cannery Manager. The first is charged primarily with the investigation of the life-histories of the principal food-fishes of the coast ; the others have charge respectively of (*a*) the departmental fisheries (pearling; chanks beche-de-mer, etc.) and with experiments in the developments of inshore and deep-sea fishing methods ; (*b*) the co-operative and socio-economic side of the Department's operations; (*c*) inland pisciculture, and (*d*) the experimental and demonstrational fish cannery at Chaliyam in South Malabar. Other officers have charge respectively of sections dealing with education and industrial work, which include a Training Institute for village teachers, fish-curing yards, and oil and guano factories.

The public fish-curing yards now under the control of the Salt and Abkari Department will eventually pass into the charge of the Fisheries Department : at present as a trial measure, 6 yards have been transferred and are now being operated directly under the latter Department, with a view to the introduction of better methods, and improved hygiene. Other newly opened yards are also being administered on model lines by the Department. Its activities are so varied and far reaching that it is difficult even to enumerate them in the space available, much less to give details. So far its most notable industrial successes have been the reform of manufacturing processes in the fish-oil trade, the creation of a fish-guano industry, the establishment of a fish cannery and the development of canned goods other than sardines, which alone had been canned previously in Malabar, and the opening of an oyster farm conducted under hygienic conditions. (For details see the Bulletins of the Department, issued from the Government Press, Madras ; twelve volumes have been issued to date). All this work has been carried on under serious handicap for want of suitable accommodation for the research staff ; prior to the war proposals were elaborated for headquarters buildings in Madras comprising laboratories, experimental hatcheries, and a large public aquarium ; postponed owing to war conditions these are again under discussion. In Madras the Department controls a small public aquarium, deservedly popular as the first and only one on the Asiatic mainland.

Fishing rights in the large irrigation tanks were transferred from Government to local authorities many years ago ; these tanks are now being reacquired by Government in order that they may be restocked periodically by the Department : the results so far have shown a profit on the operations. To breed the necessary fry, three fish farms are in operation, and the construction of three more is in progress. In these the chief fish bred are the Gourami, obtained from Java, the Murrel and *Etroplus suratensis*, which has the excellent attribute of thriving and breeding as well in brackish as in fresh water; all three protect their eggs while developing a useful habit ; both the *Gourami* and *Etroplus* are largely vegetarian in diet. A further activity is represented by the breeding of small fishes specially addicted to feed upon the aquatic larvæ of mosquitoes. These are supplied in thousands to municipalities and other local authorities at a nominal price, for introduction into mosquito-haunted sheets of water; these anti-malarial operations have proved most successful in those places where the local authorities have given proper attention to the directions given. The educational work of the Department is becoming one of its most important branches whether it being specially training teachers for schools in fishing villages, in training men in the technology of curing, canning, and oil manufacture : in co-operative propaganda and in the supply of zoological specimens for the use of college classes and museums. The last named has filled a long-felt want and is contributing materially to the advancement of the study of zoology throughout India ; there is now no need to obtain specimens from Europe.

The development of deep-sea fishing is engaging the attention of Government ; splendid trawl grounds are indicated off Cape Comorin extending over an area of some 4,000 square miles ; other promising areas are known elsewhere, but so far the limiting factors are the lack of cold storage accommodation at any port in the Presidency, and the want of a deep-water harbour in the south, where steam-trawlers can discharge direct into store.

Welfare Work.—A remarkable feature in the work of the Madras Fisheries Department is the energy which it devotes to the improvement of the condition of the fisherfolk. On Sir Frederick Nicholson's initiative the department has always recognized the duty of spreading among them education and the habits of thrift, temperance and co-operation. The work has been specially successful on the west coast. The number of fishermen's co-operative societies last year had risen to 65. The paid-up-capital of these societies amounted to over three-quarters

of a lakh of rupees; over 2 lakhs were disbursed by them in loans. These societies it is reported worked satisfactorily, allowance being made for the inexperience and illiteracy of the members. But the formation and working of co-operative societies are not the only social activity among these fishermen. There is a vigorous temperance society at Mangalore. The Collector of South Kanara has granted sites for the construction of village halls for the fishermen in two villages and the fishermen have themselves collected Rs. 3,000 for the building. In another village, Kizhur, the fishermen have already completed a building in which they hold meetings while an elementary school carries on its work in the same building. In Madras itself at Nadukuppam a temperance organisation has got to work with the assistance of the Fisheries Department. To promote the education of fishermen a training institution was opened in the middle of 1918 at Calicut to train teachers to work in elementary schools for the fisherfolk. The pupil teachers under training are familiarized with the work carried on in the fishery stations at Tanur and Chaliyam. They are given practical instructions in fishing, a boat having been purchased for the purpose. By the end of 1920 29 schools for the fisherfolk were being maintained by the department on the west coast with a total of 1,400 pupils. Nine of these were new schools started during the year by the department. In some places the villagers themselves started the schools and then handed them over to the department. In other places schools were opened by the department at the request of the fishermen. Local men are appointed as honorary managers of schools.

Bengal & Bihar & Orissa.

The fishing value of this extensive deltaic region lies primarily in the enormous area occupied by inland waters—rivers, creeks, jheels, and swamps, to say nothing of paddy fields and tanks. These swarm with fish and, as the Hindu population are free to a large extent from the aversion to a fish-diet which is widely prevalent among the better castes in the south, the demand for fish is enormous. Rice and fish are indeed the principal mainstays of the population and not less than 80 per cent. of the people consume fish as a regular item of diet. It is calculated that 1·6 per cent. of the population is engaged in fishing and its connected trades, a percentage that rises to 2·6 in the Presidency, Raj Shahi, and Dacca Divisions. 644,000 persons in Bengal subsist by fishing with 324,000 maintained by the sale of fish, and this in spite of the fact that fishing is not considered an honourable profession. As a fresh-water fisherman the Bengali is most ingenious, his traps and other devices exceedingly clever and effective—in many cases too effective—so eager is he for immediate profit, however meagre this may be. The greatest inland fishery is that of the hilsa (*Clupea ilisha*) which annually migrates from the sea in innumerable multitudes to seek spawning grounds far up the branches of the Ganges and the other great rivers. Other valued and abundant fishes are the rohu (*Labeo rohita*) and the katla (*Catla catla*); prawns abound everywhere. Of important fishes taken in the lower reaches of the rivers and in the great network of creeks spread throughout the Sunderbans, the bekti (*Lates calcarifer*) and the mullets are the most esteemed; apart from these estuarine fish the most valuable sea-fishes are the mango-fishes (*Polynemus,*) pomfrets and soles. The Sea-fisheries are as yet little exploited, the fishermen of Orissa, where alone coastal fishing is of any local importance, having no sea-craft save catamarans of inferior design and construction.

Following the inquiry begun in 1906 by Sir K. G. Gupta, an investigation of the steam trawl potentialities of the head of the Bay of Bengal was undertaken, the trawler *Golden Crown* being employed for the purpose. The results showed that there are extensive areas suitable for trawling and capable of yielding large quantities of high class fish. Much attention was devoted during these trawl cruises to the acquisition of increased knowledge of the marine fauna, the results being published in the Records and Memoirs of the Indian Museum. For various reasons, the chief perhaps being the hostility of vested interests, the lack of cold storage facilities and the loss of time involved by the trawler having to bring her catches to Calcutta instead of sending them by a swift tender, the experiment was financially a failure and was dropped. With ever-increasing demand for fish in Calcutta and the concurrent rise in prices, the prospects of remunerative steam-trawling are now much more promising and there seems a prospect of one or more steam trawling companies being floated in the immediate future. The trade is a difficult one to organize and without a rare combination of technical fishery knowledge and far sighted and comprehensive organization the danger run by the investing public will be considerable. Originally one Fisheries Department served the needs of the two provinces of Bengal and Bihar and Orissa. Separation was effected recently and at the present time fisheries in Bengal are administered temporarily by the Department of Agriculture, whereas in Bihar and Orissa, they form a section of the Department of Industries.

The Bengal Fisheries Department has of necessity a more limited scope for its activities than in the case of Madras. Practically no coastal minor industries exist, neither do the natural conditions lead us to suppose that any can be created without extreme difficulty, and in the absence of a great trawl industry which alone might be able to call into existence factories devoted to the utilization of fish byeproducts. Apart from this, much can be done by its officers for the uplift of the general fishing population with a view to free them from the tyranny of the mahajans (fish contractors and middlemen) and enable them to put more capital into their business and to conduct it cooperatively. This is necessarily extremely slow work, but the Department has made a beginning and once a few societies can be made successful, the news of the benefits conferred on the members will constitute the best possible form of propaganda. With the advent of the Reforms, fresh life has been infused into the Department and proposals are under consideration for a thorough-going reorganisation, having for its main object an intensive development of the great potentialities of the inland and estuarine

fisheries, which constitute the true fishery wealth of Bengal. Among these are included the establishment of a biological station where the life-histories of food fishes will be studied, the introduction of improved fishing methods and of new species of fish superior to the indigenous under certain conditions, the erection of an experimental cannery, etc.

Fresh-water murrels are used extensively at Dacca in the manufacture of cheap pearl buttons. The Dacca bangle factories carry on an important local industry of very ancient standing; their material is almost entirely obtained from the South Indian and Ceylon chank fisheries already alluded to.

Bombay.

Whereas Bengal's fisheries are at present confined principally to inland waters, those of Bombay are concerned, save in Sind, almost entirely with the exploitation of the wealth of the sea. Bombay is favoured with a coast line abounding with excellent harbours for fishing craft, a fair-weather season lasting for some seven months, and a fishing population more alive to their opportunities and more daring than those of the sister Presidencies. Bombay sea-fisheries are of very great importance financially as well as economically and, though there is less necessity for a special department to develop marine industries, there is ample scope for most useful work in improving curing methods, in introducing canning, and in the development of minor marine industries particularly those connected with the utilization of bye-products. With this end in view the recent Director of Industries obtained sanction to include 'Fisheries' within his purview, and there are now two officers in the Department engaged upon fishery investigation and development. A steam trawler was bought for work in Bombay waters in 1920 and began work in May 1921 off Bombay. The experiment continued until March, 1922, and the trawler was subsequently sold to the Government of Burma. At the outset the results seemed promising, but the experiment as a whole showed that the cost of maintaining a trawler of the type used could not be met by sales of fish at current market rates. A beginning has been made in Bombay to instal cold storage, but for a trawler special facilities are needed also for rapid coaling, supplying ice and stores, and for unloading catches. More than this a change is needed in the mediæval conditions under which the local fish market is conducted and there is much to be done in popularising little known species of edible fish, such as karel, palu, tambusa, and particularly the ray or skate which formed on the average 25 per cent. of the total catch but which is so little esteemed locally that it sold on the average at the rate of 100 lbs. for a rupee.

The more important sea-fish are pomfrets soles and sea-perches among which are included the valuable Jew-fishes (*Sciæna* spp.) often attaining a very large size and notable as the chief source of "fish-maws" or "sounds," largely exported from Bombay for eventual manufacture into isinglass The finest of Bombay fishing boats hail from the coast between Bassein and Surat. These boats are beautifully constructed, attain a considerable size, and are capable of keeping the sea for weeks together. In the season they fish principally off the Kutch and Kathiawar coasts and in the mouth of the Gulf of Cambay. Their main method of fishing is by means of huge anchored stow nets, which are left down for several hours and hauled at the turn of the tide. The chief catches are bombil (Bombay ducks), pomfrets and jew-fishes. The first named are dried in the sun after being strung through the mouth upon lines stretched between upright posts. South of Bombay the fishermen of Ratnagiri and Rajpur make use of another and lighter class of fishing boat, specially designed for use in drift-net fishing. Fine hauls of bonito seer (a large form of mackerel) and allied fishes are often made during the season from September to January and later of shark and rayfish. For the latter specially large and powerful nets are employed. For part of the fair season, when fishing is not usually remunerative, many of the larger Bombay fishing boats are employed as small coasters, a fact which shows how large they run in size.

In **Sind** considerable sea-fishing is carried on in the neighbourhood of Karachi chiefly for large and coarse fish, as shark, rays and jew-fishes. The edible oyster trade of Karachi was once extensive, the creeks of the Indus producing a species of oyster superior to that found in Bombay and Madras backwaters and estuaries. Unrestricted exploitation of beds of limited extent inflicted great harm, and now, when various salutary restrictions are imposed, the beds are slow to respond. Occasionally large deposits of the window pane oyster (*Placuna placenta*) are found in the Indus creeks and as these produce seed pearls in abundance, Government leased the beds to the highest bidder. The pearls are largely exported to China for use in medicine. Considerable fisheries exist in the River Indus, chiefly for the fish known as palla, which are annually leased out by Government for about Rs. 20,000.

In the Gulf of Kutch two pearl fisheries exist, one for the true pearl oyster, the other for the window-pane oyster. The former is carried on by His Highness the Maharaja of Jamnagar, the other partly by this Prince and partly by the administration of His Highness the Maharaja Gaekwar of Baroda. The latter industry owes its local existence to the enterprise of the Baroda Government which in 1905 obtained the services on deputation of Mr. J. Hornell, now Director of Fisheries in Madras, for the purpose of examining the Marine potentialities of the Baroda territory in Kathiawar. One of the consequences was the discovery of large deposits of pearl-bearing window-pane oysters, until then unknown; of late years these beds have produced annually from Rs. 15,000 to Rs. 25,000 in revenue, perhaps the best example we have in India of the profitable nature of well-directed scientific enquiry into fishery problems. The Baroda Government, continuing their enlightened interest in the fishery developments, have had two officers trained in the Madras Fisheries Department and now employ them in development work on the Baroda coast.

Experiments in canning are now in progress at one of the chief fishing centres on the Southern Kathiawar coast and already promise considerable success particularly with regard to pomfrets.

Burma.

As with Bengal, the main fisheries of Burma are those in inland waters. From time immemorial the exclusive right of fishing in certain classes of inland waters has belonged to the Government, and this right has been perpetuated in various fishery enactments, the latest of which is the Burma Fisheries Act of 1905. Fishing is also carried on along the coast, but the sea fisheries absorb but a small portion of industry. Most of the fishermen labour in the stream and pools, which abound particularly in the Delta Districts. The right to work these fisheries, mentioned in the enactments alluded to above, is usually sold at auction, and productive inland waters of this kind often fetch very considerable sums. River fishing is largely carried on by means of nets, and generally yields revenue in the shape of licence fees for each net or other fishing implement used. Here and there along the coast are turtle banks which yield a profit to Government. In the extreme south the waters of the Mergui Archipelago afford a rich harvest of fish and prawns, mother-of-pearl shells and their substitutes, green snails and trochas, shark-fins, fish-maws, and beche-de-mer. Pearling with diving apparatus was introduced by Australians with Filipino and Japanese divers in 1893. They worked mainly for the shell, it being impossible for them to keep an effective check on the divers as regards the pearls. After about five years, when the yield of shell had decreased, they all left. The industry was then carried on by the Burmese.

In 1918, the Burma Government deputed one of their civilians to study the methods of fishery development found successful in Madras. His report and recommendations are now before Government. From what is known of fishery conditions in Burma, the coastal fisheries appear more backward and undeveloped than anywhere else in India. This is due partly to the fact that the Burman is a poor sailor, and partly to the ease with which the population can earn a fair living by agriculture and other less hazardous and more profitable callings. The stress of population has not yet been felt in Burma. In 1922 the Government of Burma purchased from the Government of Bombay the steam trawler with which experiments (*vide* details of the Bombay fisheries) had been carried on off Bombay and Karachi.

The Punjab.

A Punjab Fisheries Department came into being as an experimental measure in 1912 and received the official sanction of Government as a regular department of the Punjab in April 1916. It operates under a Warden of Fisheries, under control of the Financial Commissioner. During the first three years the Department was almost entirely concerned with preliminary work, consisting largely of investigations and experiments in the Beas and Ravi Rivers.

These rivers were examined with a view to ascertain the indigenous species which inhabited them, their habits, spawning grounds and other data which would enable Government to frame regulations for their protection. The various fishing communities were interviewed and their views and statements carefully considered as to their rights in Government waters. Rules based upon the evidence when collated were subsequently drafted and approved by Government for the regulation of fishing in various districts, and are said to be working smoothly and satisfactorily. Those for each district take account of special local conditions, with a view both to conserve the fish supply and to secure a reasonable revenue to Government.

Trout culture flourishes in the hill streams, good sport being enjoyed by anglers in the Kulu Valley where operations were first initiated. The Kangra streams are now receiving attention, various consignments of ova having been sent there, successfully hatched out, and turned into suitable waters.

Travancore.

This State has affiliated Fisheries to the Department of Agriculture and with the help of two officers trained in Madras, the Department has already accomplished a notable amount of development work. Special attention has been given to the regulation of fisheries in backwaters to the establishment of co-operative societies among the fishing community and to the introduction of improved methods of sardine oil and guano production. Useful work has been done by one of the officers in elucidating the life-histories of the more valuable food fishes and prawns.

Coinage, Weights and Measures.

As the currency of India is based upon the rupee, statements with regard to money are generally expressed in rupees, nor has it been found possible in all cases to add a conversion into sterling. Down to about 1873 the gold value of the rupee (containing 165 grains of pure silver) was approximately equal to 2s., or one-tenth of a £, and for that period it is easy to convert rupees into sterling by striking off the final cipher (Rs. 1,000=£100). But after 1873, owing to the depreciation of silver as compared with gold throughout the world, there came a serious and progressive fall in the exchange, until at one time the gold value of the rupee dropped as low as 1s. In order to provide a remedy for the heavy loss caused to the Government of India in respect of its gold payments to be made in England, and also to relieve foreign trade and finance from the inconvenience due to constant and unforeseen fluctuations in exchange, it was resolved in 1893 to close the mints to the free coinage of silver, and thus force up the value of the rupee by restricting the circulation. The intention was to raise the exchange value of the rupee to 1s. 4d., and then introduce a gold standard at the rate of Rs. 15=£1. From 1899 onwards the value of the rupee has been maintained, with insignificant fluctuations, at the proposed rate of 1s. 4d., and consequently since that date three rupees have been equivalent to two rupees before 1873. For the intermediate period, between 1873 and 1899, it is manifestly impossible to adopt any fixed sterling value for a constantly changing rupee. But since 1899, if it is desired to convert rupees into sterling, not only must the final cipher be struck off (as before 1873), but also one-third must be subtracted from the result. Thus Rs. 1,000=£100−⅓=(about) £67.

Notation.—Another matter in connection with the expression of money statements in terms of rupees requires to be explained. The method of numerical notation in India differs from that which prevails throughout Europe. Large numbers are not punctuated in hundreds of thousands and millions, but in lakhs and crores. A **lakh** is one hundred thousand (written out as 1,00,000), and a **crore** is one hundred lakhs or ten millions (written out as 1,00,00,000). Consequently, according to the exchange value of the rupee, a lakh of rupees (Rs. 1,00,000) may be read as the equivalent of £10,000 before 1873, and as the equivalent of (about) £6,667 after 1899, while a crore of rupees (Rs. 1,00,00,000) may similarly be read as the equivalent of £1,000,000 before 1873, and as the equivalent of (about) £666,667 after 1899.

Coinage.—Finally, it should be mentioned that the rupee is divided into 16 annas, a fraction commonly used for many purposes by both Indians and Europeans. The anna was formerly reckoned as 1½d., it may now be considered as exactly corresponding to 1d. The anna is again sub-divided into 12 pies.

Weights.—The various systems of weights used in India combine uniformity of scale with immense variations in the weight of units. The scale used generally throughout Northern India, and less commonly in Madras and Bombay, may be thus expressed one maund=40 seers, one seer=16 chittaks or 80 tolas. The actual weight of a seer varies greatly from district to district, and even from village to village, but in the standard system the tola is 180 grains Troy (the exact weight of the rupee), and the seer thus weighs 2·057 lb., and the maund 82·28 lb. The standard is used in official reports.

Retail.—For calculating retail prices, the universal custom in India is to express them in terms of seers to the rupee. Thus, when prices change what varies is not the amount of money to be paid for the same quantity, but the quantity to be obtained for the same amount of money. In other words, prices in India are quantity prices, not money prices. When the figure of quantity goes up, this of course means that the price has gone down, which is at first sight perplexing to an English reader. It may, however, be mentioned that quantity prices are not altogether unknown in England, especially at small shops, where pennyworths of many groceries can be bought. Eggs, likewise, are commonly sold at a varying number for the shilling. If it be desired to convert quantity prices from Indian into English denominations without having recourse to money prices (which would often be misleading), the following scale may be adopted—based upon the assumption that a seer is exactly 2 lb., and that the value of the rupee remains constant at 1s. 4d., 1 seer per rupee=(about) 3 lb. for 2s., 2 seers per rupee=(about) 6 lb. for 2s., and so on

The name of the unit for square measurement in India generally is the *bigha*, which varies greatly in different parts of the country. But areas have been expressed in this work either in square miles or in acres.

Proposed reforms.—Indian weights and measures have never been settled upon an organised basis suitable for commerce and trade characteristic of the modern age. They vary from town to town and village to village in a way that could only work satisfactorily so long as the dealings of towns and villages were self-contained and before roads and railways opened up trade between one and the other. It is pointed out that in England a hogshead of wine contains 63 gallons and a hogshead of beer only 54 gallons; that a bushel of corn weighs 46 lbs. in Sunderland and 240 lbs. in Cornwall; that the English stone weight represents 14 lbs. in popular estimation, but only 5 lbs., if we are weighing glass, and eight for meat, but 6 lbs. for cheese. Similar instances are multiplied in India by at least as many times as India is bigger than England. If we take, for instance, the maund denomination of weight common all over India, we shall find that in a given city there are nearly as many maunds as there are articles to weigh. If we consider the maund as between district and district the state of affairs is worse. Thus in the United Provinces alone, the maund of sugar weighs 48½ seers in Cawnpore, 40 in Muttra, 72½ in Gorakhpur, 40 in Agra, 50 in Moradabad, 43½ in Saharanpur, 50 in Bareilly, 46 in Fyzabad, 48½ in Shahjehanpur, 51 in Goshanguage. The maund

varies throughout all India from the Bengal or railway maund of 82·2/7 lbs. to the Factory maund of 74 lbs. 10 oz. 11 drs., the Bombay maund of 28 lbs., which apparently answers to the Forest Department maund in use at the Fuel Depot, and the Madras maund, which some authorities estimate at 25 lbs. and others at 24 lbs. and so on.

Committees of Inquiry.—These are merely typical instances which are multiplied indefinitely. There are variations of every detail of weights and measures in every part of India. The losses to trade arising from the confusion and the trouble which this state of things causes are heavy. Municipal and commercial bodies are continually returning to the problem with a view to devising a practical scheme of reform. The Supreme and Provincial Governments have made various attempts during 40 years past to solve the problem of universal units of weights and measures and commerce and trade have agitated about the question for the past century. The Indian railways and Government departments adopted a standard tola (180 grains), seer (80 tolas) and maund (40 seers) and it was hoped that this would act as a successful "lead" which would gradually be followed by trade throughout the empire, but the expectation has not been realised.

The Government of India considered the whole question in consultation with the provincial Governments in 1890-1894 and various special steps have at different times been taken in different parts of India. The Government of Bombay appointed a committee in 1911 to make proposals for reform for the Bombay Presidency. Their final report has not been published, but they presented in 1912 an *ad interim* report which has been issued for public discussion. In brief, it points out the practical impossibility of proceeding by compulsory measures affecting the whole of India. The Committee stated that over the greater part of the Bombay Presidency a standard of weights and measures would be heartily welcome by the people. They thought that legislation compulsorily applied over large areas subject to many diverse conditions of trade and social life would not result in bringing about the desired reform so successfully as a "lead" supplied by local legislation based on practical experience. The want of coherence, *savoir faire*, or the means of co-operation among the people at large pointed to this conclusion. The Committee pointed out that a good example of the results that will follow a good lead is apparent in the East Khandesh District of the Presidency, where the District Officer, Mr. Simcox, gradually, during the course of three years, induced the people to adopt throughout the district uniform weights and measures, the unit of weight in this case being a tola of 180 grains. But the committee abstained from recommending that the same weights and measures should be adopted over the whole Presidency, preferring that a new system started in any area should be as nearly as possible similar to the best system already prevailing there.

Proposals from England.—Suggestions have been made by the British Weights and Measures Association and the Decimal Association, respectively, at different times that British weights and measures and the decimal system should be introduced. Both proposals fail to meet the special requirements set forth by the Bombay Committee. Variations of them which have been put forward by different bodies in India in recent years are that the English pound weight and the English hundredweight should be adopted as the unit of weight for all India. The argument in favour of the importation of an outside unit in this manner is that people in India will always associate with a given, familiar denomination of weight or measure the value they have been accustomed to consider in regard to it, but that if a new weight were introduced they would learn to use it in dealing with their neighbours, without the interference of anything resembling prejudice at what they might regard as an attempt to tamper with their old, traditional standards of dealing.

Committee of 1913.—The whole problem was again brought under special consideration by the Government of India in October, 1913, when the following committee was appointed to inquire into the entire subject anew:—

Mr. C. A. Silberrard (*President*).

Mr. A. Y. G. Campbell.

Mr. Rustomji Fardoonji.

This Committee reported, in August, 1915, in favour of a uniform system of weights to be adopted in India based on the 180 grain tola. The report says:—Of all such systems there is no doubt that the most widespread and best known is that known as the Bengal or Indian Railway weights. The introduction of this system involves a more or less considerable change of system in parts of the United Provinces (Gorakhpur, Bareilly and neighbouring areas), practically the whole of Madras, parts of the Punjab (rural portions of Amritsar and neighbouring districts), of Bombay (South Bombay, Bombay city and Gujarat), and the North West Frontier Province. Burma has at present a separate system of its own which the committee think it should be permitted to retain. The systems recommended are:—

FOR INDIA.

8 khaskhas	=	1 chawal
8 chawals	=	1 ratti
8 rattis	=	1 masha
12 mashes or 4 tanks	=	1 tola
5 tolas	=	1 chatak
16 chataks	=	1 seer
40 seers	=	1 maund

FOR BURMA.

2 small ywes	=	1 large ywe
4 large ywes	=	1 pe
2 pes	=	1 mu
5 pes or 2½ mus	=	1 mat
1 mat	=	1 ngamu
2 ngamus	=	1 tikal
100 tikals	=	1 peiktha or viss.

The tola is the tola of 180 grains, equal to the rupee weight. The viss has recently been fixed at 3·60 lbs. or 140 tolas.

Government Action.—The Government of India at first approved the principles of the Report and left the Provincial Governments to take action, but they passed more detailed orders in January, 1922. In these they again, for the present and subject to the restrictions imposed by the Government of India Act and the devolution rules, left it entirely to local Governments to take such action as they think advisable to standardise dry and liquid measures of capacity within their provinces. Similarly, they announced their decision not to adopt all-India standards of length or area.

As regards weights they decided in favour of the standard mentioned under the heading, "Weights", near the commencement of this article, this having been recommended by a majority of the Weights and Measures Committee and having received the unanimous support of the Local Governments. At the same time the Government of India recognised that the question of the introduction of the desired change throughout India presents serious difficulties and for the present they accepted the resolution passed by the Council of State on the 23rd September, asking Government to declare themselves in favour of the ultimate adoption in India excluding Burma of a uniform system of weights based on the scale now in use on the railways—that is the standard already mentioned. They provisionally undertook to assist provincial legislation for standardisation and stated that "if subsequently, opinion develops strongly in favour of the Imperial standardisation of weights, the Government of India will be prepared to undertake such legislation, but at present they consider that any such step would be premature."

PROVING OF WILLS.

In British India if a person has been appointed executor of the will of a deceased person, it is always advisable to prove the will as early as possible. If the will is in a vernacular it has to be officially translated into English. A petition is then prepared praying for the grant of probate of the will. All the property left by the deceased has to be disclosed in a schedule to be annexed to the petition. The values of immoveable properties are usually assessed at 16½ years purchase on the nett Municipal assessment. For estate under Rs. 10,000 the probate duty payable is 2 %; between Rs. 10,000 and Rs. 50,000 the duty payable is 2½%. Over 50,000 rupees the duty payable is 3%. In determining the amount of the value of the estate for the purposes of probate duty the following items are allowed to be deducted :—

1. Debts left by the deceased including mortgage encumbrances.
2. The amount of funeral expenses.
3. Property held by the deceased in trust and not beneficially or with general power to confer a beneficial interest.

The particulars of all these items have to be stated in a separate schedule. It is the practice of the High Court to send a copy of these schedules to the Revenue authorities and if the properties particularly immoveable properties have not been properly valued, the Revenue department require the petition to be amended accordingly. In certain cases the Court then requires citations to be published and served on such persons as the Court thinks are interested in the question of the grant of probate. If no objection is lodged by any person so interested within 14 days after the publication or service of citation and if the will is shown to have been properly executed and the petitioner entitled to probate, probate is ordered to be granted.

Calcutta Improvement Trust.

The Calcutta Improvement Trust was instituted by Government in January, 1912, with a view to making provision for the improvement and expansion of Calcutta by opening up congested areas, laying out or altering streets, providing open spaces for purposes of ventilation or recreation, demolishing or constructing buildings and re-housing the poorer and working classes displaced by the execution of improvement schemes.

The origin of the Calcutta Improvement Trust must, as in the case of the corresponding Bombay body, upon which the Calcutta Trust was to a large extent modelled, be looked for in a medical enquiry which was instituted into the sanitary condition of the town in 1896, owing to the outbreak of plague. It was estimated that the Trust might in the ensuing 30 years have to provide for the housing of 225,000 persons. The population of Calcutta proper, which includes all the most crowded areas, was 649,995 in 1891, and increased to 801,251, or by 25 per cent., by 1901. The corresponding figure according to the 1911 Census was 896,067 and this had increased by 1921 to 993,508.

The problem of expansion was difficult because of the peculiar situation of Calcutta, which is shut in on one side by the Hooghly and on the other by the Salt Lakes.

Preliminary investigations continued for several years, so that it was only in 1910 that legislation was eventually introduced in the provincial legislature and the Trust instituted by it. The Bill provided for a scheme involving the expenditure of Rs. 8,22,00,000, and for special local taxation to this end. It also provided for the appointment of a whole time chairman of the board of trustees and the membership of the Trust was fixed at eleven.

The following formed the Board of Trustees in 1922-23: Mr. T. Emerson, C.I.E., I.C.S., M.L.C., *Chairman*; Mr. S. N. Mallik, M.A., B.L., M.L.C., Officiating Chairman of the Corporation of Calcutta (*ex-officio*); Raja Reshee Case Law, C.I.E., M.L.C., elected by the Corporation of Calcutta; Rai Nalini Nath Sett Bahadur, elected by the Ward Commissioners; Mr. W. H. Phelps, elected by the Commissioners appointed under Section 8 (2) of the Calcutta Municipal Act, 1899; Mr. A. H. Johnstone, B.A., B.E., A.M.I.C.E., elected by the Bengal Chamber of Commerce; Babu Amulyadhon Addy, M.L.C., elected by the Bengal National Chamber of Commerce; Mr. J. H. de C. Ballardie, A.R.I.B.A., Rai Annoda Prosad Sarkar Bahadur and Rai Sahib Ram Deo Chokhany, appointed by the Local Government.

During the 11 years that it has now been at work, the Trust have decided, and partly or entirely carried through, several improvement schemes for opening up congested areas, laying out or widening streets and providing open spaces. It has spent over 6·8 crores of rupees on Capital Account, of which 1·24 crores has gone in Engineering Works and 5·56 crores on Land Acquisition: it has sold land to the value of 2·23 crores.

In Central Calcutta many highly insanitary *bustees* have been done away with and several roads of an improved type laid out, the most important of which is the Central Avenue, 100 ft. wide, which at present extends from Beadon Street to Bow Bazar Street, a distance of 1¼ miles and which will shortly be extended towards the south to link up with Chowringhee, and to Shambazar on the north.

In the north of the City, a park and play ground have been completed and several wide roads driven through that highly congested area. The approaches to the City have also been adequately widened.

The Suburban Areas to the South and South-East of Calcutta required greater attention and extensive development schemes were undertaken. Several open spaces and squares have been made in various parts. Insanitary tanks requiring approximately 2 crores C.ft. of earth have been filled up. Russa Road which forms the southern approach to the town has been widened to 150 ft. for a length of one mile and 100 ft. for a length of another mile. It now gives a most pleasant drive from Chowringhee to Tollygunge. To improve the drainage of this area a 100 ft. wide East to West road, from Ballygunge Railway Station to Chetla Bridge, and for recreation an artificial lake of 167 bighas with adequate grounds are being made.

Lastly, for the housing of the displaced population the Trust has undertaken on a large scale the following schemes:—

In the early stages three blocks of chawls were built in Wards Institution Street for persons of the poorer classes. It was found, however, that the persons displaced preferred to take their compensation and migrate to some place where they could erect *bastis* of their own, the class of structures they were accustomed to live in. These chawls were then filled with persons of limited means, *e.g.*, School Masters, poor Students, Clerks and persons of the artisan class. As many as 1,200 people are housed in these chawls, these buildings, including land, cost Rs. 2,44,368 and are let at at very low rents—ground floor rooms at Rs. 5 per mensem and top floor rooms on Rs. 6 per mensem each room measuring 12'×12' with a 4 ft. verandah in front opening on to a central passage 7 ft. wide.

As these chawls failed to attract the people for whom they were meant, the Board next tried an experiment in providing sites for bustees. Two sites with a lettable area of 16 bighas were acquired within the area of Maniktola Municipality, but they failed to attract because they were out of the way and were expensive. A scheme is now being carried out at Palkpara, in Cossipore-Chitpore Municipality. Here 36 bighas of land have been acquired and are being laid out in building sites for sale to middle class people who will build their own houses. A large park is also under construction in this area.

The Trust has also built a cluster of houses n Kerbala Tank Lane, off Beadon Street, to house temporarily persons whose residences have been acquired, while they are building new houses.

Finally, the Trust has under construction in Bow Street a number of blocks of one, two and three roomed tenements capable of accommodating 500 people. These are intended for Anglo-Indians, who have been displaced in the area to the East of Bentinck Street.

The single roomed tenements are just ready and have been greatly in demand by the people for whom they are intended.

BOMBAY IMPROVEMENT TRUST.

Bombay is an island twelve miles long, but very narrow and containing only 22 square miles altogether, but in the city, occupying little more than half the island, there lives a population enumerated at 11,75,914 at the Census in 1921, and actually totalling at the present time, according to conservative estimates, over a million and a quarter. Bombay is, in point of population, the second city of the British Empire. Seventy-six per cent. of its people live in one-roomed tenements. A terrible visitation of plague in 1896 harshly directed attention to the insanitary conditions arising from overcrowding and as it was recognised that the task of effecting the required improvements was too great for the Municipality, a special body, termed the Trustees for the Improvement of the City of Bombay, was appointed. It consists of 14 members, of whom four are elected by the Municipality and one each by the Chamber of Commerce, the Millowners' Association and the Port Trust, and the balance nominated by Government, or sit *ex-officio* as officers of Government. The Board is presided over by a whole-time chairman (who has hitherto always been either a covenanted civilian or an officer of the Public Works Department) and he is also head of the executive. The present chairman and members of the Trust are as follows :—

Chairman—

Mr. E. G. Turner, I.C.S., J.P.

Ex-officio Trustees—

Major-Genl. J. H. K. Stewart, C.B., D.S.O. Officer Commanding Bombay District.

Mr. J. P. Brander, I.C.S., Collector of Bombay.

Mr. H. B. Clayton, M.A., J.P., Municipal Commissioner for the City of Bombay.

Elected by the Corporation—

Dr. K. E. Dadachanji, J.P.

Mr. V. A. Dabholkar, O.B.E., J. P.

Mr. Naoroji M. Dumasia, J. P.

The Hon. Mr. P. C. Sethna, O.B.E., J.P.

Elected by the Chamber of Commerce—

Mr. Harry T. Gorrie, J.P.

Elected by the Port Trustees—

Mr. P. R. Cadell, C.S.I., C.I.E., I.C.S.

Elected by the Millowners' Association—

Mr. S. D. Saklatvala.

Nominated by Government—

Sir Lawless Hepper, Kt., J.P.

Mr. Mirza Ali Mahomedkhan, M.A., LL.B., J.P.

Dr. S. S. Bottlewala.

The specific duties of the Trust are to construct new and widen old streets, open out crowded localities, reclaim lands from the sea to provide room for expansion, and construct sanitary dwellings for the poor (including the Presidency Police) and also at the cost of employers of labour for the labourers employed.

Bombay city grew on haphazard lines houses being added as population poured in with the growth of trade and without any regard to town planning or the sanitary requirements of a great town. The price of land was always comparatively high, owing to the small area of the island, and while the builder had only one object in view, namely, to collect as many rent paying tenants as possible on the smallest possible piece of land, there were no proper restraints to compel him to observe the most ordinary rules of hygiene. The result was the erection of great houses; sometimes five and six storeys high, constituting mere nests of rooms. There was no adequate restriction as to the height of these chawls, or the provision of surrounding open space, so that the elementary rules as to the admission of light and air went unobserved and the house builder invariably erected a building extending right up to the margins of his site. Consequently, great houses accommodating from a few hundred to as many as four thousand tenants were built with no more than two or three feet between any two of them and with hundreds of rooms having no opening at all into the outer air.

The Trust has practically reconstructed large areas on modern sanitary lines, but the old municipal by-laws having until within the past year remained quite inadequate for the due control of private building operations by the Municipality, the Trust have spent millions sterling of public money in sweeping away abuses, while unscrupulous landlords, still unchecked, added in the same old manner to the insanitary conditions of the place. It is hoped that the amendment of the by-laws, as recently settled, will overcome this evil of bad building.

Certain Government and Municipal lands were vested in the Trust, the usufruct of which it enjoys, and the Trust receives a contribution from municipal revenues amounting to a definite share in the general tax receipts, approximating to 2 per cent. on assessments and subject to no maximum. Works were financed out of 4 per cent. loans, until the war stopped borrowing by the Trust, the loans being guaranteed by the Municipality and Government, and the revenue of the Trust being used to meet interest and sinking fund charges. Short term loans were raised in 1919 and 1920 at 6 per cent. interest and for the last two years loans are borrowed from Government (on which the rate of interest amounts to nearly 7 per cent.).

The salient features of the Trust's programme of 65 schemes as completed or sanctioned up to 1922-23 may be summarised as follows:

The total capital expenditure up to 31st March 1923 was Rs.1,428 lakhs. The margin for expansion is about Rs. 161 lakhs. The total borrowings stand at Rs. 1,265 lakhs, involving interest and sinking fund charges of Rs. 75 lakhs per annum.

Plan of Operations.

The work of the Trust, as epitomised by these figures, can be divided into two parts. The first concerned the immediate alleviation of

the worst burdens of insanitation and the second consisted of opening up new residential a reas. The Trust began by attacking the most insanitary areas, cutting broad roads through them. Meanwhile, large areas of good building land, lying idle for want of development works, were developed and brought on the market, sold at remunerative rates and largely built upon. Instances of this development are the Chaupati and Gamdevi estates, the land overhung by Malabar Hill, between it and the native city. These were cut up with fine new roads and are now nearly covered with modern suburban dwellings. Two of the most insanitary quarters in the midst of the city have been levelled to the ground and rebuilt in accordance with hygienic principles. Sanitary chawls have been built for over 21,000 persons.

The death-rate in the Trust's permanent chawls has always been considerably below the general death-rate in the vicinity. The smallest one room tenement on the Trust Estate is large enough for a family of five.

The second phase of the Trust's work, arising gradually out of the first and advancing along with its later stages, consists of the development of a new suburban area in the north of the Island, beyond the present city, and the construction of great arterial thoroughfares traversing the island from north to south.

During the past few years there has been an important movement towards the establishment of co-partnership housing societies on the Board's Estate. The Board regard the new departure as one deserving every encouragement at their hands, especially in connection with the disposal of land in their suburbs in the north of the island and sites have been given to societies on specially favourable terms, and have granted valuable concessions to the Society which approached them for plots on the latter agreeing to limit their dividends. The Board have prevented, as far as possible, profiteering on their estates, by preventing the transfer of plots before completion of buildings.

But in recent years the Improvement Trust have perpetually been subjected to fierce criticism, based upon the undoubted fact that their operations dishoused population more quickly than they provided new accommodation. This evil has been aggravated by the great influx of new population into the city during the past five or six years. The result has been a gross increase of overcrowding in all kinds of housing accommodation throughout the city and a violent increase in rents. Criticism of the Trust assumed such proportions and received such general support that the abolition of that body and the absorption of its duties by the Municipality was formulated into definite proposals by Government two years ago. The great difficulty of the housing problem, however, meanwhile compelled Government to pass Rent Acts for the protection of tenants and to tackle on a large scale the problem of providing further housing accommodation. It was recognized that vast housebuilding operations must be undertaken and this involved the supervision of the work by a special body. Consequently, the Trust from being moribund has suddenly obtained a new lease of life.

Enormous schemes for the expansion of housing in the city are now passing through the final stages before being put into execution. Government, the Improvement Trust and the great employers of labour will all be concerned in the work and the Improvement Trust have floated a huge new programme, their new schemes sanctioned representing a greater undertaking than all their former schemes put together.

The new schemes of the Trust concern the northern part of Bombay Island, where large opportunities for suburban development offer themselves. At Worli on the north-west of the Island, at Dharavi on the north, and at Sewri and Wadala on the north-east, the Trust have undertaken development schemes involving the acquisition and development of 1,558 acres, or 2·43 square miles, that is, between 1/9th and 1/10th of the whole area of the Bombay Island. A considerable amount of filling of lowlying land is involved and for this purpose material from the hills on the north-east and north-west of the Island will be utilised, the hills being lowered in such a manner as to level them into desirable building sites. Room will be provided for more than a quarter of a million new population, equal to nearly ¼th of the present total population of the city, in the three new estates when they are fully developed and the recoupment which the Trust will derive from the disposal of building sites upon them will repay almost the whole of the enormous capital outlay.

A good commencement has been made of the Worli scheme where several thousands of labourers are now engaged. The Board have resolved to complete all their schemes so far sanctioned, within the next 5 years.

Government have decided to transfer the functions of the Trust to the Municipality and the necessary formalities and legislation to effect the transfer are receiving attention at their hands.

The Indian Ports.

The administration of the affairs of the larger ports (*Calcutta, Bombay, Madras, Karachi, Rangoon and Chittagong*) is vested by law in bodies specially constituted for the purpose. They have wide powers, but their proceedings are subject in a greater degree than those of municipal bodies to the control of Government. Except in Calcutta, the elected members are fewer in number than the nominated members. At all the ports the European members constitute the majority and the Board for Rangoon consists mainly of European members.

The income, expenditure and capital debt, according to the latest figures obtainable from the Department of Statistics (India) of the five principal ports managed by Trusts (Aden is excluded from the tables) are shown in the following table:—

—	Income.	Expenditure.	Capital Debt.
	£	£	£
Calcutta ..	1,270,568	1,227,628	6,852,030
Bombay ..	1,311,202	1,242,194	10,317,716
Karachi ..	371,412	331,318	1,717,408
Madras ..	131,463	131,529	967,510
Rangoon ..	348,481	283,727	1,990,800

In the Department of Statistics, India, the following returns have been compiled, showing the ratios borne by the income and the expenditure of each port to the total income and the total expenditure, respectively, of all the chief Indian ports during the year 1918-19, the latest period for which the compilation is obtainable:—

—	Income per cent.	Expenditure per cent.
Calcutta	36·7	37·8
Bombay	37·8	38·2
Madras	3·8	4·1
Karachi	10·7	10·2
Rangoon	10·0	8·7
Chittagong	1·0	1·0

The latest return of the Department of Statistics shows that in the ten years ending 1918-19, the income and expenditure of each port have increased as shown in the following table. The total income of all the ports has increased in the decade by 91·0 per cent. and the total expenditure by 79·9 per cent.:—

—	Increase per cent.	
	Income.	Expenditure.
Calcutta	61·0	53·5
Bombay	158·7	158·7
Madras	45·7	40·3
Karachi	65·7	70·3
Rangoon	78·3	27·2
Chittagong	280·3	133·2

The war has affected the trade of all the ports in a manner which makes it useless to continue comparisons up to date on the lines of the foregoing figures.

CALCUTTA.

The Commissioners for the Port of Calcutta are as follows:—

Appointed by Government.—
Mr. S. C. Stuart-Williams, M.L.C., Chairman, Mr. T. H. Elderton; Offg., Deputy Chairman

Elected by the Bengal Chamber of Commerce.—Mr. R. O. Law (Messrs. Birkmyre Bros.), Mr. E. J. Oakley (Messrs. Kilburn & Co.), Mr. J. H. Pattinson (Messrs. H. V. Low & Co.), Mr. N. F. Paton (Messrs. Graham & Co.), Mr. J. W. A. Bell, M.L.C. (Messrs. Mackinnon Mackenzie & Co.) and Sir Robert Watson Smyth (Messrs. Turner Morrison & Co.).

Elected by the Calcutta Trades Association.—Mr. W. H. Phelps (William, Heath & Co.).

Elected by the Bengal National Chamber of Commerce.—Babu Woomesh Chandra Banerjee.

Elected by the Municipal Corporation of Calcutta.—Raja Reshee Case Law, C.I.E., M.L.C.

Nominated by Government.—Sir George Godfrey (Agent, Bengal-Nagpur Railway), Mr. G. L. Colvin, C.B., C.M.G., D.S.O. (Agent, East Indian Rly.), Col. H. A. Cameron, C.I.E., R.E. (Agent, Eastern Bengal Rly.), Mr. W. W. Nind (Collector of Customs) and Captain O. Goldsmith, R.I.M.

The principal officers of the Trust are—
Secretary.—Mr. W. J. Good (Offg.).
Traffic Manager.—W. A. Burns.
Chief Accountant.—Mr. N. G. Park, C.A.
Chief Engineer.—Mr. J. McGlashan, M. INST., C.E.

Deputy Conservator.—Commander E. A. Constable, R.N.

Medical Officer.—Lt.-Col. R. P. Wilson, F.R.C.S., I.M.S.

Consulting Engineer and London Agent.—Mr. J. Angus, M. INST., C.E.

The traffic figures and the income of the Trust for the last eight years are as follows:—

Year.	Docks.			Jetties.	Nett tonnage of shipping entering the Port.	Income.
	General Export.	Coal Export.	Imports.	Imports.		
	Tons.	Tons.				Rs.
1913-14 ..	1,231,589	3,017,180	613,876	1,186,797	4,256,987	1,51,28,485
1914-15 ..	920,659	2,633,805	700,133	917,978	3,714,344	1,44,50,349
1915-16 ..	1,054,985	1,610,645	570,997	788,481	2,967,798	1,59,35,456
1916-17 ..	1,185,159	1,994,528	444,210	686,010	2,804,680	1,57,23,432
1917-18 ..	995,112	1,014,993	363,383	633,693	2,094,011	1,58,39,175
1918-19 ..	1,097,562	1,333,285	482,403	575,833	2,292,462	1,90,53,513
1919-20 ..	1,146,479	2,264,976	653,066	713,746	2,941,846	2,23,55,614
1920-21 ..	1,133,719	3,046,400	413,357	685,080	4,017,514	2,66,08,032
1921-22 ..	974,783	1,687,222	697,361	622,411	3,446,021	2,19,17,042
1922-23 ..	1,414,166	1,174,041	804,109	680,053	3,336,722	2,64,75,522

BOMBAY.

The Board of the Trustees of the Port of Bombay is constituted of 21 members as follows:—

Appointed by Government.—Mr. P. R. Cadell, C.S.I., C.I.E., I.C.S. (Chairman), (*on deputation*); W. H. Neilson, O.B.E. (*acting*); Sir Lawless Hepper, Kt., H. B. Clayton, I.C.S., Major-General Sir Henry Freeland, K.C.I.E., C.B., D.S.O., M.V.O., Captain E. J. Headlam, C.M.G., D.S.O., A.D.C., R.I.M., The General Officer Commanding, Bombay District (Major-General H.A.V.C. Cummins, C.M.G.), R. McLean, A. M. Green, I.C.S.

Elected by the Chamber of Commerce.—The Hon'ble Sir Arthur H. Froom, Kt., H. T. Gorrie, F. C. Annesley, N. Birrell, T. E. Cunningham.

Elected by the Indian Merchants' Chamber.—The Hon'ble Sir Purshotamdas Thakurdas, Kt., C.I.E., M.B.E., Devidas Madhowji Thakersey, Lalji Naranji, Chotalal Kilachand, Ishwardas Lakshmidas.

Elected by the Bombay Municipality.—The Hon'ble Mr. Phiroze C. Sethna, O.B.E., Fazul Ibrahim Rahimtulla.

Elected by the Millowners' Association.—N. B. Saklatvala, C.I.E.

The following are the principal officers of the Trust:—

SECRETARY'S DEPARTMENT.

W. R. S. SHARPE, *Secretary.*

CHIEF ACCOUNTANT'S DEPARTMENT.

J. Tyers, J.P., *Chief Accountant*—(On leave).

C. P. Gay, *Acting* ,, ,,

CHIEF ENGINEER'S DEPARTMENT.

W. H. Neilson, O.B.E., M.A., M. INST. C.E., M.I. Mech. E., *Chief Engineer* (*Acting Chairman*).

J. McClure, M. Inst. C.E., *Deputy Chief Engineer.*

DOCKS MANAGER'S DEPARTMENT.

A. E. PINSENT, *Docks Manager* (on leave).

C. N. RICH, B.A., *Acting Dock Manager.*

RAILWAY MANAGER'S DEPARTMENT.

J. R. Reynolds, C.I.E., V.D., *Manager.*

PORT DEPARTMENT.

Capt. G. H. Finnis, O.B.E., R.I.M., *Port Officer.*

Commander H. M. K Molliet, O.B.E., R.I.M., *Assistant Port Officer.*

LAND AND BUNDERS DEPARTMENT.

F. H. Taylor, P.A.S.I., M.R.S.I., *Manager.*

STORES DEPARTMENT.

H. E. Lees, *Controller of Stores.*

MEDICAL DEPARTMENT.

Dr. W. Nunan, B.A., M.D., B.Ch., *Administrative Medical Officer.*

The revenue of the Trust in 1922-23 amounted to Rs. 2,59,62,351. The expenditure amounted to Rs. 2,57,74,652. The net surplus on the year's working was Rs. 2,32,216, which has been transferred to the Revenue Reserve Fund, the balance of which at the close of the year amounted to Rs. 69,89,376. The aggregate capital expenditure during the year was Rs. 1,63,93,169. The total debt of the Trust at the end of the year amounted to Rs. 20,69,66,318.

The trade of the Port of Bombay during the last official year aggregated 332 crores in value.

The following statement shows the number of steam and square-rigged vessels which during recent years have entered the docks or been berthed at the harbour walls and paid dues, excluding those which have remained for unloading and loading in the harbour stream:—

Year.	Number.	Tonnage.
1907-08	1,477	2,678,345
1908-09	1,474	2,633,303
1909-10	1,611	2,747,779
1910-11	1,589	2,866,623
1911-12	1,519	2,767,913
1912-13	1,566	2,926,506
1913-14	1,579	3,135,597
1914-15	1,880	4,417,035
1915-16	1,794	3,939,721
1916-17	2,112	5,031,572
1917-18	2,069	4,746,578
1918-19	2,058	4,526,846
1919-20	2,164	4,874,820
1920-21	2,029	4,589,627
1921-22	2,123	4,895,968
1922-23	1,907	4,429,263

The two dry docks were occupied during the year 1922-23 by 223 vessels, the total tonnage amounting to 738,588 tons which was less than the previous year by 88,060 tons.

KARACHI.

The members of the Board of Trustees of the Port of Karachi are as follows:—

Chairman.—Mr. J. B. S. Thubron, C.I.E. (on leave). Mr. T. S. Downie, O.B.E. (acting).

Appointed by Government.—Mr. H. G. Houghton (Donald Graham & Co.,) (Vice-Chairman, elected by the Board), Mr. H. H. Hood (Chief Collector of Customs in Sind), Mr. F. R. Hawkes, O.B.E. (District Traffic Superintendent, North-Western Railway, Karachi Port), Major G. N. Buckland, D.S.O. (D. A. Q. M. G., Sind Rajputana District), Mr. Gidumal Lekhraj (Representative Indian Merchant) and Khan Bahadur K. H. Katrak (Katrak & Co.).

Elected by the Chamber of Commerce.—Mr. J. R. Baxter (Mackinnon, Mackenzie & Co.), Mr. C. Demetriadi (Ralli Brothers), Mr. F. Clayton, M.L.C. (Fleming Shaw & Co.), (on leave), Mr. B. Frank Jones (Forbes Forbes Campbell & Co.), (acting).

Elected by the Municipality.—Mr. Goolam Husein Kassim, M.L.C.

The Principal Officers of the Trust are:—

Port Officer.—Captain H. M. Salmond, C.I.E., R.I.M. (on leave), Captain N. Woodsmith, R.I.M. (acting).

Secretary and Traffic Manager.—Mr. T. S. Downie, O.B.E. (acting as Chairman).

Supernumerary Appointments—

Secretary.—Mr. L. J. Mascarenhas.

Supernumerary Appointments—contd.

Traffic Manager.—Mr. A. A. L. Flynn.

Chief Accountant.—Mr. B. A. Inglet, B.A., C.A.

Chief Engineer.—Mr. T. H. E. Coad, M. Inst. C.E. (on leave), Mr. H. A. L. French (acting).

Deputy Chief Engineer.—Mr. H. A. L. French (acting Chief Engineer), Mr. J. M. S. Culbertson, A. M. Inst. C.E. (acting).

The Revenue receipts and expenditure of the Port of Karachi for the year 1922-23 were as under:—

Revenue receipts (excluding the Port Fund Account) Rs. 57,38,220. Expenditure Rs.58,05,538. Deficit Rs. 67,318. Reserve Fund Rs. 27,17,633.

The number of vessels which entered the Port during the year 1922-23 exclusive of vessels put back and fishing boats, was 2,869 with a tonnage of 2,212,229 against 2,859 with a tonnage of 2,346,617 in 1921-22. 865 steamers of all kinds entered the Port with a tonnage of 2,097,518 against 906 and 2,226,953 respectively in the previous year. Of the above 760 were of British nationality.

Imports including coal landed at the ship wharves during the year totalled 692,140 tons against 1,113,571 in the previous year. Total shipments from the ship wharves were 800,685 tons in 1922-23 against 434,277 tons in 1921-22.

MADRAS.

The following gentlemen are the Trustees of the Port of Madras:—

Officials.—Mr. Bradford Leslie, O.B.E., M. Inst.C.E., M.I.E.E., Chairman Mr.A.E. Boyd, I.C.S. (Collector of Customs), and Capt. E. W. Huddleston, C.I.E., O.B.E., R.I.M. (Presidency Port Officer).

Non-Officials.—(1) *Nominated by Government.* Brig.-Genl. Sir Charles L. Magniac, C.M.G., C.B.E., R.E., Mr. B. C. Scott, (2) *Representing Chamber of Commerce, Madras*—Mr. K. Kay, Mr. A. J. Leech, Mr. C. E. Wood, Mr. A. C. M. Strouts, (3) *Representing Southern India Chamber of Commerce, Madras.*—M.R.Ry. Divan Bahadur Govindas Chatturbhoojadas Garu, M.L.C., Sir M. Ct. Muthia Chettiar, Kt., M.L.C., (4) *Representing Madras Trades Association.*—Mr. A. M. MacDougall, M.L.C., and Mr. J. M. Smith, (5) *Representing Southern India Skin and Hide Merchants' Association*—M. R. Ry. M. Balasundaram Nayadu Garu. *Representing Madras Piece-goods Merchants) Association*—M. R. Ry. Rao Sahib Batchu Papaiyya Chettiar Garu.

The receipts during the year of the Port Trust on Revenue account from all sources were Rs. 28,04,254 as against 25,43,001 in 1921-22 and the gross expenditure out of revenue was 22,33,568. During the year 632 vessels with an aggregate tonnage of 19,89,179 tons, called at the port against last year's figure of 653 vessels of 1,943,159 tons.

RANGOON.

The personnel of the Commissioners for the Port of Rangoon is comprised of the following thirteen members:—

Appointed by Government.—Messrs. J. A. Cherry, C.I.E. (Chairman), Captain A. St. C. Bowden, R.I.M. (Principal Port Officer), G. S. Hardy, I.C.S. (Chief Collector of Customs, C. Morgan-Webb, C.I.E., M.L.C., I.C.S., (Chairman, Rangoon Development Trust), G. Scott, C.I.E., I.C.S. (Commissioner, Rangoon Corporation), Maung Po Yee, F. L. Bigg-Wither and G. R. Campbell.

Elected by the Burma Chamber of Commerce.—Messrs. J. Hogg, M.L.C., (Vice-Chairman), J. W. Richardson, A. J. Anderson, C.S.I., M.L.C. and W. Archbald.

Elected by the Rangoon Trades Association.—Mr. M. Oppenheimer.

Principal Officers are:—

Secretary.—Mr. H. Leonard.

Chief Accountant.—Mr. D. H. James, A.C.A

Chief Engineer.—Mr. E. C. Niven, M. INST. C.E.

Deputy Conservator.—Mr. H. G. G. Ashton, D.S.O.

Traffic Manager.—Mr. H. Cooper.

Administrative Medical Officer.—Dr. C. G. Crow, K.I.H., I.M.D.

The receipts and expenditure on revenue account of the port of Rangoon in 1922-23 were as follows :—

	Rs.
Receipts	76,94,232
Expenditure	68,67,874

The capital debt of the Port at the end of the year was Rs. 3,48,01,132. Against this should be set the total of the balance (including investments at cost) at the credit of the different sinking funds, namely, Rs. 1,03,90,568.

The total sea-borne trade of Rangoon during the year was 4,306,567 tons of which 1,171,318 tons were imports, 3,128,311 tons exports and 6,938 tons transhipment. The tonnage of goods dealt with at the jetties and foreshore for inland vessels during the year amounted to 757,364 tons. The total number of steamers (excluding Government vessels) entering the Port was 1,393, with a total nett registered tonnage of 3,308,087, being an increase of 55 steamers and 237,410 tons over the previous year.

CHITTAGONG.

Chittagong in Eastern Bengal, lying on the right bank of the river Karnafuli at a distance of 12 miles from the sea was already an important port in the sixteenth century, when the Portuguese gave it the name of Porto Grande.

The construction of the Assam-Bengal Rail way has facilitated the transport of trade with Assam and Eastern Bengal for which the Port of Chittagong is the natural outlet.

The chief exports are tea and jute and im ports, piece-goods, salt, oil and machinery.

FOREIGN TRADE 1922-23. Rs. (in lakhs.)

Imports	..86·86
Exports	..564·06

COASTING TRADE 1922-23. Rs. (in lakhs.)

Imports	..140·95
Exports	..189·66

Port Commissioners.—Mr. A. H. Clayton I.C.S., *Chairman*; Mr. S. C. Ghatak, M.A., M.R.A.S. *Vice-Chairman*; Mr. G. A. Bayley, V.D., Mr. C.P. M. Harrison M. I. C. E.; Mr. P. T. Moore; Mr. A. R Leishman, Mr. H. C. McEWEN, Captain H. W. Fox; Rai Upendralal Roy Bahadur, B.L., M.L.C.

Port Officer and Secretary to the Port Commissioners.—Commander E. C. Withers, C.I.E., R.I.M.

Port Engineer.—Mr. W. P. Shepherd-Barron, A. M. INST. C.E.

Vessels of 25 feet draught can be accommodated during the greater part of the year at four jetties which are fitted with modern equipment and capable of quick despatch.

VIZAGAPATAM HARBOUR PROJECT.

The question of the creation of a harbour at Vizagapatam, to supply an outlet for a large area of fertile country hitherto undeveloped and without suitable access to the outside world, was lately brought to the fore through a report to the Bengal-Nagpur Railway Company by their consulting engineers, Sir John Wolfe Barry, Lyster and partners. This report, which was based on personal inspection, upholds the practicability of creating, at no very extravagant cost, an inland harbour to which access would be maintained by two breakwaters projecting into the sea, and by dredging a channel to the depth (in the first instance) of 24 feet. A deep-water quay would be provided, 1,500 feet in length, with a possibility of supplying further accommodation in the future. The proposals made in this report were carefully gone into at site by representatives both of the Consulting Engineer and of the Bengal Nagpur Railway and working plans have been prepared so that there might be no delay in starting work when funds became available for the purpose.

The question received sympathetic consideration on the part of the Indian Government and the Bengal-Nagpur Railway will probably be given powers to raise capital for the construction and working of the port as part of their railway system. That the creation of such a port would have a beneficial influence on the development of a large area in East Central India seems unquestioned. It is pointed out that Vizagapatam, lying as it does in front of the only practicable gap in the barrier of the Eastern Ghats, is formed by nature to be the outlet of the Central Provinces, from which a considerable amount of trade has taken this route in the past, even with the imperfect communications hitherto available. A necessary complement of the scheme would be the construction of the proposed railway by Parvatipuram to Rajpur, which with the existing coast line of the Bengal Nagpur Railway, would make a large and rich area tributary to the proposed port, and obviate the long and expensive circuit by Calcutta. A link would also be supplied in the most direct route to Rangoon from Europe by way of Bombay, while from an imperial point of view the possible provision of a fortified port on the long and almost unprotected stretch of coast between Colombo and Calcutta is held to be a consideration of great importance. The lofty projecting headland of the Dolphin's Nose would, it is pointed out, offer facilities for this purpose as well as protecting the entrance to the Port from the effects of south and south-westerly gales.

The necessary steps are being taken by the Government of India to achieve this end, 12 square miles of land are being acquired for the purposes of the harbour.

Laws and the Administration of Justice.

The indigenous law of India is personal and divisible with reference to the two great classes of the population, Hindu and Mahomedan. Both systems claim divine origin and are inextricably interwoven with religion, and each exists in combination with a law based on custom. At first the tendency of the English was to make their law public and territorial, and on the establishment of the Supreme Court at Calcutta in 1773 and the advent of English lawyers as judges, they proceeded to apply it to Europeans and Indians alike. This error was rectified by the Declaratory Act of 1780, by which Parliament declared that as against a Hindu the Hindu law and usage, and as against a Mahomedan the laws and customs of Islam should be applied. The rules of the Shastras and the Koran have been in some cases altered and relaxed. Instances can be found in the Bengal Sati Regulation Act of 1829; the Indian Slavery Act, 1843; the Caste Disabilities Removal Act of 1850; the Hindu Widows' Remarriage Act, 1856; and other Acts and Codes. To quote the Imperial Gazetteer, "A certain number of the older English statutes and the English common law are to a limited extent still in force in the Presidency Towns as applicable to Europeans, while much of the old Hindu and Mahomedan law is everywhere personal to their native fellow subjects; but apart from these, and from the customary law, which is as far as possible recognised by the Courts, the law of British India is the creation of statutory enactments made for it either at Westminster or by the authorities in India to whom the necessary law-giving functions have from time to time been delegated."

Codification.

Before the transfer of India to the Crown the law was in a state of great confusion. Sir Henry Cunningham described it as "hopelessly unwieldy, entangled and confusing." The first steps toward general codification were taken in 1833, when a Commission was appointed, of which Lord Macaulay was the moving spirit, to prepare a penal code. Twenty-two years elapsed before it became law, during which period it underwent revision from his successors in the Law Membership, and especially by Sir Barnes Peacock, the last Chief Justice of the Supreme Court of Calcutta. The Penal Code, which became law in 1860, was followed in 1861 by a Code of Criminal Procedure. Substantially the whole criminal law of British India is contained in these two Codes. One of the most eminent lawyers who ever came to India, Sir James Stephen, said "The Indian penal code may be described as the criminal law of England freed from all technicalities and superfluities, systematically arranged and modified in some few particulars (they are surprisingly few) to suit the circumstances of British India. It is practically impossible to misunderstand the code." The rules of Civil Procedure have been embodied in the Code of Civil Procedure. The Indian Penal Code has from time to time been amended. The Code of Civil Procedure was remodelled in 1908 and the Code of Criminal Procedure in 1898. These Codes are now in force.

Statute Law Revision.

In October, 1921, a committee was appointed under the presidency of the Hon. Mr. A. P. Muddiman, I.C.S., to deal with the question of statute law revision. The functions of the Committee are to prepare for the consideration of Government such measures of consolidation and clarification, as may be necessary to secure the highest attaintable standard of formal perfection in the statute law of India. In several branches of the law consolidation has long been overdue, and it is suggested that the preparation of a Bill consolidating the existing law relating to merchant shipping, with such amendments therein as are necessitated or rendered desirable by the enactment of the English statutes since 1894 on the same subject should form the first duty undertaken by the Committee. Under the conditions resulting from the establishment of the reformed Constitution, increasing importance will attach hereafter to the periodical examination and revision of the Statute Book and the Government of India hope that the Committee will take its place as a permanent feature of the legislative machinery of the country.

European British Subjects.

Whilst the substantive criminal law is the same for all classes, certain distinctions of procedure have always been maintained in regard to criminal charges against European British subjects. Until 1872 European British subjects could only be tried or punished by one of the High Courts. It was then enacted that European British subjects should be liable to be tried for any offences by magistrates of the highest class, who were also justices of the peace, and by judges of the Sessions Courts; but it was necessary in both cases that the magistrate or judge should himself be a European British subject. In 1883 the Government of India announced that they had decided "to settle the question of jurisdiction over European subjects in such a way as to remove from the code at once and completely every judicial disqualification which is based merely on race distinctions." This decision, embodied in the Ilbert Bill, aroused a storm of indignation which is still remembered. The controversy ended in a compromise which is thus summarised by Sir John Strachey ("India"). "The controversy ended with the virtual, though not avowed, abandonment of the measure proposed by the Government. Act III of 1884; by which the law previously in force was amended, cannot be said to have diminished the privileges of European British subjects charged with offences, and it left their position as exceptional as before. The general disqualification of native judges and magistrates remains; but if a native of India be appointed to the post of district magistrate or sessions judge, his powers in regard to jurisdiction over European British subjects are the same as those of an Englishman holding the same office. This provision however is subject to the condition that every European British subject brought for trial before the district magistrate or sessions judge has the right, however trivial be the charge, to claim to be tried by a jury of which

not less than half the number shall be Europeans or Americans.....Whilst this change was made in the powers of district magistrates, the law in regard to other magistrates remained unaltered." Since 1836 no distinctions of race have been recognised in the civil courts throughout India.

After a discussion on this subject in the Legislative Assembly in September 1921, the following motion was adopted:—"That in order to remove all racial distinctions between Indians and Europeans in the matter of their trial and punishment for offences, a committee be appointed to consider what amendments should be made in the provisions of the Code of Criminal Procedure, 1898, which differentiate between Indians and European British subjects and American and Europeans who are not British subjects in criminal trials and proceedings and to report on the best methods of giving effect to their proposals."

High Courts.

The highest legal tribunals in India are the High Courts of Judicature. These were constituted by the Indian High Courts Act of 1861 for Bengal, Bombay and Madras, and later for the United Provinces and the Punjab superseding the old supreme and Sudder Courts. The Judges are appointed by the Crown; they hold office during the pleasure of the Sovereign; at least one-third of their number are barristers, one-third are recruited from the judicial branch of the Indian Civil Service, the remaining places being available for the appointment of Indian lawyers. Trial by jury is the rule in original criminal cases before the High Courts, but juries are never employed in civil suits in India.

For other parts of India High Courts have been formed under other names. The chief difference being that they derive their authority from the Government of India, not from Parliament. In Burma there is a Chief Court, with three or more judges; in the other provinces the chief appellate authority is an officer called the Judicial Commissioner. In Sind the Judicial Commissioner is termed Judge of the Sudder Court and has two colleagues.

The High Courts are the Courts of appeal from the superior courts in the districts, criminal and civil, and their decisions are final, except in cases in which an appeal lies to His Majesty in Council and is heard by the Judicial Committee of the Privy Council in England. The High Courts exercise supervision over all the subordinate courts. Returns are regularly sent to them at short intervals and the High Courts are able, by examining the returns, by sending for proceedings, and by calling for explanations, as well as from the cases that come before them in appeal, to keep themselves to some extent acquainted with the manner in which the courts generally are discharging their duties.

Lower Courts.

The Code of Criminal Procedure provides for the constitution of inferior criminal courts styled courts of session and courts of magistrates. Every province, outside the Presidency towns, is divided into sessions divisions, consisting of one or more districts and every sessions division has a court of session and a sessions judge, with assistance if need be. These stationary sessions courts take the place of the English Assizes, and are competent to try all accused persons duly committed, and to inflict any punishment authorised by law, but sentences of death are subject to confirmation by the highest court of criminal appeal in the province. Magistrates' courts are of three classes with descending powers. Provision is made and largely utilised in the towns, for the appointment of honorary magistrates; in the Presidency towns Presidency magistrates deal with magisterial cases and benches of Justices of the Peace or honorary magistrates dispose of the less important cases.

Trials before courts of session are either with assessors or juries. Assessors assist, but do not bind the judge by their opinions; on juries the opinion of the majority prevails if accepted by the presiding Judge. The Indian law allows considerable latitude of appeal. The prerogative of mercy is exercised by the Governor-General-in-Council and the Local Government concerned without prejudice to the superior power of the Crown.

The constitution and jurisdiction of the inferior civil courts varies. Broadly speaking one district and sessions judge is appointed for each district: as District Judge he presides in its principal civil court of original jurisdiction; his functions as Sessions Judge have been described. For these posts members of the Indian Civil Service are mainly selected though some appointments are made from the Provincial Service. Next come the Subordinate Judges and Munsiffs, the extent of whose original jurisdiction varies in different parts of India. The civil courts, below the grade of District Judge, are almost invariably presided over by Indians. There are in addition a number of Courts of Small Causes, with jurisdiction to try money suits up to Rs. 500. In the Presidency Towns, where the Chartered High Courts have original jurisdiction, Small Cause Courts dispose of money suits up to Rs. 2,000. As Insolvency Courts the chartered High Courts of Calcutta, Bombay and Madras have jurisdiction in the Presidency towns. In the mofussil similar powers were conferred on the District Courts by the Insolvency Act of 1906.

Coroners are appointed only for the Presidency Towns of Calcutta and Bombay. Elsewhere their duties are discharged by the ordinary staff of magistrates and police officers unaided by jurors.

Legal Practitioners.

Legal practitioners in India are divided into Barristers-at-Law, Advocates of the High Court; Vakils and Attorneys (Solicitors) of High Courts; and Pleaders, Mukhtiars and revenue agents. Barristers and Advocates are admitted by each High Court to practise in it and its subordinate courts; and they alone are admitted to practise on the original side of some of the chartered High Courts. Vakils are persons duly qualified who are admitted to practise on the appellate side of the chartered High Courts and in the Courts subordinate to the High Courts. Attorneys are required to qualify before admission to practise in much the same way as in England. The rule that a solicitor must instruct counsel

prevails only on the original side of certain of the High Courts. Pleaders practise in the subordinate courts in accordance with rules framed by the High Courts.

Organisation of the Bar.

At Calcutta, Madras, and Bombay there is a Bar Committee presided over, *ex-officio*, by the Advocate-General. This body is elected by the barristers practising in each High Court, and its functions are to watch the interests of the Bar and to regulate its etiquette. At Allahabad, Lahore, Nagpore, and Rangoon a similar Bar Committee exists, but the electorate is extended to include the vakils or native pleaders, and the president is either the senior practising member of the Bar or the Government Advocate. In the larger Districts and Sessions Courts, an organisation representing the Bar is usually to be found, and in the subordinate Courts, including the Revenue Courts, similar machinery is generally in use. Pending an opportunity of detailed inquiries in India, these general descriptions must suffice.

Composition of the Bar.

A considerable change is occurring in the composition of the Indian Bar. The following extract from an informing article in the *Times* (May 25, 1914) indicates the character and incidence of this development. "During the last forty years, a striking change has taken place in the professional class. The bulk of practice has largely passed from British to Indian hands, while, at the same time, the profession has grown to an enormous extent. One typical illustration may be quoted. Attached to the Bombay High Court in 1871 there were 38 solicitors, of whom 10 were Indian and 28 English, and 24 advocates, of whom 7 were Indian and 17 English. In 1911, attached to the same High Court, there were 150 solicitors, of whom more than 130 were Indian and the remainder English, and 250 advocates, of whom 16 only were English and the remainder Indian."

Law Officers.

The Government of India has its own law colleague in the Legal Member of Council. All Government measures are drafted in this department. Outside the Council the principal law officer of the Government of India is the Advocate-General of Bengal, who is appointed by the Crown, is the leader of the local Bar, and is always nominated a member of the Provincial Legislative Council. In Calcutta he is assisted by the Standing Counsel and the Government Solicitor. There are Advocates-General and Government Solicitors for Bombay and Madras, and in Bombay there is attached to the Secretariat a Legal Remembrancer and an Assistant Legal Remembrancer, drawn from the Judicial Branch of the Indian Civil Service. The Government of Bengal consults the Bengal Advocate-General, the Standing Counsel and the Government Solicitor, and has besides a Legal Remembrancer (a Civil Servant) and a Deputy Legal Remembrancer (a practising barrister); the United Provinces are equipped with a civilian Legal Remembrancer and professional lawyers as Government Advocate and Assistant Government Advocate; the Punjab has a Legal Remembrancer, Government Advocate and a Junior Government Advocate; and Burma a Government Advocate, besides a Secretary to the Local Legislative Council.

Sheriffs are attached to the High Courts of Calcutta, Madras and Bombay. They are appointed by Government, selected from non-officials of standing, the detailed work being done by deputy sheriffs, who are officers of the Court.

Law Reports.

The Indian Law Reports are published in four series—Calcutta, Madras, Bombay, and Allahabad, under the authority of the Governor-General in Council. They contain cases determined by the High Court and by the Judicial Committee on appeal from the particular High Court. These appeals raise questions of very great importance, and the Council of Law Reporting for England and Wales show their appreciation by printing the Indian Appeals in a separate volume, and have also compiled a digest of Indian Appeals covering the period 1874-1893. The other Provinces and States have series of reports issued under the authority either of the Judiciary or the State.

Legislative Power.

The supreme power of Parliament to legislate for the whole of India cannot be questioned. In practice, however, this power is little used, there being a majority of officials on the Imperial Legislative Council—a majority deliberately reserved in the India Councils Act of 1909—the Secretary of State is able to impose his will on the Government of India and to secure the passage of any measure he may frame, regardless of the opinion of the Indian authorities. Legislative Councils have been established both for the whole of India and for the principal provinces. Their constitution and functions are fully described in detailing the powers of the Imperial and Provincial Councils (q. v.). To meet emergencies the Governor-General is vested with the power of issuing ordinances, having the same force as Acts of the Legislature, but they can remain in force for only six months. The power is very little used. The Governor-General-in-Council is also empowered to make regulations, having all the cogency of Acts, for the more backward parts of the country, the object being to bar the operation of the general law and permit the application of certain enactments only.

Bengal Judicial Department.

Sanderson, The Hon'ble Sir Lancelot	Chief Justice.
Mukharji, The Hon'ble Sir Ashutosh, Kt., C.S.I., M.A., D.L.	Puisne Judge.
Richardson, The Hon'ble Sir Thomas William, Bar.-at-Law, I.C.S.,	Ditto

Bengal Judicial Department—*contd.*

Walmsley, The Hon'ble Mr. Hugh, I.C.S.	Puisne Judge.
Rankin, The Hon. Mr. George Claus, Bar-at-Law ..	Ditto.
Greaves, The Hon'ble Mr. William Ewart	Ditto.
Chatarji, The Hon'ble Sir Nalini Ranjan, M.A., B.L. ..	Ditto.
Newbould, The Hon'ble Mr. B. B.	Ditto. (On leave.)
Ghosh, The Hon. Mr. Charu Chander, Bar.-at-Law ..	Ditto.
Buckland, The Hon. Mr. Justice Pullip Lindsay, Bar.-at-Law.	Ditto.
Pearson, The Hon. Mr. Justice Herbert Grayhurst, Bar.-at-Law.	Ditto.
Suhrawardy, The Hon. Mr. Justice Zahhadur Rahim Zahid, Bar.-at-Law.	Ditto.
Cuming, The Hon. Mr. Justice Arthur Herbert, I.C.S.	Ditto.
Ghosh, The Hon. Mr. Justice Bepin Behari	Ditto.
Panton, The Hon. Mr. Justice Edward Brookes Henderson.	Ditto.
Page, The Hon. Mr. Justice Arthur, Kt.	Ditto. (Additional).
Das, S. R., Bar-at-Law	Advocate-General.
Mitter, B. L., Bar.-at-Law	Standing Counsel.
Gooding, G. C.	Government Solicitor.
Duval, The Hon. Mr. H. P., I.C.S.	Superintendent and Remembrancer of Legal Affairs.
Orr, John Williams, Bar.-at-Law	Deputy Superintendent and Remembrancer of Legal Affairs.
Dwarka Nath Chakrabatti, M.A., B.L.	Senior Government Pleader.
Sadhu, Rai Bahadur Tarak Nath	Public Prosecutor, Calcutta.
Remfrey, Maurice	Registrar, Keeper of Records, Taxing Officer, Accountant-General, and Sealer, etc., Original Jurisdiction.
Satish Chandra Mitra	Registrar in Insolvency.
Nalini Mohan Chatarji, Bar.-at-Law	Master and Official Referee.
Mitra, Jyotish Chandra	Dy. Registrar.
Moses, O., Bar.-at-Law	Clerk of the Crown for Criminal Sessions.
Kirkham, Joseph Alfred	Secretary to the Chief Justice and Head Clerk, Decree Department.
Edgley, Norman George Armstrong, I.C.S.	Registrar and Taxing Officer, Appellate Jurisdiction.
Counsell, Frank Bertram	Deputy Registrar.
Paulit, Peter Sydenham	Assistant Registrar.
Kinney, Alexander	Administrator-General and Official Trustee.
Bonnerjee, K. K. Shelly, Bar.-at-Law	Official Receiver, sub *pro tem.*
Dobbin, F. K., Bar.-at-Law	Coroner of Calcutta.
Falkner, George McDonald	Official Assignee.
Bose, B.D., Bar.-at-Law	Editor of Law Reports.

Bombay Judicial Department.

Macleod, The Hon. Sir Norman Cranstoun, Bar-at-Law.	Chief Justice.
Shah, The Hon'ble Sir Lallubhai Asharam, M.A., LL.B.	Puisne Judge.
Marten, The Hon. Mr. A. B.	Ditto.
Pratt, The Hon. Mr. Edward Millard, I.C.S.	Ditto.
Crump, The Hon'ble Mr. Louis Charles, I.C.S.	Ditto. (On furlough).
Fawcett, The Hon'ble Mr. Charles Gordon Hill, I.C.S.	Ditto
Abdeali Muhammadali Kaziji, The Hon. Mr.	Ditto.
Mulla, The Hon. Mr. Dinsha Fardunji, M.A., LL.B. ..	Ditto. (Additional).
Kanga, Jamshedji Behramji, M.A., LL.B.	Advocate-General.
Stephin, James Murphy, I.C.S.	Remembrancer of Legal Affairs.
Dadiba, C. Mehta, M.A., LL.B.	Assistant Remembrancer of Legal Affairs and Secretary to the Legislative Council of the Governor.
Bowen, J. C. G.	Government Solicitor and Public Prosecutor. (On Leave.)
Campbell, Henry	Clerk of the Crown.
Kemp, K. Mac I., Bar.-at-Law	Reporter to the High Court.
Mitchell, H. C. B.	Administrator-General and Official Trustee and Registrar of Companies.
Phirozshah Behramji Malbari, Bar.-at-Law	Prothonotary, Testamentary and Admiralty Registrar.
Hirjibhai Hormasji Wadia, M.A.	Master and Registrar in Equity and Commissioner for taking Accounts and Local Investigations, and Taxing Officer.

Bombay Judicial Department—*contd.*

Nassarwanji Dinshahji Gharda, B.A., LL.B.	Deputy Registrar and Sealer, Appellate Side, and Secretary to Rule Committee, Acting Registrar, Appellate Side.
King, A. R.	Sub. *pro tem.* Coroner.

COURT OF THE JUDICIAL COMMISSIONER OF SIND.

Kincaid, The Hon. Mr. Charles Augustus, C.V.O., I.C.S.	Judicial Commissioner. (On leave.)
Calcraft-Kennedy, B.C.H., I.C.S.	Additional Judicial Commissioner (Acting Judicial Commissioner).
Madgaonkar, Govind Dinanath, B.A., I C.S.	Addl. Judicial Commissioner (Ag.)
Kemp, Norman Wright	Ditto. (On furlough.
Raymond, Edward	Ditto.
Aston, Arthur Henry Southcote, M.A., Bar-at-Law ..	Ditto. (Actin

Madras Judicial Department.

Schwabe, The Hon. Sir Walter George Salis, K.C. ..	Chief Justice.
Oldfield, The Hon'ble Mr. Francis Du Pre, I.C.S ..	Puisne Judge.
Spencer, The Hon'ble Mr. Charles Gordon, I.C.S. ..	Ditto.
Trotter, The Hon'ble Mr. Victor Murray Coults ..	Ditto.
Ayling, The Hon'ble Sir William Bock, I.C.S.	Ditto.
Ramesam Pantulu, The Hon. Mr. V.	Ditto.
Odgers, The Hon. Mr. Charles Edwin, M.A., B.C.L ..	Ditto. (On leave).
Phillips, The Hon. Mr. William Watkin, I.C.S. ..	Ditto.
Kumarswami Shastri, The Hon'ble Diwan Bahadur C. V.	Ditto.
Krishnan, The Hon. C. Dewan Bahadur, M.A., Bar-at-Law	Ditto.
Devadoss, The Hon. Mr. Justice, M. D., Bar.-at-Law..	Ditto.
Venkata Suba Rao, The Hon. Mr. Justice, M., B.A., B.L.	Ditto.
C. Madhavan Nair, Bar.-at-Law	Advocate-General.
Moresby, Charles	Ag. Government Solicitor.
C. V. Ananta Krishna Iyer	Government Pleader.
Adam, J. C., Bar.-at-Law..	Public Prosecutor.
Tirunarayana Achariyar, M.A.	Editor, Indian Law Reports, Madras Series
Cornish, H. D., Bar.-at-Law	Administrator-General, Official Trustee and Custodian of Enemy Property (On leave).
Butler, Frank Gregory, I.C.S.	Registrar.
Madhava Menon, K. P., Bar.-at-Law	Crown Prosecutor.

Assam Judicial Department.

Mellor Arthur	Secretary to Government, Legislative Department, and Secretary to the Assam Legislative Council. Superintendent and Remembrancer of Legal Affairs. Administrator-General and Official Trustee.
Jack, Robert Ernest	District and Sessions Judge, Assam Valley District.
Ran, B. N.	Officiating District and Sessions Judge, Sylhet and Cachar.
Neogi, Hem Kumar	Additional District and Sessions Judge, Sylhet and Cachar.

Bihar and Orissa Judicial Department.

Miller, The Hon. Sir Thomas Frederick Dawson ..	Chief Justice.
Jwala Prashad, The Hon'ble Sir, Kt., Rai Bahadur ..	Puisne Judge.
Adami, The Hon. Justice Leonard Christian, I.C.S. ..	Ditto.
Coutts. The Hon. Mr. William Strachan	Ditto.
Pratutta Ranjan Dass, The Hon. Mr., Bar.-at-Law ..	Ditto.
Mullick, The Hon'ble Sir Basanta Kumar, I.C.S. ..	Ditto.
Bucknill, The Hon. Justice Sir John Alexander Strachey, Bar.-at-Law.	Ditto.
Ross, The Hon. Mr. Justice Robert Lindsay, I.C.S...	Ditto. (Offg.)
Kulwant Sahay, The Hon. Mr.	Ditto,
Foster, The Hon. Mr. Justice Federick Edward Burton, LL.B.	Ditto.
Macpherson, The Hon. Mr. Justice Thomas Stewart, C.I.E., I.C.S.	Ditto.
Allanson, Harry Llewelyn Lyons, I.C.S.	Superintendent and Remembrancer of Legal Affairs.
Scroop, A. E.	Registrar. (Offg.)

Burma Judicial Department.

Robinson, The Hon'ble Sir Sydney Maddock, Bar.-at-Law.	Chief Justice, High Court; Rangoon.
Young, The Hon. Mr. Charles Philip Radford, B.A. ..	Judge.
Pratt, The Hon. Mr. Justice Henry Sheldon.. ..	Do. Mandalay.
Heald, The Hon. Mr. Justice Benjamin Herbert ..	Do.
Rutledge, The Hon. Mr. Justice John Guy	Do.
MacColl, The Hon. Mr. Hugh Ernest, I.C.S.	Do. (On leave).
Oung, The Hon. Mr. Justice Maung May, M A., L.L.M., Bar.-at-Law.	Do.
Beasley, The Hon. Mr. Justice Horace Owen, Comptn., Bar -at-Law.	Do.
Lentaigne, The Hon. Mr. Justice B.P., Bar.-at-Law..	Additional Judge.
Carr, The Hon. Mr. Justice William, I.C.S.	Do. Mandalay.
Duckworth, The Hon. Mr. Justice Edward Dyce, B.A., I.C.S.	Acting Judge.
Maung Thin, Bar.-at-Law	Administrator-General, Official Trustee, Official Assignee and Receiver, Rangoon.
Higginbotham, Edward, Bar.-at-Law	Government Advocate.
Urguhart, D. W. J., Bar.-at-Law	Government Prosecutor, Rangoon.
Barretto, Charles Lionel, Advocate	Ditto. Moulmein.
MacDougall, Ralbeart MacIntyre, M.A., I.C.S... ..	Registrar, High Court, Rangoon.

Central Provinces Judicial Department.

Batten, J. K., I.C.S.	Judicial Commissioner. (On leave.)
Baker, William Thomas Webb, B.A., I.C.S.	Officiating Judicial Commissioner.
Prideux, F. W. A., O.B.E	Additional Judicial Commissioner.
Hallifax, H. F., I.C.S.	Do. do.
Kotwal, P. S., Bar.-at-Law	Do. do.
Parry, Bernard King, I.C.S.	Registrar.
Muhammad Abdul Hadi, Khan Saheb	Deputy Registrar.

N.-W. Frontier Province Judicial Department.

Pipon, P. J. G., C. M.G., C.I.E., M.C., I.C.S.	Judicial Commissioner.
Umar Khitab	Registrar.

Punjab Judicial Department.

The Hon'ble Sir Rai Baha dur Shadi Lal, Bar.-at-Law.	Chief Judge.
Smith, The Hon'ble Mr. H. Scott, I.C.S.	Judge.
Chevis, The Hon. Sir William, Kt., I.C.S.	Do.
Abdur Rauf, The Hon. Khan Bahadur Sayyed Muhammad.	Do.
Le Rossignol, The Hon. Mr. Walter Aubin, I.C.S. ..	Do.
Broadway, The Hon. Mr. Alan Brice, Bar.-at-Law ..	Do.
Martineau, The Hon. Mr. Alfred Edward, I.C.S. ..	Do.
Harrison, The Hon. Mr. Michael Harman	Do. (Officiating.)
Campbell, The Hon. Mr. Archibald, I.C.S.	Additional Judge.
Fforde, The Hon. Mr. Justice Cecil	Do.
Moti Sagar, The Hon. Mr. R. B., Barr.-at-Law ..	Do.
Zafar Ali, The Hon. Mr. Justice K. B. Mirza Ansari.	Temporary Judge.
Prenter, N. H., B.A., LL.D.	Legal Remembrancer.
Jai Lal, Rai Bahadur	Government Advocate.
Blacker, Harold Alfred Cecil, B.A.	Registrar.
Noad, Charles Humphrey Cardon, B.A., Bar.-at-Law ..	Assistant Legal Remembrancer and Administrator-General and Official Trustee.

United Provinces Judicial Department.

Mears, The Hon. Sir Edward Grimwood, Bar.-at-Law ..	Chief Justice.
Banarji, The Hon'ble Sir Pramada Charan, Kt., B.A., B.L.	Puisne Judge. (On furlough.)
Piggott, The Hon'ble Mr. Theodore Caro, I.C.S. ..	Ditto.
Walsh, The Hon. Mr. Cecil, Bar.-at-Law, M.A. ..	Ditto.
Rafiq, The Hon'ble Mr. Muhammad, Bar.-at-Law ..	Ditto.
Lindsay, The Hon. Mr. Benjamin, I.C.S.	Ditto.
Stuart, The Hon. Mr. Louis, C.I.E., I.C.S.	Ditto.
Ryves, The Hon. Mr. Alfred Edward, B.A., Bar.-at-Law.	Additional Puisne Judge
Gokul Prasad, The Hon. Mr. Rai Bahadur, M.A., LL.B...	Puisne Judge (Additional).
Johnson, J. N. G., I.C.S.	Registrar.
Porter, Wilfred King, Bar.-at-Law	Law Reporter.
Banarji, Lalit Mohan, M.A., LL.B.	Government Advocate.
Shankar Saran, B.A., Bar.-at-Law	Government Pleader.

COURT OF JUDICIAL COMMISSIONER OF OUDH—LUCKNOW.

Kanhaiya Lal, The Hon. Rai Bahadur Pandit, M.A. ..	Judicial Commissioner.
Daniels, Sidney Reginald, J.P., I.C.S., Bar.-at-Law ..	First Additional Judicial Commissioner of Oudh, on deputation.
Lyle, D. R., I.C.S.	Second Additional Judicial Commissioner of Oudh. (On leave.)
Dalal, B. J., I.C.S.	Officiating First Additional Judicial Commissioner of Oudh.
Simpson, F. D.	Officiating Second Additional Judicial Commissioner of Oudh. (On leave.)
Saiyid Iftikhar Husain, B.A.	Registrar.
Nagendra Nath Ghosal, Rai Bahadur, B.A., B.L. ..	Government Pleader.

NUMBER AND VALUE OF CIVIL SUITS INSTITUTED.

	Administrations.		Number of Suits Instituted.							Number of Suits the value of which cannot be estimated in money.	Total Number of Suits Instituted.	Total Value of Suits.
			Value not exceeding Rs. 10.	Value Rs. 10 to Rs. 50.	Value Rs. 50 to Rs. 100.	Value Rs. 100 to Rs. 500.	Value Rs. 500 to Rs.1,000.	Value Rs. 1,000 to Rs.5,000.	Value above Rs.5,000.			
			(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
												Rs.
1	Bengal		101,578	318,672	148,467	166,874	17,986	9,468	2,140	1,369	765,654	15,50,26,170
2	Bihar and Orissa		33,865	74,750	33,264	38,379	5,338	4,120	919	116	190,751	7,53,57,169
3	United Provinces		10,397	73,208	54,452	66,651	9,971	8,404	1,697	52	224,832	10,71,43,672
4	Punjab		13,155	53,310	47,583	62,636	13,074	7,512	1,261	420	198,951	5,96,56,038
5	Delhi		276	1,820	1,383	2,360	532	877	242	..	7,490	80,97,753
6	North-West Frontier Province ..		3,230	7,080	6,147	7,592	1,395	941	183	5	26,573	85,59,525
7	Burma		2,868	11,736	16,342	22,672	2,836	2,309	472	1,894	71,129	2,16,96,774
8	Central Provinces and Berar ..		5,593	38,538	27,617	36,495	4,922	3,575	502	3	117,245	3,05,86,823
9	Assam		4,124	21,141	10,454	11,728	952	406	65	187	49,057	1,61,48,935
10	Ajmer-Merwara		855	4,347	2,803	1,625	120	64	6	2	9,822	8,99,306
11	Coorg		130	1,216	610	534	19	33	2	26	2,570	2,60,058
12	Madras		56,432	181,716	87,359	113,053	16,345	11,457	2,115	844	469,321	12,05,27,395
13	Bombay		9,379	52,762	36,014	52,416	10,160	8,784	2,648	3,862	176,025	10,09,10,799
14	British Baluchistan		379	1,645	886	1,115	164	141	39	212	4,581	9,65,676
	TOTAL, 1920		242,261	851,941	473,381	584,130	82,914	58,091	12,291	8,992	2,314,001	70,58,35,493
	TOTALS ..	1919	252,766	864,173	460,938	559,434	73,974	52,773	11,589	7,055	*2,282,702	70,02,15,969
		1918	266,355	852,754	428,466	492,400	62,886	43,072	8,387	6,091	*2,160,411	60,68,29,956
		1917	296,225	919,308	466,612	517,131	61,140	80,880	7,528	6,540	2,315,373	5,2,80,21,819
		1916	305,751	935,140	463,294	511,417	60,405	39,680	7,076	6,237	2,329,000	48,75,42,538
		1915	309,505	900,766	431,983	476,916	56,453	37,934	6,763	6,148	2,226,468	47,33,16,511
		1914	286,704	835,694	390,885	438,122	53,845	36,247	6,633	7,030	2,055,160	51,12,55,092
		1913	289,745	851,323	395,546	433,932	51,981	34,066	6,224	7,300	*2,070,117	42,38,31,151
		1912	301,394	867,790	393,502	425,852	50,300	33,037	6,164	7,368	*2,085,407	40,17,54,015
		1911	299,542	858,388	387,657	406,486	47,408	31,563	5,956	6,336	*2,043,336	41,02,58,779
		1910	301,895	879,145	405,969	440,101	56,628	37,732	6,798	6,763	*2,135,031	48,51 05,074
		1909	294,997	845,946	376,742	390,375	48,654	30,806	5,690	7,336	*2,000,546	43,43,70,838
		1908	289,284	819,595	354,196	366,602	44,430	28,236	5,264	7,347	*1,914,954	38,93,28,285
		1907	300,857	808,368	335,739	344,351	40,707	26,186	4,869	6,822	*1,867,899	33,68,85,974
		1906	311,039	818,974	335,840	338,010	39,863	25,014	4,497	6,871	*1,880,108	33,55,52,785

* Details not given of 42 Bombay suits in 1906; 56 Madras suits in 1906 96 in 1907, 74 in 1908, 92 in 1909, 376 in 1910, 71 in 1911, 64 in 1912, 22 in 1913, and 28 suits in 1914; 4 in 1918 and 6 in 1919: 370 Bengal suits in 1909; and 49 Delhi suits in 1913 and 84 in 1914.

THE INDIAN POLICE.

The Indian Government employ (1921-22) about 203,000 Officers and men in the Indian Police. In addition to these there are about 30,000 Officers and men of the military police, of whom more than half belong to Burma. The total cost of maintaining the Force has greatly risen in recent years on account of increases of pay and allowances made on account of the increased cost of living. The Budget Estimate for 1922-23 is Rs. 90,78,000. In large cities the Force is concentrated and under direct European control; in the mofussil the men are scattered throughout each District and located at various Outposts and Police stations. The smallest unit for administrative purposes is the Outpost which generally consists of 3 or 4 Constables under the control of a Head Constable. Outpost Police are maintained to patrol roads and villages and to report all matters of local interest to their superior, the Sub-Inspector. They have no powers to investigate offences and are a survival of the period when the country was in a disturbed state and small bodies of Police were required to keep open communications and afford protection against the raids of dacoits. It is an open question whether they are now of much use. Each Outpost is under a Police Station which is controlled by an officer known as a Sub-Inspector.

Distribution of Police.—The area of a Police Station varies according to local conditions. The latest figures available are:—

—	Average area per Police Station.	Average number of Regular Civil Police per 10,000 of Population.
	Square miles.	
Bengal*	126	4·8
Assam	616	5·3
United Provinces	127	7·7
Punjab	203	10·3
North-West Frontier Province	179	19·8
Central Provinces and Berar	242	8·6
Burma*	487	13·4
Madras	144	8·0
Bombay*	252	15·0

* Excluding the towns of Calcutta, Bombay and Rangoon. The figures include the Railway police, but not Military police.

Organisation of Police.

The Police Station Officer (the Sub-Inspector) is responsible for the investigation of all cognisable crimes, that is to say, all offences in which the Police can arrest without a warrant from a Magistrate, which occur within his jurisdiction; he is also held responsible for the maintenance of the public peace and the prevention of crime. From the point of view of the Indian Ryot, he is the most important Police Officer in the District and may rightly be considered the backbone of the Force.

Superior to the Sub-Inspector is the Inspector who holds charge of a Circle containing 4 or 5 Police Stations. His duties are chiefly those of supervision and inspection. He does not ordinarily interfere in the investigation of crime unless the conduct of his subordinates renders this necessary.

The Inspector is usually a selected and experienced Sub-Inspector. Each District contains 3 or 4 Circles, and in the case of large Districts, is divided into 2 Sub-divisions—one of which is given to an Assistant Superintendent of Police, a European gazetted Officer. The Police Force in each District is controlled by a District Superintendent of Police, who is responsible to the District Magistrate (Collector or Deputy Commissioner) for the detection and prevention of crime and for the maintenance of the public peace, and, to his Deputy Inspector-General and Inspector-General, for the internal administration of his Force. Eight or ten Districts form a Range administered by a Deputy Inspector-General, an officer selected from the ranks of the Superintendents. At the head of the Police of each Province is the Inspector-General who is responsible to the Local Government for the administration of the Provincial Police.

Separate but recruited from the District Force is the Criminal Investigation Department, which is under the control of a specially selected European Officer of the rank and

standing of a Deputy Inspector-General. The Criminal Investigation Department, usually called the C. I. D., is mainly concerned with political inquiries, sedition cases and crimes with ramifications over more than one District or which are considered too important to leave in the hands of the District Police. It is a small force of Sub-Inspectors and Inspectors who have shown their ability and intelligence when working in the mofussil and forms in each Province a local Scotland Yard.

The larger Cities of Calcutta, Bombay, and Madras have their own Police Force, independent of the Inspector-General of Police, and under the control of a Commissioner and 2 or more Deputies. For Police purposes each city is divided into divisions; in Calcutta each division is in charge of a Deputy Commissioner of Police; in Bombay and Madras of a Superintendent, these officers being selected from the European ranks of the City Force. In Bombay, however, the Superintendents are Gazetted Officers, and two of them are Indians. Each division is sub-divided into a small number of Police Stations, the station being in charge of an Inspector assisted by a Deputy Inspectors Indian Sub-Inspectors and European Sergeants.

The Supreme Government at Delhi and Simla keeps in touch with the Provincial Police by means of the Director of Criminal Intelligence and his Staff. The latter do not interfere in the Local Administration and are mainly concerned with the publication of information regarding international criminals, inter-provincial crime and Political enquiries in which the Supreme Government is interested.

Recruitment.—The constable is enlisted locally. Certain castes are excluded from service and the formation of cliques by filling up the Force from any particular caste or locality is forbidden. In some Provinces a fixed percentage of foreigners must be enlisted. Recruits must produce certificates of good character and pass a medical test. They must be above certain standards of physical development. The constable rises by merit to the rank of Head Constable and, prior to the Police Commission, could rise to the highest Indian subordinate appointments. Since 1906, his chances of promotion have been greatly curtailed; this has certainly lowered the standard coming forward for service in the Force in the lower ranks.

The Sub-Inspector, until 1906, was a selected Head Constable, but Lord Curzon's Commission laid down that Sub-Inspectors should be recruited direct from a socially better class of Indians. In most Provinces, eighty per cent. of the Sub-Inspectors are selected by nomination, trained for a year or 18 months at a Central Police School; and; after examination; appointed direct to Police Stations to learn their work by actual experience. It is too early to judge this system by results, but it has no doubt great disadvantages and undetected crime in India is increasing rapidly.

An Inspector is generally a selected Sub-Inspector. Direct nomination is the exception, not the rule.

The Deputy Superintendent, a new class of officer, instituted on the recommendation of the Commission, is an Indian gazetted officer and is the native Assistant to the District Superintendent of Police. He is either selected by special promotion from the ranks of the Inspectors or is nominated direct, after a course at the Central Police School.

Prior to 1893, the gazetted ranks of the Force were filled either by nomination or by regimental officers seconded from the Army for certain periods. In 1893, this system was abandoned and Assistant Superintendents were recruited by examination in London. On arrival in India, they were placed on probation until they had passed their examinations in the vernacular, in law, and in riding and drill. The establishment of Police Training Schools in 1906 has done much to improve the training of the Police Probationer, and selection by examination has given Government a better educated officer, but open competition does not reveal the best administrators and should be tempered, as in the Navy, by selection.

Internal Administration.—The District Force is divided into 2 Branches—Armed and Unarmed. As the duties of the armed branch consist of guarding Treasuries, escorting treasure and prisoners and operating against dangerous gangs of dacoits, they are maintained and controlled on a military basis. They are armed and drilled and taught to shoot after military methods. The unarmed branch are called upon to collect fines magisterially inflicted, serve summonses and warrants, control traffic, destroy stray dogs, extinguish fires; enquire into accidents and non-cognizable offences. The lower grades are clothed and housed by Government without expense to the individual. The leave rules are fairly liberal, but every officer, European or Native, must serve for 30 years before he is entitled to any pension, unless he can obtain a medical certificate invaliding him from the service. This period of service in an Eastern climate is generally admitted to be too long and the efficiency of the Force would be considerably improved if Government allowed both the officers and men to retire after a shorter period of service.

STATISTICS OF POLICE WORK.

The undesirability of attaching undue importance to statistical results as a test of the merits of police work was a point upon which considerable stress was laid by the Indian Police Commission, who referred to the evils likely to result from the prevalence among subordinate officers of an impression that the advancement of an officer would depend upon his being able to show a high ratio of convictions, both to cases and to persons arrested, and a low ratio of crime. The objection applies more particularly to the use of statistics for small areas; but they cannot properly be used as a basis of comparison even for larger areas without taking into account the differences in the conditions under which the police work; and, it may be added, they can at the best indicate only very

Imperfectly the degree of success with which the police carry out that important branch of their duties, which consists in the prevention of crime. These considerations have been emphasized in recent orders of the Government of India. Subject to these observations, the figures below may be given as some indication of the volume of work falling upon the police, and of the wide differences between the conditions and the statistical results in different provinces:—

Administrations.	Number of Offences reported.	Number of Persons under Trial.	Persons whose cases were disposed of				Persons remaining under Trial at the end of the Year.
			Discharged or Acquitted.	Convicted.	Committed or Referred.	Died, Escaped or Transferred to another Province.	
Bengal	368,387	(c) 307,817	101,382	188,917	3,287	227	14,000
Bihar and Orissa	116,508	119,091	64,555	45,239	1,957	153	7,187
United Provinces	235,752	343,447	200,299	128,188	6,048	491	8,421
Punjab	195,577	264,714	181,333	60,530	1,710	270	20,871
North-West Frontier Province.	24,421	33,685	16,825	15,264	447	25	1,124
Burma	123,266	194,815	69,912	112,092	2,197	2,687	7,927
Central Provinces and Berar.	40,597	60,374	32,73.	20,716	2,790	95	4,039
Assam	51,581	42,323	23,239	15,595	614	73	2,802
Ajmer-Merwara	7,638	11,587	4,632	5,970	....	198	787
Coorg	5,390	5,157	2,613	2,043	....	12	489
Madras	328,130	443,486	187,009	226,417	6,085	219	23,755
Bombay	195,216	270,234	107,815	144,539	2,181	833	14,866
British Baluchistan	7,235	12,610	5,454	4,927	....	167	2,062
Delhi	7,661	6,545	3,457	2,813	27	3	245
TOTAL, 1920	1,707,359	2,115,885	1,001,259	973,250	27,343	5,453	108,576
TOTALS 1918	1,536,081	1,929,669	892,131	918,881	25,517	6,239	86,889
TOTALS 1917	1,638,577	2,038,170	943,805	987,148	22,820	4,810	79,572
TOTALS 1916	1,669,070	2,098,379	980,525	10,14,891	23,186	6,139	73,619
TOTALS 1915	1,603,075	2,085,622	982,589	997,210	25,185	4,769	75,851
TOTALS 1914	1,634,224	2,120,472	1,031,374	992,922	23.554	4,949	67,631
TOTALS 1913	1,658,405	a2,141,362	1,051,888	987,592	22,459	4,735	74,652
TOTALS 1912	1,659,254	a2,132,813	1,053,657	977,267	21,650	4,313	75,765
TOTALS 1911	1,502,995	a1,960,679	966,783	897,786	21,173	3,906	70,832
TOTALS 1910	1,447,732	a1,884,951	922,379	872,298	21,029	4,439	64,677
TOTALS 1909	1,421,350	a1,856,219	914,500	854,667	22,174	3,349	61,502
TOTALS 1908	1,412,817	a1,814,207	897,462	860,065	24,535	3,625	58,496
TOTALS 1907	1,411,653	1,816,827	880,706	851,097	21,296	3,505	60,223
TOTALS 1906	1,404,777	1,805,707	864,493	860,486	22,776	3,911	54,041

(*a*) Includes 1 person handed over to Military Authorities in 1919.
" 9 persons handed over to Military Authorities in each of the years 1917 and 1918
" 8 " handed over to Military Authorities in 1916.
" 10 " handed over to Military Authorities in 1915.
" 25 " (9 on dormant file, 16 handed over to Military Authorities) in 1914.
" 30 " (13 " 17 " " to Military Authorities) in 1913.
" 149 " (139 " 9 " " " " " and 1 sent to Naval Authorities) in 1912.
" 206 " (171 " 35 " " to Military Authorities) in 1911.
" 128 " (117 " 11 " " to Military Authorities) in 1910.
" 26 " (10 " 14 " " " " and 2 referred under Section 307, Criminal Procedure Code) in 1909.

(*b*) " 8 " remanded for retrial in 1919.

(c) Excludes 3 persons remanded for retrial by the High Court and 1 referred to the Local Government.

PRINCIPAL POLICE OFFENCES.

CASES.

Administrations.	Offences against the State and Public Tranquility.		Murder.		Other serious Offences against the Person.		Dacoity.		Cattle Theft.		Ordinary Theft.		House-trespass and Housebreaking with intent to commit Offence.	
	Reported.	Conviction obtained.	Reported.	Conviction obtained.	Reported.	Conviction obtained.	Reported.	Conviction obtained.	Reported.	Conviction obtained.	Reported.	Conviction obtained.	Reported.	Conviction obtained.
Bengal	1,929	729	476	38	5,254	1,183	611	91	1,221	575	32,214	6,065	48,139	2,551
Calcutta Town and Suburbs.	123	67	28	3	879	270	2	..	23	16	6,024	1,737	1,661	344
Bihar and Orissa ..	1,089	319	264	34	2,957	615	260	48	1,268	483	19,920	4,516	22,765	1,470
United Provinces ..	1,554	674	833	245	8,157	2,688	764	213	4,692	1,174	31,114	6,647	47,926	4,366
Punjab	1,744	465	692	207	6,724	1,838	157	27	3,088	817	8,826	2,056	19,606	2,079
Delhi	21	9	16	4	111	24	2	..	10	4	517	187	574	79
N.-West Frontier Pro.	206	102	654	191	1,607	503	499	40	198	51	1,252	315	2,047	250
Burma	732	365	811	156	10,398	2,980	366	104	6,050	1,803	21,388	7,489	11,704	3,681
Rangoon	110	17	9	2	427	143	8	1	..	..	1,841	751	428	129
Central Provinces and Berar.	530	190	285	95	2,472	715	140	14	1,467	544	23,688	2,734	16,293	1,611
Assam	825	301	64	27	1,426	360	46	12	372	131	5,621	1,249	7,123	731
Coorg	9	8	7	3	49	11	..	..	30	6	172	68	91	19
Madras	1,666	659	1,048	178	5,507	1,432	831	148	5,574	1,938	26,241	6,715	16,783	3,156
Bombay	1,203	360	501	175	4,327	1,062	381	91	3,587	1,132	15,247	5,146	11,663	2,160
Bombay Town & Island.	141	85	27	5	819	373	6	..	..	..	7,008	3,701	1,847	373
TOTAL, 1920 ..	11,882	4,350	5,715	1,363	51,114	14,255	4,073	789	27,580	8,674	201,063	49,376	208,650	22,999
1918.	10,934	4,378	5,271	1,427	47,772	13,805	5,296	847	22,294	6,122	194,105	43,070	220,123	21,188
1917.	11,234	4,575	4,856	1,428	50,443	14,354	3,050	506	23,194	6,567	179,427	40,055	209,907	21,239
1916.	11,440	4,651	4,773	1,388	51,459	15,277	3,286	563	26,354	7,516	179,549	41,502	217,295	21,655
1915.	11,698	4,753	1,307	4,757	51,795	15,186	3,730	733	28,382	8,248	188,286	43,572	235,509	22,642
1914.	11,706	4,740	1,484	4,624	52,522	15,324	2,770	457	27,329	7,926	178.824	39,664	216,817	21,296
1913.	12,172	4,798	1,397	4,471	52,948	15,458	2,494	397	27,261	7,495	*174.727	*37.685	205,860	20,014
TOTALS .. 1912.	12,414	4,716	1,308	4,430	52,337	14,763	2,512	413	27,254	7,171	176,091	38,356	199,480	20,178
1911.	11,873	4,456	1,281	4,163	49,308	14,123	2,454	367	25,952	6,789	166,304	37,501	205,274	20,065
1910.	11,700	4,599	1,092	4,031	47,750	13,749	2,150	369	27,237	7,200	159,280	37,279	199,604	19,784
1909.	11,919	4,614	1,143	3,885	44,960	12,947	2,524	453	27,833	7,710	169,451	40,872	207,283	21,296
1908.	12,411	4,797	1,203	4,014	43,838	12,678	2,984	659	29,456	8,927	194,246	48,448	236,280	24,972
1907.	12,181	4,454	1,106	3,603	42,921	12,506	2,360	428	27,809	7,492	178,898	41,173	212,299	21,679
1906.	12,386	4,490	1,090	3,555	42,993	12,452	2,085	419	27,577	7,831	184,915	45,112	203,701	22,654

* Including some cases of cattle theft.

JAILS

Jail administration in India is regulated generally by the Prisons Act of 1894, and by rules issued under it by the Government of India and the local governments. The punishments authorised by the Indian Penal Code for convicted offenders include transportation, penal servitude, rigorous imprisonment (which may include short periods of solitary confinement), and simple imprisonment. Accommodation has also to be provided in the jails for civil and under-trial prisoners.

The origin of all jail improvements in India in recent years was the Jail Commission of 1889. The report of the Commission, which consisted of only two members, both officials serving under the Government of India, is extremely long, and reviews the whole question of jail organization and administration in the minutest detail. In most matters the Commission's recommendations have been accepted and adopted by Local Governments, but in various matters, mainly of a minor character, their proposals have either been rejected *ab initio* as unsuited to local conditions, abandoned as unworkable after careful experiment or accepted in principle but postponed for the present as impossible.

The most important of all the recommendations of the Commission, the one that might in fact be described as the corner stone of their report, is that there should be in each Presidency three classes of jails: in the first place, large **central jails** for convicts sentenced to more than one year's imprisonment; secondly, **district jails**, at the head-quarters of districts; and, thirdly, **subsidiary jails** and "lock-ups" for under-trial prisoners and convicts sentenced to short terms of imprisonment. The jail department in each province is under the control of an Inspector-General; he is generally an officer of the Indian Medical Service with jail experience, and the Superintendents of certain jails are usually recruited from the same service. The district jail is under the charge of the civil surgeon, and is frequently inspected by the district magistrate. The staff under the Superintendent includes, in large central jails, a Deputy Superintendent to supervise the jail manufactures, and in all central and district jails one or more subordinate medical officers. The executive staff consists of jailors and warders, and convict petty officers are employed in all central and district jails, the prospect of promotion to one of these posts being a strong inducement to good behaviour. A Press Note issued by the Bombay Government in October, 1915, says:—"The cadre and emoluments of all ranks from Warder to Superintendent have been repeatedly revised and altered in recent years. But the Department is not at all attractive in its lower grades. The two weak spots in the jail administration at the moment are the insufficiency of Central Prisons and the difficulty of obtaining good and sufficient warders."

Employment of Prisoners.—The work on which convicts are employed is mostly carried on within the jail walls, but extra-mural employment on a large scale is sometimes allowed, as, for example, when a large number of convicts were employed in excavating the Jhelum Canal in the Punjab. Within the walls prisoners are employed on jail service and repairs, and in workshops. The main principle laid down with regard to jail manufactures is that the work must be penal and industrial. The industries are on a large scale, multifarious employment being condemned, while care is taken that the jail shall not compete with local traders. As far as possible industries are adapted to the requirements of the consuming public departments, and printing, tent-making, and the manufacture of clothing are among the commonest employments. Schooling is confined to juveniles; the experiment of teaching adults has been tried, but literary instruction is unsuitable for the class of persons who fill an Indian jail.

The conduct of convicts in jail is generally good, and the number of desperate characters among them is small. Failure to perform the allotted task is by far the most common offence. In a large majority of cases the punishment inflicted is one of those classed as "minor." Among the "major" punishments fetters take the first place. Corporal punishment is inflicted in relatively few cases, and the number is steadily falling. Punishments were revised as the result of the Commission of 1889. Two notable punishments then abolished were shaving the heads of female prisoners and the stocks. The latter, which was apparently much practised in Bombay, was described by the Commission as inflicting exquisite torture. Punishments are now scheduled and graded into major and minor. The most difficult of all jail problems is the internal maintenance of order among the prisoners, for which purpose paid warders and convict warders are employed. With this is bound up the question of a special class of well-behaved prisoners which was tried from 1905 onwards in the Thana Jail.

Juvenile Prisoners.—As regards "youthful offenders"—*i.e.*, those below the age of 15—the law provides alternatives to imprisonment; and it is strictly enjoined that boys shall not be sent to jail when they can be dealt with otherwise. The alternatives are detention in a reformatory school for a period of from three to seven years, but not beyond the age of 18; discharge after admonition; delivery to the parent or guardian on the latter executing a bond to be responsible for the good behaviour of the culprit; and whipping by way of school discipline.

The question of the treatment of "young adult" prisoners has in recent years received much attention. Under the Prisons Act, prisoners below the age of 18 must be kept separate from older prisoners, but the recognition of the principle that an ordinary jail is not a fitting place for adolescents (other than youthful habituals) who are over 15, and therefore ineligible for admission to the reformatory school, has led Local Governments to consider schemes for going beyond this by treating young adults on the lines followed at Borstal, and considerable progress has been made in this direction. In 1905, a special class for selected juveniles and young adults was established at the Dharwar

jail in Bombay; in 1908 a special juvenile jail was opened at Alipore in Bengal; in 1909 the Meiktila jail in Burma and the Tanjore jail in Madras were set aside for adolescents, and a new jail for juvenile and "juvenile adult" convicts was opened at Bareilly in the United Provinces; and in 1910 it was decided to concentrate adolescents in the Punjab at the Lahore District jail, which is now worked on Borstal lines. Other measures had previously been taken in some cases; a special reformatory system for "juvenile adults" had, for example, been in force in two central jails in the Punjab since the early years of the decade, and "Borstal enclosures" had been established in some jails in Bengal. But the public is slow to appreciate that it has a duty towards prisoners, and but little progress has been made in the formation of Prisoners' Aid Societies except in Bombay and Calcutta, though even in those cities much remains to be done.

Reformatory Schools.—These schools have been administered since 1899 by the Education department, and the authorities are directed to improve the industrial education of the inmates, to help the boys to obtain employment on leaving school, and as far as possible to keep a watch on their careers.

Transportation.—Transportation is an old punishment of the British Indian criminal law, and a number of places were formerly appointed for the reception of Indian transported convicts. The only penal settlement at the present time is Port Blair in the Andaman Islands.

Commission of Enquiry, 1919.—A committee was appointed to investigate the whole system of prison administration in India with special reference to recent legislation and experience in Western countries. Its report, published in 1921, was summarised in the Indian Year Book, 1922 (pages 670-671). A number of reforms were advocated but, owing to financial stringency, it has not yet been possible to introduce some of the more important of them.

Fines and Short Sentences.—Those sections of the Indian Penal Code, under which imprisonment must be awarded when a conviction occurs, should be amended so as to give discretion to the court. Sentences of imprisonment for less than twenty-eight days should be prohibited.

The Indeterminate Sentences.—The sentence of every long-term prisoner should be brought under revision, as soon as the prisoner has served half the sentence in the case of the non-habitual, and two-thirds of the sentence in the case of the habitual, remission earned being counted in each case. The revision should be carried out by a Revising Board, composed of the Inspector-General of Prisons, the Sessions Judge and a non-official. In all cases, the release of a prisoner on parole should be made subject to conditions, breach of which would render him liable to be remanded to undergo the full original sentence. The duty of seeing that a prisoner fulfils the conditions on which he was released should not be imposed upon the police or upon the village headman, but special officers, to be termed parole officers, should be appointed for the purpose. These parole officers should possess a good standard of education, though not necessarily a university degree, and should both protect and advise the released prisoner and report breaches of the conditions of release.

Transportation and the Andamans.—If any fresh attempt at colonisation is made, it should be in an entirely new locality. A fresh attempt at colonisation in the Middle Andaman is not recommended. The retention of the settlement at Port Blair on the present lines is not recommended. The entire abandonment of the Andamans as a place of deportation is not recommended. Deportation to the Andamans should cease, except in regard to specially dangerous prisoners and any others whose removal from Indian jails is considered by the Government to be in the public interests. The existing restrictions as to age and physical condition of prisoners sentenced to transportation to the Andamans should, unless special medical grounds exist in any particular case, cease to apply. The Indian Penal Code should be amended by the substitution of rigorous imprisonment for transportation. In provinces where the available prison accommodation will not permit of the immediate cessation of deportation of all but selected prisoners, the Star class should be the first, and the habitual the last, to be detained in Indian jails. No female should in future be deported to the Andamans, and those now there should be brought back to India and distributed among the Provinces to which they belong. In those Provinces where the jails are insufficient to detain prisoners now deported, additional accommodation should be provided as soon as possible.

Criminal Tribes.—The first essential of success in dealing with the criminal tribes is the provision of a reasonable degree of economic comfort for the people. It is therefore of paramount importance to locate settlements where sufficient work at remunerative rates is available. Large numbers of fresh settlers should never be sent to a settlement without first ascertaining whether there is work for them. Commitment to settlements should, as far as possible, be by gangs not by individuals. It is desirable to utilise both Government and private agency for the control of settlements.

The variations of the jail population in British India during the five years ending 1921 are shown in the following table:—

——	1921.	1920.	1919.	1918.	1917.
Jail population of all classes on 1st January	118,250	120,133	122,158	115,589	115,731
Admissions during the year	593,348	578,109	696,568	605,242	547,810
Aggregate	711,598	698,242	818,726	720,831	663,541
Discharged during the year from all causes	584,681	579,992	698,591	598,673	547,931
Jail population on 31st December ..	126,917	118,250	120,135	122,158	115,610
Convict population on 1st January ..	100,541	101,617	100,220	95,468	102,208
Admissions during the year	176,056	168,572	200,442	166,303	160,556
Aggregate	276,597	270,189	300,662	261,771	262,764
Released during the year	167,403	166,184	195,164	156,378	165,575
Transported beyond seas	537	1,556	1,208	1,471	1,544
Casualties, &c.	2,832	2,563	3,584	4,590	2,452
Convict population on 31st December.	106,117	100,541	101,617	100,220	95,468

More than one-half of the total number of convicts received in jails during 1921 came from the classes engaged in agriculture and cattle tending, about 145,000 out of 176,000 are returned as illiterate.

The percentage of previously convicted prisoners was 13·37 as against 15·16 in 1920 while the number of youthful offenders rose from 399 to 417. The following table shows the **nature and length of sentences** of convicts admitted to jails in 1919 to 1921:—

Nature and Length of Sentence.	1921.	1920.	1919.
Not exceeding one month	38,661	38,706	45,130
Above one month and not exceeding six months.	73,362	70,745	83,535
„ six months „ „ one year ..	32,356	31,916	37,979
„ one year „ „ five years ..	25,257	21,550	26,045
„ five years „ „ ten „ ..	3,240	2,796	3,866
Exceeding ten years	428	227	239
Transportation beyond seas—			
(*a*) for life	1,439	1,277	2,011
(*b*) for a term	437	628	828
Sentenced to death	878	750	868

The total daily average population for 1921 was 99·41 the total offences dealt with by criminal courts was 735, and by Superintendents 127,595. The correaponding figures for 1920 were 98,876,232 and 139,105 respectively.

The total number of corporal punishments showed a decrease, *viz.*, from 294 to 234. The total number of cases in which penal diet (with and without solitary confinement) was prescribed was 6,037 as compared with 6,555 in the preceding year.

Total expenditure increased from Rs. 1,53,46,545 to Rs. 1,67,54,616 and total cash earnings increased from Rs. 20,42,981 to Rs. 28,67,629; there was, consequently an increase of Rs. 5,65,983 in the net cost to Government.

The death rate increased from 19·76 per mille in 1920 to 20·36 in 1921. The admissions to hospital were higher, and the daily average number of sick fell from 29·88 to 28·32. The chief causes of death were tubercle of the lungs, dysentery and pneumonia.

The Laws of 1923

BY

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(*Editors, "Bombay Law Reporter"*).

The Criminal Tribes Amendment Act.—In 1911, the Crimes Tribes Act was enacted by the Government of India to regulate the movements and exercise strict watch over criminal tribes in different provinces in India. A conference was held in Delhi in 1919 consisting of representatives of British Indian Provinces and Indian States to consider the working of the Act. To carry out the recommendations made by that conference the present Act was passed. It extends the provisions of the Act to Rangoon proper and the presidency towns. When a criminal tribe is restricted in its movements to a specified area it requires the sanction of the local Government before it be allowed to move to another area: this machinery was cumbrous and slow to move. This can now be done by an officer specially empowered in that behalf, if the movement is to another area in the same district (section 5). When the movement is to another province the sanction of the local Government of that province is to be taken (section 13A). Similarly a criminal tribe can be moved to the territory of an Indian State (section 27A). Section 22 has been amended and a member of a criminal tribe can be arrested without warrant for an offence punishable under the section.

The Malabar (Completion of Trials) Supplementing Act.—On the outbreak of widespread riots in Malabar, the Governor-General of India in Council promulgated an Ordinance for Completion of Trials. In due course the Ordinance would expire by efflux of time. The Madras Legislative Council, therefore, passed Act I of 1923 for Completion of the Trials. The Act gave appellate jurisdiction to the Madras High Court. It was discovered that the vesting of the jurisdiction aforesaid was *ultra vires* of the Madras Legislature. The present Act is accordingly passed to confer the appellate jurisdiction on the Madras High Court.

The Cotton Transport Act.—The Indian Cotton Committee which sat in 1917 was of opinion that the long staple cotton ran great danger of losing its character and reputation. It pointed out that the danger arose in four different ways: (1) by admixture of long staple cotton with short staple cotton in certain local areas; (2) this admixture led to the deterioration of the genuine seed and was responsible for inferior product; (3) soft cotton waste also used for adulteration; and (4) short staple cotton was first railed to long-staple area and thence re-booked as long-staple cotton. To check these rapidly growing evils, this Act has been enacted. Section 3 gives power to local Government to issue notification prohibiting import of cotton into a protected area. Section 4 permits the Station-Master of any railway station outside a protected area to decline to accept for transmission any packages or bales of cotton to any station within the area so prohibited. If a manufacturer within such area wishes to import cotton from outside he can do so under a license. Section 5 authorises the station-master within the prohibited area to decline to deliver any smuggled cotton. Any person offending against any of the foregoing provisions is liable to be sentenced to pay a fine of Rs. 1,000 on first conviction; and to suffer imprisonment for three months or to pay a fine of Rs. 5,000 or both on any subsequent conviction. No suit or other legal proceeding can lie against any person for anything done in good faith under the Act (section 9).

The Indian Mines Act.—The earlier Act relating to Mines was passed in 1901. It has had to race with, or at the very least, to keep pace with factory legislation which was moving rather rapidly in India. In the meanwhile the International Labour Conference met in Washington in 1921; and later at Geneva. The recommendations made at these conferences had to be translated into the provisions of an Act of Legislature. The new Act is hence a notable departure from the old one. The "Child" which hitherto was of twelve years has an extension of one year more (section 3 (*c*)). The definition of 'mine' is enlarged. It means "any excavation where any operation for the purpose of searching for or obtaining minerals" is going on and includes all upper works as well as operations below the surface (section 3 (*f*)). The 'week' has been so defined as to make every Sunday a day of rest (section 3 (1)). Chapter II deals with the appointment and powers of the Chief Inspector and Inspectors of Mines (sections 4-9). Chapter III treats of Mining Boards and Committees. The former consists of (1) a Government Officer, (2) Chief Inspector, (3) two persons to represent employees appointed by local Government and (4) two persons nominated by mine owners (section 10). The Committee is composed of (1) a Chairman nominated by Local Government; (2) a duly qualified person nominated by Chairman; (3) one person appointed by Government to represent labour and (4) one person nominated by mine owners (section 11). The mining board can exercise any of the powers of an inspector; and both the Board and the Committee have the power to enforce attendance of witnesses and to compel production of documents and material objects (section 12). Chapter IV regulates mining operations and management of mines. Every mine must have a duly qualified manager (section 15). Section 16 defines duties and responsibilities of owners, agents and managers. The provisions as to health and safety of operatives are contained in Chapter V. Every mine must provide for conservancy (section 17) and sufficient medical appliances (section 18). Where a danger not expressly provided for is found to exist, the Chief Inspector or an Inspector can have it safeguarded (section 19). Whenever an accident happens, due notice of it should be given (section

20). The Government have the power to appoint Court of Inquiry in the case of an accident (section 21); and the report made by the Court may be published (section 22). Chapter VI revises the hours and limitation of employment in the light of resolutions adopted at the International Labour Conferences. The hours of employment in a mine are limited to six days in a week; and to fifty-four hours in a week for under-ground works (section 23); but in cases of emergency, the limit may be exceeded (section 25). A child cannot be employed in under-ground work (section 26). The Chapter following gives to the Governor-General in Council power to make rules, regulations and bye-laws. Chapter VIII speaks of penalties and procedure. Section 34 penalises obstruction to Inspector with three months' imprisonment and a fine of Rs. 500; and the same punishment is improvised for falsification of records (section 35). A fine of Rs. 500 is provided for omission to furnish plans (section 36); for contravention of provisions regarding employment of labour (section 37); for omission to give notice of accidents (section 38); for contravention of law attended with dangerous results (section 40). Prosecution under the Act can only lie if complaint is made within six months of the date of offence (section 42). Only a Presidency Magistrate or a First Class Magistrate can take cognizance of the offence (section 43). The provisions of the Act apply to Crown Mines also (section 48).

The Indian Boilers Act.—Hitherto every province had its own local Act to govern the regulation and inspection of steam boilers. It gave occasion to much diversity and also to contradiction in the provisions. The regulation of boilers became an all India subject under the Devolution Rules. The Indian Government, therefore, unified the provisions of the Boilers Acts in one general uniform measure. The local Government has the power to appoint Chief Inspectors and Inspector under the Act (section 5). No one can use unregistered or uncertified boiler (section 6). Every boiler in use must be registered (section 7) and the certificate granted must be renewed from time to time (section 8). Pending the grant of a certificate the boiler may be used (section 10). A certificate once granted is liable to be revoked (section 11). No structural alteration, addition or renewal can be made in a boiler without the sanction of the Chief Inspector (section 12); alterations in steam pipes are subject to the like control (section 13). Every owner is bound to give every facility to an Inspector for examination of boilers (section 14). The Inspector has the right of entry for the purpose (section 17). Whenever any accident occurs to a boiler or a steam-pipe it should be reported to the Inspector (section 18). An appeal lies from an order passed by an Inspector to the Chief Inspector (section 19); and to the appellate authority from an order passed by the Chief Inspector (section 20). The orders passed by the appellate authority are final and cannot be called in question in any Court (section 21). A penalty of a fine of Rs. 100 is provided for (1) refusal to produce certificate (section 22) and (2) illegal use of boiler (section 23). A fine of Rs. 500 can be inflicted for omission to report transfer of boilers from one place to another, or to fix the register number on a boiler or to report structural alterations in a boiler, or for tampering with the safety-valve (section 24), or for tampering with register-mark (section 25). Prosecutions under the Act must be instituted within six months (section 26) and can be entertained only by a Presidency Magistrate or a First Class Magistrate (section 27). The fees and penalties under the Act are recoverable as arrears of land revenue (section 32). The Act applies also to boilers belonging to the Crown (section 33).

The Cantonments (House Accommodation) Act.—Almost every cantonment in India has houses built by private owners. Those houses are allowed to be built on cantonment terms which are that on military emergency the houses are to be vacated by their owners or tenants and they are placed at the disposal of Government which pays reasonable rent for their use and occupation. Every house within cantonment limits is liable to appropriation by Government on lease (section 5). Such a house can be inspected prior to military occupation (section 6) and the owner can be called upon to execute a lease of it in favour of Government for such period as may be required (section 7). Before a house can be occupied for a hospital, school, hostel, bank, hotel, shop or club, previous sanction of the Officer Commanding must be obtained (section 9). A house cannot be appropriated if it is already occupied by a school, etc.,or by a railway administration or by a club or by the owner himself (section 10). Where a house is appropriated, a notice of 21 days is given for unoccupied houses and of thirty days for occupied houses (section 11) or a notice of six months in cases of long term tenancies (section 14.) On failure of the owner to give up peaceful possession, the District Magistrate shall enter upon the premises and enforce the surrender of the house (section 12). Under certain circumstances the owner can call upon the Government to buy up his house (section 13). The owner can require arbitration on the question of rent (section 15) or of repairs (section 16). When there is devolution of interest in a house in a cantonment notice of it should be given to the Commanding Officer (section 18). Sections 19 to 23 deal with Committees of arbitration and their powers. A decision of the Committee may be appealed from to the Civil Court (section 19). An appeal also lies to the Officer Commanding from an order under section 7 (section 20) but his decision is final (section 32). No suit or other legal proceeding can lie against any person for any thing done in good faith under the Act (section 38).

The Indian Naval Armament Act.—In 1922,a treaty between all the world naval powers was signed at Washington for the Limitation of Naval Armaments. The present Act is passed to fulfil the obligations imposed by that treaty. Its object is to lay down restrictions on the buildings of vessels of war and for the adapting of any ship for use as a vessel of war. It is, therefore, enacted that no person shall "build any vessel of war, or alter, or arm or equip any ship so as to adapt for use as a vessel of war" (section 3). A person offending against the Act is liable to be sentenced to imprisonment for two years or to pay a fine of Rs. 1,000 (section 5). The ship so illegally built or fitted out is liable

to forfeiture (section 6). Power is given to search a suspected ship (section 7). Only a Presidency Magistrate or a Magistrate of the First Class can try offences under the Act (section 13). A person acting *bona fide* under the provisions of this Act is protected against a suit or legal proceeding (section 14).

The Workmen's Compensation Act.—The trend of legislation in India has recently been in the wake of amelioration in the conditions of labour. The present Act forms a notable addition to it. The growth of large factories and industries has led to the huddling together of numbers of workmen on a scale never thought of before. Necessity, therefore, has arisen for safeguarding them. This safeguard cannot operate sufficiently through inspection by Government Officers: the legislature have therefore devised payment of monetary compensation by the employer for injury caused to his workmen (section 3). If the injury result in death the employer is liable to compensate in case of an adult workman with thirty months' wages or Rs. 2,500 whichever is less or to pay Rs. 200 in the case of a minor workman. In the case of permanent total disablement, he is liable to pay to an adult, forty-two months' wages of Rs. 3,500 whichever is less; or to a minor, eighty-four months' wages or Rs. 3,500. In the case of temporary disablement half of the salary during disablement or five years which is the shorter period (section 4). The claim to compensation must be lodged within six months of the accident (section 10). The person injured must permit himself to be medically examined free of charge if required (section 11). In certain cases a person employing a contractor to do "his trade or business" remains liable for injuries caused to the workman employed by the contractor (section 12). Where a workman has received compensation from his employer, but in reality a stranger is liable to pay it, the employer can recover the amount from the stranger (section 13). If the employer becomes insolvent, the workman can recover compensation from the insurer if any (section 14). The provisions of the Act are made applicable to masters of registered ships and seamen subject to qualifications mentioned in section 15. Any contract by a workman relinquishing any right of compensation from the employer for personal injuries caused to him is null and void (section 17). The questions relating to the liability to pay and the amount of compensation under the Act can be settled only by a Commissioner and not by a Civil Court (section 19). The Commissioner may be appointed by the Local Government (section 20). It is only when the parties concerned fail to settle the compensation by agreement that they can resort to the Commissioner (section 22), who has the powers of a Civil Court (section 23), and before whom the parties can appear by a lawyer (section 24). It is competent to the Commissioner to refer any questions to the High Court (section 27). If parties settle their differences by agreement, such agreement needs be registered by the Commissioner (section 28). If the agreement is not so registered the employer remains liable to pay full amount of compensation over again (section 29).

Appeals lie to the High Court from some of the orders of the Commissioner (section 30). The amount of compensation either under an agreement or otherwise may be recovered by the Commissioner as an arrear of land revenue (section 31).

The Indian Factories (Amendment) Act.—The introduction of sixty working hours in a week in a factory has led to the amendment in section 22 of the Factories Act of 1911 which makes provision for an intervening holiday. Where any person is employed on a Sunday in consequence of his having a holiday on one of the three days preceding that Sunday, that Sunday shall, for the purpose of calculating the weekly hours of work of such person, be deemed to be included in the preceding week (section 2). Not only "machinery" but "electrical fittings," also are required to be fenced (section 3).

The Indian Paper Currency Act.—This is a purely consolidating measure and boils down into one Act six different Acts enacted at different times. It starts with a definition of "universal currency note" of denominations ranging from Re. 1 to Rs. 100. Other denominations can be universalised in India by a Government Notification (section 2). These notes are interchangeable with current metallic coins (section 11). A universal currency note is payable at any office of issue throughout India (section 15). The issue of currency note is supported by a paper currency reserve. It consists of two parts: (1) the metallic reserve, consisting of the coined metal and gold and silver bullion held on that account by the Secretary of State or the Governor-General in Council; and (2) the securities reserve (section 18). Powers have been reserved to issue currency notes against bills of exchange (section 21). The Governor-General in Council may convert any of the coin or bullion in reserve into ordinary coin or bullion under section 11 (section 20). Coin and bullion not in India may under certain circumstances be deemed to be part of the reserve (section 22). Securities held in reserve may sometime be sold and replaced (section 27). No person can draw any bill or hundies or promissory notes payable to the bearer on demand or borrow on such instrument (section 25); if he does so he is liable to be fined in a sum equal to the amount of the instrument (section 26). A person is entitled to recover from Government the value of any lost, mutilated or imperfect currency note (section 28).

The Repealing and Amending Act.—The purpose of this Act is to remove unnecessary words and phrases from the existing Acts passed by the Indian legislature from time to time.

The Criminal Law Amendment Act.—This Act is popularly known as the Racial Distinctions Act. Under the Criminal Procedure Code as it stood hitherto European British subjects in India had privileges when tried for a criminal offence. These privileges always produced heart-burning in the Indian subjects of His Majesty. Time after time resolutions were moved in the Indian Assembly to do away with the preference shown; and even the present Viceroy promised to set matters right. A Commission was appointed to examine the question. The present Act is based on the recommendations of the Commission. A European British

subject cannot be tried by a Magistrate of the Second or Third Class when the offence is punishable with a fine exceeding Rs.50 or imprisonment (section 29A). Only the Court of Session can pass upon him a sentence of death, penal servitude, imprisonment or fine; but a District or First Class Magistrate can only sentence him to imprisonment for one year or fine up to Rs. 1,000 (section 34A). The equalisation is sought thus: section 275 and section 284A of the Criminal Procedure Code are so framed that a European British subject or an Indian British subject can claim that he should be tried by a jury or assessors the majority of which is drawn from his own countrymen. In cases where there is a joint trial of both, each one can claim a separate trial (section 285A). Chapter 33 of the Code has been re-cast. An Indian or a European British subject can claim as of right to be tried under this Chapter (section 443). In summons cases the Magistrate shall direct that the case be tried by a Bench of two Magistrates of First Class one of whom is a European and the other an Indian. If the two Magistrates differ, the whole case is to be laid before a Sessions Judge for decision. Any sentence passed is appealable (section 445). In warrant cases, the Magistrate, if he does not discharge the accused, should commit him to the Court of Session (section 446). The sentences passed are subject to ordinary appeals (section 447).

The Married Women's Property (Amendment) Act.—Section 6 of the Married Women's Property Act, 1874, has been so amended that if a Hindu effects an assurance on his life and expresses the policy to be for the benefit of his wife, on his death the wife becomes entitled to the money. The amendment settles the conflict between Madras High Court (37 Mad. 483) and Bombay High Court (37 Bombay 471) on the point.

Indian Cotton Cess Act.—The Indian Cotton Committee which met in 1917-18 recommended the constitution of a permanent Central Cotton Committee, which has now been called into being (section 4). There is also cess imposed of annas two on each standard bale of 400 lbs. for cotton exported by sea from India or consumed in any mill in British India (section 3). The proceeds of the sale are to be applied to "promoting agricultural and technological research in the interests of the cotton industry in India." (section 12).

The Indian Income-Tax Amendment Act.—The present Act seeks to remove two defects that have been discovered in the main Act. The perquisite enjoyed by a person in the shape of a rent-free residence is liable to income-tax (section 2). The adjustments of assessments of income tax which were introduced in 1922 are now made permanent from year to year (section 3).

The Government Savings Banks Amendment Act.—It always popularises an institution when every facility is given to the heirs of a deceased depositor to withdraw amount standing in his name. The set constitution of the Imperial Bank requires that for withdrawing such amount the heir or legal representative must be armed with either probate or letters of administration. This stringent requirement is now relaxed in the case of a savings bank deposit. Where the amount does not exceed Rs. 3,000 the Secretary, or where it does not exceed Rs. 1,000 any officer employed in the management, may pay it over to the heir, even in the absence of probate or letters of administration (section 4).

The Prisoners (Amendment) Act.—Section 29 of the Prisoners Act, 1920, is amended in a small particular and its provisions are extended to Central Provinces and Berar.

The Criminal Procedure (Amendment) Act.—A new section 29B is added to the Criminal Procedure Code, which empowers certain Magistrates to try juvenile offenders under the age of 15 years for offences not punishable with death or transportation for life, and deal with them under the Reformatory Schools Act. Section 59 has been amended to enable a private person to arrest any person who in his view commits a non-bailable offence or any proclaimed offender. Sections relating to security procedure are amended here and there. Section 133 relating to conditional order for removal of nuisance is drafted anew; and a new section 139A is added to provide procedure where existence of public right is denied. Sections 144 and 145 which deal with the fertile topic of disputes regarding immoveable property are greatly altered; and a new section 147 is put in to settle the disputes concerning rights of use of immoveable property. Under section 162, a statement made by any person to a police-officer in the course of the investigation need not be signed. It will not form any evidence at the trial. Section 195 regarding sanctions to prosecute has undergone great change. It is no longer competent now to give sanction to a private person; but only the public servant may obtain it. It was surmised that in some cases the sanctions were not *bona fide* taken out but were held *in terrorem* over their victims or used for the purpose of coercing them. The list of offences which can be compounded is much enlarged in the new section 345 and even the High Court in revision may allow a case to be compounded. The provisions for recovery of fines (s. 386) are made elaborate. The Magistrate may either issue a warrant for the levy of the amount by attachment and sale of the offender's moveable property; or issue a warrant to the Collector authorising him to raise it by sale of moveable or immoveable property of the offender. An appeal has been provided in security proceedings. An order for security under section 118, if passed by a Presidency Magistrate, is appealable to the High Court; or if passed by any other Magistrate, to the Court of Session. Similar appeals are provided against orders rejecting surety under section 122. A new section 415A provides that where more than one person are jointly tried at one trial and an appealable sentence is passed on one of them only, all the accused have a right of appeal. Sections 439 is altered; and when a person is called upon to show cause why a sentence passed upon him should not be enhanced, he can also show cause against his conviction. The section 476 referring to directions to prosecute is made more precise; and a superior Court is now given power to act under it when the lower Court has not acted (section 476A). An order passed under the foregoing is now made appealable (section

section 488 relating to maintenance is relaxed a little; no warrant can issue for recovery of the amount unless the application is made within a year of the order. The powers to issue a writ of Habeas Corpus which were hitherto confined to the High Courts in their original jurisdiction are now extended to the limits of their appellate jurisdiction as well. An important diversion is made in the law of bail (section 497) and the Court may direct that any person under the age of sixteen years or any woman or any sick or infirm person accused of a non-bailable offence be released on bail. When a surety to a bond dies or becomes insolvent the Court may order the person bound over to furnish fresh security (section 514A). A new section (section 516A) is introduced to empower the Court to pass orders as regards custody of property pending the disposal of a case when a person is accused of an offence under the Naval Discipline Act or the Army Act or the Air Force Act. The High Court can, on the application of the Advocate General, transfer the case to itself (section 625). When allegations are made against the conduct of a public servant in the course of an inquiry or trial, the party complaining may put in an affidavit in support of his allegations (section 539A). A Judge or a Magistrate can when he thinks fit make local inspection, but must record a memorandum of any relevant facts observed at such inspection (section 539B). The inherent powers of the High Court are expressly saved in section 561A. The beneficent provisions of section 562 are greatly enlarged. Any person not under 21 years of age convicted of an offence punishable with imprisonment for not more than 7 years; any person under 21 years or a woman convicted of an offence not punishable with death or transportation, and without any previous conviction, may be released on probation of good conduct. The order may be passed by an appellate Court or even a Court in revision (section 562).

The Indian Official Secrets Act.—There were hitherto two Acts on the subject: (1) The Indian Official Secrets Act of 1889 and the English Official Secrets Act of 1911. Both of these applied to India. The latter is replaced by a more comprehensive provision in England in 1920; but the latter statute does not apply to India. The three Acts are consolidated in the present measure. Penalties for spying are stringent and vary from imprisonment for three years to fourteen years (section 3). At the trial, communications with foreign agents are by themselves evidence of commission of certain offences (section 4). Wrongful communication of official secret is punishable with two years imprisonment or fine (section 5) and a similar penalty is provided for unauthorised use of uniforms, or falsification of reports, etc. (section 6); or for interference with officers of police or members of His Majesty's forces (section 7). An attempt or abetment is punishable with the same severity (section 9). Harbouring of spies is visited with imprisonment for one year or fine (section 10). Section 14 empowers the Court to hold proceedings in camera. For an offence by a company or a corporation, every director or officer in the Company is liable (section 15).

The Indian Penal Code (Amendment) Act.—In 1910, there met at Paris the International Convention for the suppression of White Slave Traffic. The Convention adopted certain resolutions to that end. Those resolutions which were accepted by the Government of India are carried out by this measure. Any person inducing a woman to go from any place for immoral purposes is liable to be punished under Section 366. Procuration of girls under 16 years of age for sexual purposes is penalised with imprisonment of ten years and fine (Section 366A.) Importation of girls under 21 years of age from any country outside India for illicit intercourse is made punishable likewise (section 366B).

The Indian Merchant Shipping Act.—The first Indian Merchant Shipping Act was passed in 1838; since then it was amended from time to time by a number of Acts, the last one being of 1920. All these Acts are consolidated and unified into one measure of legislature. As there is nothing characteristically new, the provisions of the new Act are not dealt with here.

The Makharoda and Goontia Villages Laws Act.—This is an administrative measure. In 1905, on the establishment of the province of Eastern Bengal and Assam, the District of Sambalpur (excepting the Chandarpur-Padampur Zemindari and the Phuljhar Zemindari) was transferred from Central Provinces to Bengal; and the Calcutta High Court was given jurisdiction over the District. Later, when Bihar and Orissa were created into a separate province, Sambhalpur was transferred there and in the constitution of the Patna High Court jurisdiction over Sambhalpur District went over to that Court. Thus the Chandarpur-Padampur and Phuljhar Zemindaries remained in the Central Provinces; similarly it was intended to retain the Malkharoda Jaghir and Goontia villages in those provinces. This intention is now made clear by this enactment.

The Legal Practitioners (Women) Act.—Although both branches of the Legal profession were opened to women in England during the war-time, India lagged behind and clung to the time-worn prejudice. The Patna High Court actually refused admission as a pleader to Miss Hazra. Some time ago the Calcutta High Court did the same to a distinguished lady graduate in law; and some years ago the Bombay High Court similarly treated the application of Miss Sorabji. Section 3 of this Act opens out all the three branches of the legal profession in India to women. It always was so open in France and America.

The Indian States (Protection Against Disaffection) Act.—This Act has a history of its own. When it was first introduced in the Legislative Assembly, it was thrown out unceremoniously. Then in spite of opposition of some members, it was passed by a majority in the Council of State. The Governor-General then certified it under the powers reserved to him under section 67B of the Government of India Act and it received the assent of His Majesty in due course. The Act provides that if any person is found guilty of sedition against "any Prince or Chief of a State in India or the Government or the Administration established in any such State" he shall be sentenced to five years' imprisonment or fine or

both (section 3). No Court inferior to that of a Presidency Magistrate or a Magistrate of the First Class can try the case and that too on a complaint made under the authority of the Governor-General in Council (section 5).

The Mahendra Partab Singh Estates Act.—The property belonging to Kunwar Mahendra Partab Singh was attached under Regulation III of 1818; but the attachment permitted the Government merely to collect the rents, meeting the revenue and the cost of management and accumulating the net profits until the estate was released. This Act enables Government to vest in itself the interest of the offender, in order that it may subsequently regrant it to his minor son and his heirs under a Sanad. Pending the re-grant the estate will be managed by the Court of Wards in trust for the minor.

The Moorshedabad Amendment Act.—The Indenture entered into by the Nawab of Murshedabad on March 12, 1891, and legalised by Murshedabad Act XV of 1891 prevents him from executing leases of any of his property for a term exceeding twenty-one years. The restriction is now relaxed and he can lease out his property for any term "provided the terms and conditions are approved by the Governor of Bengal in Council" (section 2).

The Code of Civil Procedure (Amendment) Act.—Under section 60 of the Code, when the salary of an employee is Rs. 20 the whole salary is exempt from attachment in execution of a decree against him; and Rs. 20 are so exempt when the salary exceeds Rs. 20 but does not exceed Rs. 40. Now all salaries under Rs. 40 are wholly exempt from attachment; and Rs. 40 are also exempt when a salary ranges from Rs. 40 to Rs. 80.

The Indian Income-Tax (Further Amendment) Act.—Section 4 of the Indian Income-Tax Act 1922 is now so amended that "income received in or brought into British India" shall be deemed to have accrued in British India. A new Chapter VA is added with reference to certain classes of shipping. A new section 44A is added which levies tax on occasional shipping belonging to concerns whose principal place of business is not in British India and who have no regular agents in India from whom the tax could be levied (section 44A).

The Indigo Cess (Repealing) Act.—The Indigo Cess (Amendment) Act levied a cess of Rs. 1-8-0 per cwt. of indigo produced in India and exported, in order to meet expenses of research work in the interests of the indigo industry in India. The research work is now complete and the cess is removed.

The Civil Procedure Code (Amendment) Act.—A decree for restitution of conjugal rights could be enforced under Order XXXI, rule 1 "by the detention in the civil prison" also; this provision is now removed; and it can now only be enforced "by the attachment of his (defaulter's) property." Thus, the law is now made uniform both with regard to husband and wife; and neither can be imprisoned for failure to obey a decree for restitution of conjugal rights.

The Special Marriage (Amendment) Act.—Some years ago Mr. B. N. Basu proposed a bill which broke through high fences of castes and creeds for purposes of marriage. It evoked a storm of opposition then and the bill had to be dropped. Before the embers of the controversy that raged then could die out, there arose from its ashes another bill framed by Mr. V. J. Patel, who left out the creeds and proposed breaking through different castes; that is, any Hindu can marry any other Hindu. It also provoked another storm and series of protest meetings throughout India. The second bill also came to grief. The provisions of the Special Marriage Act of 1872 are now applied to "Hindu, Budhist, Sikh or Jaina religion." In other words the amendment now obviates the necessity of a declaration that the parties entering into a special marriage are not Hindus, Budhists, Sikhs, etc. There are some novel features. A person entering into a special marriage, if a member of an undivided Hindu family, ceases *ipso facto* to be its member (section 22). Succession to his property is governed by the Indian Succession Act 1865 (section 24). He is not to have right of adoption (section 25). If his father has no other son the father can adopt another son (section 26).

The Indian Territorial and Auxiliary Forces (Amendment) Act.—Where a person whose period of service is about to expire under the Indian Territorial Force Act or the Auxiliary Force Act, commits a serious military offence, he can, although he ceases to belong to such force, still be tried by Military Court-Martial.

The Indian Lunacy (Amendment) Act.—If a person is once the subject of a reception order, taken to a mental hospital and discharged as cured, he still remains liable under the law as it stood to be sent to the mental Hospital any time during his life-time without a fresh reception order. This defect is now remedied, and a reception order now remains in operation only for 30 days from its date, or if acted upon, until the lunatic is discharged from the asylum.

The Indian Army (Amendment) Act.—The Indian Army Act is now made applicable to officers, warrant officers and non-commissioned officers of the Royal Air Force (section 2). A new section is added by which the report of a chemical analyser "which proved itself under section 510 of the Criminal Procedure Code, is also a proof by itself in the proceedings before a Court martial (section 91A). If a person tried by a Court martial is found to be insane, ample powers have been given to the Governor-General of India in Council to deal with him (section 103A).

The Cutchi Memons (Amendment) Act.—The Cutchi Memons Act XLVI of 1920 enabled a Cutchi Memon to take advantage of the Act and to permit himself and his descendants to be governed by the principles of Mahomedan law in matters of succession and inheritance. It is now enacted, that only a Cutchi Memon "(1) who has attained majority and (2) who is resident in British India" can take advantage of the Act (section 2). If the prescribed authority refuses to accept his declaration, he can appeal from the order, section 2 (2).

The Code of Criminal Procedure (Further Amendment) Act.—"Mukhtars" in the Bengal Presidency are made to undergo a test by the Calcutta High Court: and their license to practise is renewed from year to year. They were required in each case to obtain permission of the Court before they could file appearance on behalf of their client. This later disability is now removed and they can now appear as a matter of right.

The Indian Paper Currency (Amendment) Act.—The Government of India have now been empowered to issue currency notes to the extent of 12 crores of rupees in order to anticipate and prevent monetary stringency as a temporary measure; the additional issue so put into circulation to be automatically retired when the necessity ceases (section 4).

The Code of Criminal Procedure (Second Amendment) Act.—When an offender is sentenced to pay a fine which is not paid forthwith, the Court may order that the fine may be paid in full or in instalments within thirty days of the date of the order. The sentence on offender may be suspended and he may be released (section 388). Where a young person is convicted for the first time with theft, misappropriation, cheating or any offence not punishable with more than two years' imprisonment, can, instead of being sentenced be released 'after due admonition" (section 562).

The Land Acquisition (Amendment) Act.—When any land is notified for compulsory acquisition under the Land Acquisition Act 1894, any person interested in the land may within 30 days of the notification object to the acquisition of the land. The objection shall be made in writing to the Collector, who shall give the objector an opportunity of being heard in person or by pleader, and shall ultimately submit a report to the local Government. The decision of the local Government shall be final (section 5A).

The Indian Ports (Amendment) Act The increase in the use of oil as fuel on ships has necessitated certain precautionary measures in port limits. The Bombay Port Trust is authorised to regulate the manner in which oil or water mixed with oil shall be discharged in any such port and for the disposal of the same.

The Indian Electricity (Amendment) Act.—The amendment enables railway companies to remove trees not growing on their land which may come in the way of their aerial line.

The Charitable and Religious Trusts (Amendment) Act.—The powers which are hitherto exercisable under the Act by the District Courts alone can now be exercised by Subordinate Judges specially empowered in that behalf.

The Mussulman Wakf Act.—Every Muttuwali is now obliged to furnish to the Court the following particulars relating to the Wakf; (1) description of Wakf property; (2) its gross annual income; (3) the gross income during five preceding years; (4) amount of Government revenue and cesses, and rents payable by the property; (5) estimate of expenses of realisation of income; and (6) the amount set apart for purposes of the Wakf (section 3). The particulars so furnished shall be duly published by the Court (section 4). The Muttuwalli has to submit annual accounts before June 30 in each year (section 5); which accounts would be audited under supervision of the Court (section 6). Any person can obtain copies of the statement of particulars under section 3 or 4; or any statement of accounts furnished under section 5 or any audit report made under section 6 (section 9). If any Muttuwali gives false particulars or accounts he is liable to be fined in Rs. 500 on first conviction; and to a fine of Rs. 2,000 on each subsequent conviction (section 10).

The Indian Stamp (Amendment) Act.—The stamp duties on "share-certificates (Art. 19), letter of allotment of shares (Art. 36), letter of credit (Art. 37), proxies (Art. 52)" are enhanced from one anna to two annas (section 2). All promissory notes were hitherto stamped uniformly at one anna irrespective of the amount. Promissory notes payable on demand are now subjected to a telescopic scale of fees. All pro-notes under Rs. 250 in value remain leviable at one anna; when the amount exceeds Rs. 250 but does not exceed Rs. 1,000 a stamp duty of annas two is fixed. On higher amounts a uniform rate of four annas is levied. When promissory notes are payable otherwise than on demand, they are chargeable as bills of exchange.

The Botanical Survey is under the direction of the Superintendent of the Royal Botanic Garden, Calcutta, with whom are associated the Economic Botanists belonging to the Agricultural Department. In 1912 the post of Reporter on Economic Products was abolished and replaced by that of Economic Botanist to the Botanical Survey. Much of the systematic botanical work of India is done for the department by forest officers and others. Over 2,000 specimens were obtained in 1911-12 by the officer deputed to accompany the Abor Expedition as botanist, and a material addition was made to the information available as to the vegetation of the little-known frontier region traversed.

Geological Survey.—The first object of the Department is the preparation of a general geological map of India. Various economic investigations, which form an increasingly important part of the Department's work, are also conducted. These include investigation of marble and sandstone quarries for the purpose of building Imperial Delhi, the examination of the Korea coal-field in the Central Provinces, of petroliferous localities in the Punjab and North-West Frontier Province, of pitchblende areas in the Gaya District, &c.

Zoological Survey.—A scheme for the formation of a Zoological Survey on the basis of the Zoological and Anthropological Section of the Indian Museum, Calcutta, came into force in July, 1916. The proposals as sanctioned by the Secretary of State mainly are as follows:—The headquarters of the Survey will be the Indian Museum. The scheme regarding the Zoological Survey entails the breaking up of the organisation now known as the Zoological and Anthropological Section of the Indian Museum into two parts, one of which will become a Government department under the title of the Zoological Survey of India, and will be primarily concerned with zoological investigation and exercise such advisory functions as may be assigned to it by Government, while the other part will remain as the office of the Trustees of the Indian Museum and will be organised for the present on the lines laid down in the existing by-laws of the Museum. It will be the duty of the Zoological Survey to act as guardians of the standard zoological collection of the Indian Empire, and as such to give every assistance in their power both to officials and to others, in the identification of zoological specimens submitted to them, arranging, if requested to do so, to send collections to specialists abroad for identification in cases in which no specialist is available in India. The Director of the Survey is Dr. Anandale.

Mammal Survey.—The Survey was instituted in the year 1912 with the object of making as complete a study as possible of the occurrence and distribution of Mammals in India, Burma and Ceylon, and with the further object of supplementing the collection of Indian Mammals at the Bombay Natural History Society's Museum and at the British Museum as well as at the Natural History Museums in India, the primary object of the Survey being the furtherance of our knowledge of Indian Mammalian Fauna. Up to 1891 Naturalists in India had to rely for information on Dr. Jerdon's "Mammals of India" published in 1874. In 1884 R. A. Sterndale published his Natural History of Indian Mammals a purely popular work which did not add much to Jerdon's book. In 1881 a memorial prepared by Dr. Scater, Hon. Secretary to the Zoological Society and signed by Darwin, Hooker, Huxley, and other well known scientists, was presented to the Secretary of State for India. The memorial recommended that a series of Volumes dealing with the Fauna of India should be prepared and Dr. Blanford should be appointed its Editor. The memorial resulted in the publication in 1888-1890 of the Volume on Mammals in the "Fauna of British India" Series and since 1891 this volume hasbeen the standard work on *Indian Mammals*. Blanford's book was however based on the information then available and the shortcomings of the book have been revealed in the light of more recent research. Further knowledge in regard to distribution and classification and the discoveries of new species have rendered Blanford practically obsolete.

To remedy this defect, at the instigation of the authorities of the British Museum, the Bombay Natural History Society decided to institute what is now known as the Mammal Survey. Mr. W. S. Millard, then Hon. Secretary of that Society, issued in an appeal to its members to enable the Society to engage the services of trained European collectors so as to make a systematic collection of the mammals of India, Burma and Ceylon. The response to the appeal resulted in over a lakh of rupees being raised between 1911 and 1920, partly by subscriptions from the Society's members, contributions from Indian Princes, and grants from the Indian Government, the Government of Burma, Ceylon, Malay States, and the Provincial Governments. Subscriptions were also received from a few Learned Societies and Institutions in England and America. By the outbreak of the war the Survey had been carried on over large areas of the country, the districts covered being—In Western India a portion of Sind, the whole of Gujarat, Kutch and Kathiawar; the Southern Maharatta country and Kanara in Southern India; in Coorg and Mysore; in the centre large tracts of the Central Provinces and some districts of Bengal and Behar; in Northern India the Society's collectors had worked over Kumaun, Darjeeling and Sikkim and the Bhutan Duars. In Burma, collections were made along the Chindwin river, in Central Burma and in the Shan States, Pegu and a portion of Tennaserim. The whole of Ceylon was also systematically surveyed.

The material, which up to the outbreak of War comprised some 17,000 specimens, was forwarded to the British Museum where the collections were scientifically worked out by the late Mr. R. C. Wroughton, formerly Inspector General of Forests, Mr. Oldfield Thomas, F.R.S., Curator of Mammals at the British Museum, Mr. Martin C. Hinton and others. The results of their researches were published in a series of scientific papers in the Journal of the Bombay Natural History Society. The enormous mass of material then collected resulted in the discovery of large numbers of new forms and species and by increasing our knowledge of the distribution of Indian Mammalia has enabled the revision of Blanford's Mammalia to be undertaken and early in 1921 the Secretary of

State for India commissioned Mr. R. C. Wroughton, since diseased, and Mr. M. C. Hinton to undertake the work.

At the beginning of the War certain important areas however remained to be worked, principally S. India, the Eastern Ghats, the Central Indian states and certain portions of Burma and the Mergui Archipelago. So when demobilisation rendered it possible the work of the Survey which had been in abeyance during the War was resumed and a collector was first sent to Assam, which has now been thoroughly worked. The Bombay Natural History Society's collectors are now in the Eastern Ghats and in Mergui, and it is hoped, if sufficient funds are forthcoming, to complete the work as originally conceived.

The Board of Scientific Advice.—This Board includes the heads of the Meteorological, Geological, Botanical, Forest, and Survey Departments, representatives of the Agricultural and Civil Veterinary Departments, and other scientific authorities whose special attainments may be useful. It was established in 1902 to co-ordinate official scientific inquiry, to ensure that research work is distributed to the best advantage, and to advise the Government of India in prosecuting practical research into those questions of economic or applied science on the solution of which the agricultural and industrial development of the country so largely depends. The programmes of investigation of the various departments are annually submitted to the Board for discussion and arrangement, and an annual report is published on the work done.

The Secretary to the Government of India (Department of Revenue and Agriculture) is *ex-officio* President of the Board which includes the Director-General of Observatories, the Director of the Zoological Survey, the Surveyor-General of India, the Principal, Punjab Veterinary College, the Director of the Indian Institute of Science, the Inspector-General of Forests, the Agricultural Adviser to the Government of India, the Director of the Geological Survey, the Director-General, Indian Medical Service, the Secretary to the Government of India, Public Works Department, and the Director of the Botanical Survey of India who is Secretary to the Board of Scientific Advice.

The Indian Research Fund.—Scientific research work is rapidly developing in India. In 1911 the sum of 5 lakhs (£33,000) out of the surplus opium revenue was set aside as an endowment for research into epidemic diseases in connection with the Central Research Institute, at Kasauli. It was hoped that this sum might be largely augmented by private subscriptions. An Indian Research Fund Association was constituted, and a good deal of work has already been undertaken. Its objects are defined as "the prosecution and assistance of research, the propagation of knowledge and experimental measures generally in connection with the causation, mode of spread and prevention of communicable diseases." Fresh investigations into kala azar and cholera have been inaugurated, and an officer was deputed, at the expense of the Fund, to study yellow fever in the regions where it is endemic, with a view to taking steps to prevent its introduction into India. A further grant of 6 lakhs (£40,000) was made to the Central Research Fund from the opium surplus of 1911-12. It has been decided to devote to research and anti-malarial projects 5 lakhs (£33,000) a year from Imperial revenue commencing in 1913-14. A new periodical "The Indian Journal of Medical Research," was instituted in 1913 and is published four times annually, as the official organ of the Research Fund. The journal deals with every branch of research directly or indirectly connected with medical and sanitary science, and forms a record of what is being done in India for the advance of this work. In 1922 it was decided to devote the capital funds at the disposal of the Association to the erection of an Imperial Medical Research Institute and to the formation of a fund for its endowment.

Survey of India.—The work of the Survey of India Department falls under various heads, namely, the trigonometrical survey, topographical and forest surveys, special surveys and explorations, and map production. Cadastral surveys are now carried out by the Provincial Land Records and Settlement Departments.

In 1904 attention was drawn to the defective state of the **topographical survey maps**, and a Committee was appointed to report on the subject. To overtake the arrears of revisional survey and to secure that the map of India should be brought up to date and revised at proper intervals, they recommended a considerable increase of establishment and an increased expenditure of £210,000 a year for the next 25 years. They also made recommendations for altering the size and improving the quality of the maps. After further inquiry the Government of India decided that a scale of 1 inch to the mile would ordinarily be sufficient, reserved forests and special areas being surveyed on the scale of 2 inches to the mile, and the ½-inch scale employed for waste and barren tracts.

Indian Science Congress.

The Indian Science Congress was founded largely owing to the effects of Dr. J. L. Simonsen and Mr. P. S. Macmahon, the present Honorary General Secretaries of the Congress. The Asiatic Society of Bengal undertakes the management of the Congress finances and publishes annually the Proceedings of the Congress. The objects are (1) to encourage research and to make the results generally known among science workers in India, (2) to give opportunities for personal intercourse and scientific companionship and thus to overcome to some extent one of the chief drawbacks in the life of workers in science in India, (3) to promote public interest in science; for this end the Congress is held at different centres annually, and evening lectures open to the public form an important part of the proceedings of each Congress.

The Congress meets in January each year, the proceedings last for six days. The Head of the Local Government is Patron of the Congress; the Congress session is opened by a Presidential Address delivered for the President for the year. The President is chosen annually, the different sections being represented in turn. The sections are (1) Agriculture, (2) Physics and Mathematics, (3) Chemistry, and Applied Botany

(4) Zoology and Ethnography, (5) Botany, (6) Geology, (7) Medical Research. When the sections meet separately each section is presided over by its own President also chosen annually. The mornings are devoted to the reading and discussion of the papers, the afternoons to social functions and visits to places of interests in the evenings public lectures are delivered.

THE IMPERIAL INSTITUTE.

The Imperial Institute, South Kensington, has been placed by the Imperial Institute (Management) Act of 1916 under the control of the Secretary of State for the Colonies as representing the central authority for the Dominions, Colonies, and Protectorates of the Empire. The actual management of the Institute will be with an executive council of twenty-five members, which, subject to the general control of the Secretary of State for the Colonies, will possess considerable autonomy and will be the governing body of the Institute. India is to be represented on this council by four members, one nominated by the Government of India, two by the Secretary of State for India, and one by the Secretary of State for the Colonies. In addition, it is understood that there will be a special Indian Committee of the Council with co-opted members—an arrangement which will greatly increase the connection of the Institute with Indian interests and, it is hoped, will promote the development of those activities of the Institute for India which are most needed in England.

An account of the work done by the Institute for India, by Dr. W. R. Dunstan, Director of the Imperial Institute, has lately been published in the *Bulletin* of the Institute.

The **Indian Collections** of the Imperial Institute, which have been completely reorganised in recent years, constitute the Indian Section of the Public Exhibition Galleries They include a representation of the important raw materials of India, illustrations of its chief industries and their results, tabular information and diagrams respecting Indian trade and commerce maps, pictures, and photographs of its cities and industries.

Technical Information Bureau.—Ever since the Scientific and Technical Research Department was started, a most important part of its work has been, in addition to conducting researches, to collect and critically collate all published information respecting the production and industrial uses of raw materials, and it has gradually come to be recognized as a central clearing-house for information of this character. Merchants and manufacturers in England, as well as producers in India and the Colonies, have applied in increasing numbers for information on these subjects. In order to be in a position to deal more effectively with such enquiries, a special branch of the department was formed in 1914, whose business it is, in collaboration with the staff of the Scientific and Technical Research Department, to collect and distribute technical information. Since the war this branch, known as the Technical Information Bureau, has been very full of work, and has not only dealt with a large number of inquiries as to Indian materials and their possibilities, but has taken the initiative with British manufacturers and merchants in bringing to their notice important Indian materials which await a new market.

The Institute has a library and map rooms which are important auxiliaries to this work and publishes quarterly the *Bulletin* which has played a conspicuous part in making known throughout the Empire the results of researches conducted at the Institute, and the records of progress in the various aspects of the production and utilisation of commercial and economic materials.

Labour.

Various causes have combined to give added importance to the great group of human activities concentrated under the generic term of Labour. India is still a predominantly agricultural country and more than seventy per cent. of its people are dependent on the soil for their livelihood. Nevertheless a process of industrialisation has gone steadily forward. Calcutta and Bombay are great manufacturing cities. Whilst the jute mills dominate Calcutta and the cotton mills Bombay, there has grown up round these industries a substantial body of other manufactories. Another considerable manufacturing centre has developed at Cawnpore, with cotton, wool and leather factories. The textile industry of Bombay has overflowed into the mofussil, and Ahmedabad and Sholapore are considerable centres of manufacture, with a lesser one at Broach. In the Central Provinces the cotton mills of Nagpore are famous throughout India. The Province of Bihar and Orissa is the centre of the great coal mining trade, having absorbed the bulk of the coal mines formerly included in the Province of Bengal. It also embraces the most remarkable example of scientific industrialism in India in the works of the Tata Iron and Steel Company at Jamshedpur, where in what was jungle fifteen years ago a considerable city is springing up, which will produce over a million tons of steel a year, and house subsidiary industries which combined with the iron and steel works will probably maintain a city of a quarter of a million in the near future. The railway works of the North-Western Railway form the core of the industrialism of the Punjab, where other manufactories, notably of cement, are developing. The Governments of India are now each faced with a vivid and growing industrial question.

Social Consciousness.

Side by side with this industrialization there has grown an increased social consciousness of the responsibility of the community towards Labour. The Government of India passed its first Factory Act in 1881 and amended it in 1891. But experience showed that these Acts permitted considerable abuses and largely as the result of the agitation raised by *The Times of India* in Bombay in 1905 against the excessive hours worked in the Bombay textile mills inquiries were set afoot which resulted in the passing of a new Act which limited the hours of labour in 1911. With the constitution of the League of Nations, India as a signatory thereto became a participator in the decisions of the League on Labour questions. India was represented at the International Labour Conference held in Washington in 1919 and it became obligatory on her to enact legislation giving effect to the decisions of the Conference. Another International Labour Conference was held at Genoa in 1920 to consider a number of questions relating to seamen, such as the hours of labour, manning scales, accommodation, the provision for finding employment and other cognate questions and the Third and Fourth Sessions of the Conference were held at Geneva in 1921 and 1922. The Fifth Session of the Conference assembled on 22nd Oct. 1923 and dealt with only one item of importance—factory inspection. India was represented at all of these Conferences. In 1922 India was admitted as one of the eight countries of industrial importance after protracted examination of the grounds of her claim by experts appointed by the League of Nations. India, therefore, assumes responsibility for giving effect to the decisions of these Conferences. There has been a considerable extension of what is known as **Welfare Work**, and although this so far depends on the individual activities of employers or labour, the work is progressing well. Further there is the nascent Trade Union movement in India. This movement lies rather more on the surface than in deep roots, but it flares up in times of labour unrest and is nominally at all events focussed in The All India **Trade Union** Congress. The frequency of strikes, and the lack of any means to hasten a solution have given rise to careful investigation of the possibility of establishing Boards of Conciliation and Arbitration. In most industrial centres the housing question is one of great difficulty. It assumed its most acute form in Bombay City, where owing to industry being concentrated in a narrow Island, where land is extremely dear, the provision of sanitary dwellings at a price within the means of the labourer, by private agency, was impossible. Much good work was done by the Improvement Trust, and by employers working with funds advanced by the Improvement Trust, but Government stepped in in 1921 with a scheme for the provision of accommodation for a quarter of a million under its own agency working through the Development Directorate. The programme for the year ended March 1923, provided for the completion of 60 chawls by 31st March 1923, against which the equivalent of 56 had been finished on that date. The total number of tenements let or ready to let on 31st March 1923 was 2,720. The last few years have therefore seen a remarkable change in the attitude of the State and the community towards Labour, which under the more democratic constitution which now obtains is assured of a hearing in the Legislatures.

LEGISLATION AND INSPECTION.

The conditions of factory labour until 1913 were regulated by the Indian Factories Act of 1881, as amended in 1891. The chief provisions of the amended Act were Local Governments were empowered to appoint inspectors of factories, and certifying surgeons to certify as to the age of children. A mid-day stoppage of work was prescribed in all factories, except those worked on an approved system of shifts, and Sunday labour was prohibited, subject to certain exceptions. The hours of employment for women were limited to 11, with intervals of rest amounting to at least an hour and a half; their employment between 8 p.m. and 5 a.m. was prohibited, as a general rule, except in factories worked

by shifts. The hours of work for children (defined as persons below the age of 14) were limited to seven, and their employment at night time was forbidden; children below the age of nine were not to be employed. Provision was made for the fencing of machinery and for the promulgation of rules as to water supply, ventilation, the prevention of overcrowding, etc.

Hours Fixed.

The next Factory Act was finally passed into law as Act XII of 1911.

The new Act extended the definition of "factory" so as to include seasonal factories working for less than four months in the year; shortened the hours within which children, and, as a general rule, women, may be employed, and further restricted the employment of women by night by allowing it only in the case of cotton-ginning and pressing factories. It also contained a number of new provisions for securing the health and safety of the operatives, making inspection more effective, and securing generally the better administration of the Act. The most important feature of the Act, however, was the introduction of a number of special provisions applicable only to textile factories. The report of the Factory Commission showed that excessive hours were not worked except in textile factories. The Act for the first time applied a statutory restriction to the hours of employment of adult males by laying down that, subject to certain exceptions, "no person shall be employed in any textile factory for more than twelve hours in any one day." It is also provided in the case of textile factories that no child may be employed for more than six hours in any one day, and that (subject to certain exceptions, among which are factories worked in accordance with an approved system of shifts) no person may be employed before 5-30 a.m. or after 7 p.m. (the new limits laid down generally for the employment of women and children).

The Act of 1922.

The acceptance by India of her obligation under the International Labour Conference of Washington in 1919 necessitated the further amendment of the Factory Act in 1922.

In the following pages it is intended to give the present law on the subject by combining the act of 1911 with that of 1922. The Amendment Act of 1922 came into force on 1st July 1922, and it extends to the whole of British India, including British Baluchistan and the Sonthal Parganas.

Hours of Employment.

Rest periods in factories.—In every factory there shall be fixed,—

(*a*) for each person employed on each working day—

(*i*) at intervals not exceeding six hours, periods of rest of not less than one hour, or

(*ii*) at the request of the employees concerned, periods of rest of not less than half an hour each so arranged that, for each period of six hours' work done, there shall be periods of rest of not less than one hour's duration in all, and that no person shall work for more than five hours continuously, and

(*b*) for each child working more than five and a half hours in any day, a period of rest of not less than half an hour.

(2) The period of rest under clause (*b*) shall be so fixed that no such child shall be required to work continuously for more than four hours.

Weekly Holiday.—No person shall be employed in any factory on a Sunday, unless—

(*a*) he has had, or will have, a holiday for a whole day on one of the three days immediately preceding or succeeding the Sunday, and

(*b*) the manager of the factory has previous to the Sunday or the substituted day, whichever is earlier, given notice to the Inspector of his intention so to employ the said person and of the day which is to be substituted and has at the same time affixed a notice to the same effect in the place mentioned in section 36.

Provided that no such substitution shall be made as will result in any person working for more than ten consecutive days without a holiday for a whole day.

Employment of Children.—With respect to the employment of children in factories the following provisions shall apply:—

(*a*) no child shall be employed in any factory unless he is in possession of a certificate granted under section 7 or section 8 showing that he is not less than twelve years of age and is fit for employment in a factory and while at work carries either the certificate itself or a token giving reference to such certificate;

(*b*) no child shall be employed in any factory before half-past five o'clock in the morning or after seven o'clock in the evening;

(*c*) no child shall be employed in any factory for more than six hours in any one day.

Employment of Women.—With respect to the employment of women in factories the following provisions shall apply:—

(*a*) no woman shall be employed in any factory before half-past five o'clock in the morning or after seven o'clock in the evening;

(*b*) no woman shall be employed in any factory for more than eleven hours in any one day.

Prohibition of Employment of Persons in two Factories on Same Day.—No person shall employ, or permit to be employed, in any factory any woman or child or, save in such circumstances as may be prescribed, any other person whom he knows, or has reason to believe, to have already been employed on the same day in any other factory.

Hours of Employment to be fixed.—The manager of a factory shall fix specified hours for the employment of each person employed in such factory, and no person shall be employed except during such hours.

Limitation of Working Hours per Week.—No person shall be employed in a factory for more than sixty hours in any one week.

Limitation of Working Hours per Day.—No person shall be employed in any factory for more than eleven hours in any one day.

Exceptions.

Where it is proved to the satisfaction of the Local Government—

(*a*) that any class of work in a factory is in the nature of preparatory or complementary work which must necessarily be carried on outside the limits laid down for the general working of the factory; or

(*b*) that the work of any class of workers is essentially intermittent; or

(*c*) that there is in any class of factories any work which necessitates continuous production for technical reasons; or

(*d*) that any class of factories supplies the public with articles of prime necessity which must be made or supplied every day; or

(*e*) that in any class of factories the work performed by the exigencies of the trade or by its nature, cannot be carried on except at stated seasons or at times dependent on the irregular action of natural forces;

the Local Government may, subject to the control of the Governor-General in Council, by notification in the local official Gazette, exempt on such conditions, if any, as it may impose.

The system of inspection is being steadily improved by the appointment of more whole-time inspectors with good technical qualifications in the principal industrial centres.

Further legislation is contemplated dealing with other important issues. A Bill is in preparation for the registration and protection of Trades Unions and the Government of India hope to be able to introduce a Bill early in 1924.

The Government of India have also decided to repeal the Workmen's Breach of Contract Act of 1859 with effect from 1st April 1924.

THE INDIAN MINES ACT, 1923.—The Indian Mines Act, 1923, received the assent of the Governor-General on the 23rd February 1923. It extends to the whole of British India, including British Baluchistan and the Sonthal Parganas, and comes into force on the first day of July 1924. By this Act the definition of a mine was made clear, and the weekly hours of employment were limited to 60 hours for work above ground and 54 hours for work below ground.

CONCILIATION AND ARBITRATION.

Of recent years much attention has been paid to the settlement of industrial disputes. The baffling character of such disputes is that they are so often sporadic, breaking out without warning, grievances being formulated after striking instead of before. When such strikes occur there is no organised body of workers with whom to negotiate. The Government of Bengal took the leading part and in March 1921 appointed a committee which recommended Conciliation Boards and the appointment of a panel on which the Local Government could draw when constituting a board to enquire into any dispute. This Board has functioned usefully. The Bombay Government, which had already explored the ground informally, appointed a similar committee in November 1921, which reported in February 1922. As this Committee surveyed the position in some detail, and its report constitutes the latest contribution to the discussion, its recommendations are summarised because they reflect the existing situation and are applicable with modifications to suit local conditions, to most industrial centres in India. The valuable suggestions made by the Committee have been considered by the Government of Bombay, particularly in regard to Courts of Enquiry and Courts of conciliation. As stated in the Legislative Council on 14th March 1923, by the Honorable Sir Maurice Hayward, Home Member of Council, details are being worked out and as soon as Government are satisfied on these points legislation will be introduced as early as possible after the sanction of the Government of India has been obtained.

The Industrial Situation.

Industry in the Bombay Presidency is mainly confined to the three centres of Bombay, Ahmedabad and Sholapur with a factory population of some 200,000, 55,000 and 20,000, respectively.

Of the workers of Ahmedabad and Sholapur, 44,000 and 20,000, respectively, are dependent on the textile trade. Those in Bombay may be divided into—

(1) Textile operatives.

(2) Transportation service workers (including Railways and Docks).

(3) Gas and electric light workers, municipal employees, Mint and Government Press workers, customs, postal, telegraph and telephone employees and inferior Government employees generally.

The Operatives.—The general body of this working population was accurately described by Mr. C N. Wadia, C.I.E., in 1919, as "agriculturists first and agriculturists last." They come to Bombay—as a rule without their families—and work till they have funds enough to return to their villages. In the textile trade and amongst the general labourers almost all the operatives, except the "jobbers" and gangmen are of this migratory class. These remarks apply with almost equal force to the industrial population of Ahmedabad and Sholapur. In the workshop and in semi-clerical employment where skill or some education is required, there is however being formed a more permanent class of workmen who can almost speak of Bombay as their home. The standard of literacy is exceedingly low, not more than five per cent. of the operatives class being able to read and write their own vernaculars.

Characteristics of Strikes.—Certain characteristics are common to most of these strikes:—

(*a*) The frequency of the strike without notice.

(*b*) The absence of any clearly-defined grievance before striking.

(*c*) The multiplicity and sometimes the extravagance of the claims put forward after the strike has begun.

(*d*) The absence of any effective organisation (except perhaps at Ahmedabad) to formulate the claims of the operatives and to secure respect for any settlement which may be made.

(*e*) The increasing solidarity of employers and employed and the capacity of the operatives to remain on strike for considerable periods despite the lack of any visible organisation.

The Prevention of Strikes.

Amongst the employers of labour there are strong organisations and the present tendency is for them to become more and more representative; but employers' associations have not yet evolved any standard scales of wages and individual employers are usually ignorant of how their rates compare with the wages given by others. The uncorrelated raising of wages in one factory is almost invariably seized upon as a grievance in other factories of the same class, and instances of strikes caused in this way are within the memory of all. The attempts made to standardise wages on a definite principle have hitherto been largely ineffective.

Trade Unions.—Amongst this heterogeneous labour force, there have in Bombay and Ahmedabad, gradually developed the beginnings of a Trade Union movement. In most cases the Unions are little more than strike committees consisting of a few officers and perhaps a few paying members around whom the rest rally in times of trouble. After work is resumed the union dwindles, and in most cases disappears. According to data published by the Labour office, Bombay, in the *Labour Gazette*, the number and membership of trade unions known to be actually in existence in the Bombay Presidency for the quarter ending September 1923 were as follows:—Bombay City and Island 8 unions with a membership of 23,913; Ahmedabad 7 unions with a membership of 10,549; and in other parts of the Presidency 4 unions with 7,184 members. The totals for the Presidency were, therefore, 19 unions with 41,646 members in September 1923 as compared with 23 unions and 52,776 members in September 1922.

The evolution of any means of preventing or adjusting strikes and trade disputes in such a floating and illiterate body, lacking any homogeneity, is exceedingly difficult and we put forward such recommendations as we make with full recognition of their indecisive character. In the forefront of these recommendations we place a wise and statesmanlike attitude towards the nascent Trade Union movement.

We are fully aware that the early days of a Trade Union movement are often full of difficulty. Strike committees arise calling themselves Trade Unions and demanding the privileges of Trade Unions without any means of discharging the responsibilities thereof. Sympathetic friends unconnected with the industry or any industry, and consequently knowing nothing of the special difficulties involved, spring into notoriety. Strike leaders appear claiming the right to bargain but with no power to make the bargain respected. But these are the growing pains of Trade Unionism; it is far better to treat than to inflame them. We therefore express the very sincere hope that there will be, neither on the part of the state, nor of industry, any hostility to the free evolution of the Trade Union movement.

As soon as a genuine Trade Union organisation emerges it should be officially recognised as the channel of communication between employers and employed. We are strongly in favour of the compulsory registration of Trade Unions under a broad and generous Act. Such registration should ensure at least strict adherence to the elements essential to any substantial association of a definite code of rules, regular office bearers properly elected and an accurate register of subscribing members. But we are strongly opposed to conferring on Trade Unions any special privileges outside the ordinary law of the land or, on the other hand, any special responsibilities.

Most of our witnesses have agreed that Works Committees promise to discount that absence of personal relationship between operatives and employers, which is inevitable in large factories owing to the numbers of the men employed. We also agree that they may have an educative value among the operatives themselves.

Welfare Work.—Next to Works Committees we place the large group of humanistic activities known as Welfare Work. Here we wish to make an explanation. We were greatly impressed by the evidence which declined to accept the term "Welfare" as accurately defining these energies and classed them as "efficiency" work, because they had such a direct reaction on the physical contentment and efficiency of the operatives, that economically they justified the expenditure thereon.

The Settlement of Industrial Disputes.

So far we have devoted our attention to a consideration of the means which will contribute to the prevention of industrial disputes; it remains to suggest the methods of settlement, when such disputes either develop irreconcilable differences between capital and labour or else become a menace to the community.

There are some who hold that the State has no right to intervene in industrial disputes. To that position we cannot subscribe.

But we are agreed that no outside agency, and in particular the agency of the State, should be used until all other means have been employed and failed, or unless it is invited by one or other of the parties to the dispute, or unless the situation is such that peace, order and good government are prejudiced. If such conditions should arise, then there should be formed an Industrial Court of Inquiry, to be followed, if necessary, by an Industrial Court of Conciliation. We deliberately place the function of inquiry first and separate from the role of conciliation, for we desire to avoid the facile opportunism which seeks to patch up an industrial dispute by proposing a compromise between the views of the two parties without going down to the economic principles which are at stake.

Constitution of the Court.—The constitution of the Court should be as follows:—

(*a*) A chairman selected by the members of the Court from a panel maintained in the Labour Office;

(*b*) Three members representing the employers in the industry concerned;

(*c*) Three members representing the operatives in the industry concerned.

A bare majority of our number is of opinion that the public should not be represented on a Court dealing with an industrial dispute, but should be represented when the Court is inquiring into a dispute affecting a Government Department or a public utility company or corporation. Whilst we are divided on this point, we are unanimous in the conclusion, that when a Government Department, or public utility company, or corporation is concerned in an industrial dispute demanding the constitution of an Industrial Court the general public should be represented in equal proportion to the parties directly concerned. The constitution of such a Court would then be:—

(i) A chairman chosen from the panel.

(ii) Three representatives of the Government Department, or public utility company or corporation concerned.

(iii) Three representatives of the operatives.

(iv) Three representatives of the general public.

The special reasons which have induced us to recommend the representation of the general public in such cases, are that the whole cost of any increase in wages is at once passed on to the public either in increased charges for an essential public service or else in a diminished revenue to the State, which is taxation in another form. We recommend that the representatives of the general public should be selected from the panel of Chairmen.

OFFICIAL ORGANISATION.

When the importance of the labour movement forced itself on the attention of the Government it was found necessary to establish an organisation to deal with it. There was created with the Government of India a Labour Bureau, which collects information on Labour conditions, keeps in touch with Labour organisations in other countries, and systematically gathers statistics regarding strikes, lock-outs, wages and cost of living. Several of the Local Governments have set up special machinery for dealing with Labour issues, and there are Labour officers with the Governments of Bengal and Madras whilst the Bombay Government, on the advice of the informal committee whose recommendations have been mentioned above, constituted a special Labour Office in the Secretariat.

In a resolution of Government in the Home Department, dated 29th April 1921, the functions of the Labour Office were set out as follows:—

(*i*) LABOUR STATISTICS AND INTELLIGENCE.—These relate to the conditions under which labour works and include information relating to the cost of living, wages, hours of labour, family budgets, strikes and lock-outs, and similar matters;

(*ii*) INDUSTRIAL DISPUTES.—As experience and knowledge are gained and the activities of the Labour Office develop, it will promote the settlement of industrial disputes when these arise; and

(*iii*) LEGISLATION AND OTHER MATTERS RELATING TO LABOUR.—The Labour Office will advise Government from time to time as regards necessary new legislation or the amendment of existing laws. The Labour office publishes a monthly journal entitled the *Labour Gazette* which is a journal for the use of all interested in obtaining prompt and accurate information on matters specially affecting labour in India and abroad. The address of the Labour office is:—

The Old Custom House,
Mint Road, Bombay,
Director—Mr. G. Findlay Shirras, M.A., F.S.S. (Hony). J.P., I.E.S., M.L.C.

LABOUR ASSOCIATIONS.

ALL-INDIA TRADE UNION CONGRESS.
President—Joseph Baptista, B.A., LL.B., Bar.-at-Law,
Mathar Packady, Mazagaon, Bombay.
General Secretary—D. Chaman Lall,
16, Mozang Road, Lahore.

CENTRAL LABOUR BOARD FOR BOMBAY.
President—F. J. Ginwalla, B.A.
123, Esplanade Road, Fort, Bombay.
Secretary—S. H. Jhabwalla, B.A.,
123, Esplanade Road, Fort, Bombay.

The names and addresses of the officials of other trade unions in the Bombay Presidency are published regularly every quarter by the Labour office in the *Labour Gazette*.

WAGES.

There is much discussion, with no very definite conclusions, as to whether wages have kept pace with the cost of living. Conditions vary so markedly between Province and Province that it is difficult to give exact figures, but the following table, applicable to the Bombay Presidency, shows that the increase in real wages has been considerable.

Index numbers showing the increase in the cost of living, nominal and real wages.
July 1914=100.

Descriptions.	April 1922.		
	Cost of Living.	Nominal Wages.	Real Wages.
WORKERS IN THE TEXTILE INDUSTRY—(*a*).			
Men.			
Mill operatives (Process workers)—			
Time workers	162	189	117
Piece workers (*b*)	162	174	108
Power house and maintenance staff (Engine room and mechanics)	162	183	113
Miscellaneous Departments—			
Stores and Godown	162	166	103
Ramosees or Sepoy Dept. and odd hands ..	162	204	126
Mill or Factory clerks	162	192	119
Women.			
Mill Operatives (Process workers)—			
Time workers	162	159	99
Piece workers	162	169	105
Mill sweepers, pickers, waste sorters, female coolies ..	162	187	116
Big Lads and Children.			
Full time	162	180	112
Half time	162	185	115
Peons in the Secretariat Departments.			
Naik (I class)	162	194	120
,, (II ,,)	162	200	123
Peons (I grade)	162	215	133
,, (II ,,)	162	224	138
,, (III ,,)	162	235	145

(*a*) The figures relate to May 1921 and there has been no change in the rate since.
(*b*) Mainly weavers.

WORKMEN'S COMPENSATION.

The Workmen's Compensation Act of 1923 received the assent of the Governor-General on the 5th March 1923. The Act extends to the whole of British India including British Baluchistan and the Southal Parganas and will come into force on the first day of July 1924. It contains two distinct parts Chapter II which lies outside the general scheme for compensation, contains provisions modifying the ordinary law in respect of employers' liability and making it easier for injured workmen to sue their employers for damages in the Civil Courts. These clauses apply only to workmen, who come under the workmen's compensation provisions, so that, although they omit the limit to damages which governs their counterpart in England, they are not likely to be much used. Ten classes of workmen are covered by the bill. Some of these, such as members of fire brigades, telegraph and telephone linesmen, sewage workers and tramwaymen, are small, and as the definition of seaman is limited to those employed on certain inland vessels, only a very small proportion of Indian seamen will benefit by the bill. The five important classes are the workers in factories, mines, docks and on railways, practically all of whom are included, and those engaged in certain types of building work, notably the construction of industrial and commercial buildings, and any other buildings which run to more than one storey. The most important classes excluded altogether are agricultural workers and domestic servants. Non-manual labourers getting more than Rs. 300 a month are excluded, except on the railways. Power is taken to include other hazardous occupations by notification from time to time. Compensation is to be given, as in the English Act, for personal injury by accident arising out of and in the course of employment. It is also to be given for diseases in certain cases. The provisions for diseases have been so framed that if a certain class of workman contracts a scheduled disease, it will usually be extremely difficult for the employer to defeat a claim for compensation. On the other hand, other workmen will find it equally difficult to get compensation for disease, as they will have to prove that the disease arises "solely and directly" from the employment. The diseases scheduled at present are anthrax, lead poisoning and phosphorus poisoning, but the list is made capable of extension.

Scales.—The scales for compensation are more generous in every way than those originally suggested by Government; they are based on the unanimous recommendation of a Committee which met in June. Adults (*i.e.*, persons over 15) and minors are distinguished throughout and compensation is subject to upper limits in every case. For death the relatives receive 30

months' wages of the deceased workman, subject to a maximum of Rs. 2,500 if he was an adult. For a minor who is killed, the compensation payable is the fixed sum of Rs. 200. If a workman is completely disabled for life, he gets 42 months' wages if he is an adult and 84 months' wages if he is a minor, subject in each case to a maximum of Rs. 3,500. If he sustains permanent injuries that do not completely disable him, he gets proportions of the above sums, and for certain clearly recognizable injuries, like the loss of limb, these proportions are specific. Thus a workman, who lost his right arm below the elbow would receive 60 per cent. of the sums specified above, subject to a maximum of Rs. 2,100. If his pay was Rs. 30 monthly, the sum would come to Rs. 756. All these payments are lump sums. Of much greater importance are the provisions for the minor and more common injuries. Statistics based on experience of industry generally in other countries indicate that 50 per cent. of injuries from accidents cause disablement for not more than ten days, 44 per cent. cause disablement lasting more than 10 days, but ultimately disappearing, 5 per cent. result in permanent injuries and 1 per cent. end fatally. A large proportion of cases will be excluded by the provision that no compensation is to be paid on account of the first ten days of disablement. The great majority of the remaining cases will fall under the scale for temporary disablement. The rate of payment for temporary disablement is half wages for adults and two-thirds wages for minors, subject to a maximum of seven years, and for minors, two-thirds wages or whole monthly wages after they have attained the age of 15 years, subject in each case to a maximum amount of Rs. 30, and to a maximum period of 5 years. This maximum of 5 years is not of great importance, as experience shows that the number of such cases which last more than six months is insignificant. During the first six months of these payments they can only be commuted to a lump sum if both parties agree; after payments have gone on for six months, either party can apply for commutation. In its treatment of the difficult question of dependents the Indian bill allows only husbands and wives, parents and minor children to claim compensation, and it makes the compensation a fixed sum independent of the number of those relations. The administration of the Act and the settlement of disputes is entrusted to special Commissioners, with a very simple procedure wide powers and restricted opportunities for appeals. The successful operation of the act depends largely upon the choice of suitable officers as Commissioners. All local Governments and administrations have, therefore, been addressed by the Government of India to consider the question of the appointment of Commissioners under Section 20 (1) of the Act.

Wages.—Last year the Labour office published a "Report on an enquiry into the wages and hours of labour in the cotton mill industry in the Bombay Presidency." This year another report dealing with wages in agriculture is under publication. This Report deals with the rise of agricultural wages from 1900 to 1922 year by year and district by district for urban areas and rural areas, and shows the daily average wages for three principal classes of agricultural labour by divisions and economic circles. The following table gives the index numbers of daily average wages of skilled labourers, ordinary labourers and field labourers for the Presidency for the years 1913, 1921 and 1922 with 1900 as the base. The index numbers of retail prices of the six principal foodgrains are also shown side by side for purposes of comparison.

Years	Index numbers of nominal wages.			Index numbers of retail prices of foodgrains.* (weighted avge.).
	Field labour.	Ordinary labour.	Skilled labour.	
1900	100	100	100	131
1913	158	147	128	123
1921	283	271	230	247
1922	300	282	249	..

* Six principal foodgrains (*e.g.*) Rice, Wheat, Jowar, Bajri, Gram and Turdal have been taken. The quinquennial average 1900-04 has been taken as the base.

It is particularly noticeable that the wages of field labourers show increases larger than the increases in the wages of ordinary and skilled labourers. This is due, not only to the drain of labour from agriculture to industry, but also to the dearth created on account of the ravages of the various epidemics that have swept over the country during the last quarter of a century. It is interesting to note that wages have kept pace with the increase in the prices of the six principal foodgrains.

Bombay Development Scheme.

The Bombay Development Scheme in its widest sense represents concerted attempts by the three local bodies, the Municipality, the City Improvement Trust and the Port Trust, each working in its own sphere, and by the Government, to secure the rapid and adequate development of the city.

The Municipality is developing various areas in the city which will result in providing increased residential and business accommodation. The Mahim scheme will provide two main avenues running north to south, in addition to the 60 feet road from Worli to Mahim Bazar, now practically completed, and a large number of cross roads. It aims at the development of an area in which it may be possible to house, approximately, a population of 250,000. Provision has been made for a central park with a frontage on the bay and for a smaller park near the southern end of the area. The main contribution of the Municipality, however, towards the general development scheme lies in the great water and drainage projects which it is undertaking and which are essential for the health and well-being of the city.

Improvement Trust.—The Improvement Trust are developing the north of the Island on a large scale and at a rapid pace, completing their old schemes, Dadar-Matunga and Sion-Matunga, and pressing on with the new schemes, adopted in 1919, the total area of which amounts to about one-ninth of the area of the whole Island. Of the latter, the Worli scheme will provide for three classes of people; the richer class on the sea face, the middle class on the main road, and very large areas for the working classes on the land which is now being reclaimed in the neighbourhood of the mills. At Dharavi the land now occupied by the tanneries and the swamps to the south will be converted into a salubrious garden suburb, including a large amount of accommodation for the working classes. The Sewri-Wadalla scheme is intended almost entirely for the working and lower middle classes, and the area included in it will, when the contemplated railway connections are made, be within easy access by rail from Victoria Terminus.

Port Trust.—The Port Trust is completing the preparation of a scheme for a great expansion of the docks, the new docks to be located on the south-west corner of Trombay. The construction of the new cotton depot on the Mazgaon-Sewri reclamation is being pushed on as rapidly as possible, which will release for other purposes the ground now occupied by the Cotton Green.

Programme.—The works which Government propose to carry out themselves are as follows:—

(*a*) The provision of at least 50,000 one room tenements for the working classes, to meet an actual existing shortage of accommodation as reported by the Municipal Commissioner in 1919.

(*b*) The Back Bay and East Colaba Reclamation, to reduce congestion in the business area and provide residential accommodation and open spaces in the south of the City.

(*c*) The development of South Salsette, including Trombay, partly for residential and partly for industrial purposes.

(*d*) The provision of other industrial areas at greater distances.

(*e*) The improvement of communications to the suburban areas.

(*f*) The improvement of the supply and transport of building materials.

The question of special measures for the development of Bombay has been under the consideration of Government for many years. The results of the last general survey of the subject are contained in the report of the Bombay Development Committee submitted in May 1914. The war made it impossible then to carry out any large schemes as to formulate a definite policy. And when the war had come to an end, it was found that owing to the large increase in the City's population during the war, and the high prices of materials, conditions were much worse than before, and that more rapid and more drastic action was necessary.

Scope of Work.—In a speech to the Legislative Council in August 1920, His Excellency the Governor explained that the industrial housing scheme, which Government considered essential, would be carried out by them direct, instead of being entrusted to the Municipality or the Improvement Trust, because of the very heavy liabilities which already rested on those bodies. He introduced a Bill for the levy of a cess of one rupee per bale on cotton imported into Bombay, the proceeds of which would be used partly to provide additional revenue for the Municipality in view of its large programme of expenditure, partly to meet the loss anticipated on the housing scheme, and partly to assist development schemes in Salsette.

He announced Government's decision to establish a new Development Department, and Directorate, which would be at once a department of Government, detached as far as possible from the ordinary Secretariat, and an executive organisation, and defined its duties as under:—

(*a*) To carry out the Back Bay Reclamation Scheme and any other reclamation schemes which may be found necessary in or near Bombay City.

(*b*) To undertake the industrial housing scheme of 50,000 one-roomed tenements for the working classes in Bombay.

(*c*) To organise systematically the supply of building materials for its own work and for the works with which it is connected.

(*d*) To take over all questions relating to the acquisition of land in Bombay City and all questions regarding the utilisation of Government land.

(*e*) To carry out large schemes for the systematic development of Salsette.—

(*i*) by town planning schemes to be carried out by local authorities, and

(*ii*) by the purchase of areas outright with a view to resale after development.

(*f*) To secure an adequate water supply for the whole of Salsette when it is developed as an urban area.

(*g*) To deal with the supply and distribution of electrical energy, both for domestic and industrial purposes in the area outside Bombay.

(*h*) To take up the question of the improvement of communications to link up Bombay City with the areas to be developed in Salsette and Trombay.

He stated also that, in view of the magnitude of the schemes to be undertaken simultaneously by Government and the local bodies, Government had decided that the finance of the whole scheme should be pooled, that they should lend their credit to the local bodies, and appeal to the public for the money required by them as well as by Government themselves. The result of this decision was the Bombay Development Loan of 1920, the subscriptions to which amounted to Rs. 939 lakhs in round figures. Of this amount, Rs. 695 lakhs were lent to the local bodies, the balance being retained by Government. Further loans aggregating Rs. 246½ lakhs (including a temporary loan of Rs. 12 lakhs to the Municipality for the Mahim Scheme) have been made to the local bodies out of a sum of Rs. 480 lakhs which the Government of India decided in 1921 to advance to the Government of Bombay for development purposes.

Personnel.—The whole Development Department, including the Directorate, is in charge of the Hon'ble Mr. Cowasjee Jahangir, C.I.E., O.B.E. as General Member of Council. The Director of Development is in charge of the executive organisation and staff, subject to the orders of Government. The Deputy Director, in addition to assisting the Director in executive matters, is Secretary to Government in the Development Department, and also Commissioner for the Bombay Suburban Division, which includes the areas in Salsette and the Ambarnath taluka, in which development schemes are being carried out.

The Back Bay Reclamation works and the East Colaba Reclamation Project are in charge of a Chief Engineer (under the Director), assisted by three Deputy Chief Engineers, one at the Quarry near Kandivlee Station from which materials for the wall are being obtained, one at Marine Lines and one at Colaba, at either end of the seawall. This branch is detached from the remainder of the engineering staff.

For development works other than the reclamation, the Director is Chief Engineer, and is assisted by four Superintending Engineers. One is in charge of industrial housing, one of development works in Salsette, one of the Salsette Trombay Railway Scheme, and the industrial area beyond Kalyan, and one of questions relating to the supply and transport of materials.

The appointment of Salsette Development Officer, created many years ago, has been absorbed in the Directorate, and the holder of it is also Collector of the Suburban District, and in charge of the staff employed on the acquisition of land in the suburban area. There is a Land Manager, who is employed on valuations, the preparation of details of schemes, negotiations with land owners, etc. As the existing land revenue survey is not nearly accurate enough for land to be developed as an Urban area, a Superintendent of Suburban survey was appointed to make a survey on the general lines of the Bombay City survey. The survey has almost been completed.

The Government of India have appointed a special Audit Officer for the Bombay Development Scheme, and have authorised his appointment as Deputy Financial Adviser, and the appointment of the Deputy Controller of Currency as Financial Adviser to the Development Department.

SIR LAWLESS HEPPER, KT.—Director of Development.

J. R. MARTIN, C. I. E., I. C. S., Deputy Director of Development, Secretary to Government, Development Department, and Commissioner, Bombay Suburban Division.

H. ST. C. SMITH, Deputy Secretary to Government, Development Department, Secretary to the Development Directorate, and Assistant to the Commissioner, Bombay Suburban Division.

LL. W. LEWIS, C.I.E., M.I.C.E., Chief Engineer, Reclamation Branch.

G. M. O'RORKE, C.I.E., M.B.E., Senior Deputy Chief Engineer, Reclamation Branch.

H. A. ELGER, M.I.C.E., Junior Deputy Chief Engineer, Reclamation Branch.

P. BILLINGTON, Junior Deputy Chief Engineer, Reclamation Branch.

W. H. THOMAS, A.C.G.I., A.M.I.C.E., Executive Engineer, Projects.

W. F. ANDERSON, Executive Engineer, Reclamation Branch.

F. HARVEY, M.Sc., M.I.C.E., Superintending Engineer, No. 1—Project Division (on leave).

A. HAMID, F. Sc. (Acting).

N. L. MEHTA, B. Sc. (London), D. Sc. (Paris), Executive Engineer, Bombay Housing District No. 1.

D. R. H. BROWN, O.B.E., A.K.C., Superintending Engineer, No. 2—Project Division.

D. K. BHAVE, L.C.E., M.A., B. Sc., A.M.INST. C.E., A.M.I.MECH.E., Executive Engineer, Andheri.

T. S. SOORMA, B. E., Executive Engineer, Suburban Sanitary District.

G. W. T. SQUIRES, Executive Engineer, Kurla, Trombay District.

A. F. MACDONALD CLARK, M.A., B.Sc., M.I.C.E., Superintending Engineer, No. 3—Project Division.

A. LENNOX STANTON, M.I.E. (India), M.AMS. M.E., A.M.I.M.E., A.M.I.E.E., Electrical and Mechanical Engineer.

T. A. PEREIRA, Executive Engineer, Central Salsette Railway.

E. F. SYKES, M.I.C.E., Superintending Engineer, No. 4—Project Division.

W. K. CALDWELL, Executive Engineer, Mechanical District.

J. R. COLABAWALLA, M. SOC.E. (Lond.) A. M. I.E., (India), A.AM., I.E.E., Executive Engineer, Materials District.

W. J. NEWLAND, Superintendent, Bombay Suburban Survey.

CAPTAIN E. M. GILBERT LODGE, F.S.I., F.I.A., F. A. I., Land Manager, Development Directorate.

G. E. L. CARTER, I.C.S., Collector, Bombay Suburban District and Salsette Development Officer.

Audit and Finance.

A. V.V., AIYAR, B.A., C.I.E., Financial Adviser to Government.

T. R. V. SARMA, Deputy Financial Adviser to Government and Audit Officer, Bombay Development Scheme.

Military Lands Scheme.

Colonel R. ST. J, GILLESPIE, C.I.E., O.B.E., Secretary, Board of Control and Chief Engineer.

Major A. H. C. Trench, C.I.E., R.E., M.I.E.E., Deputy Chief Engineer.

Housing.—In Bombay City, apart from certain petty schemes affecting Government properties, the work of the Directorate consists at present of industrial housing and the Back Bay Reclamation. Three housing schemes are in progress, at Naigaum, DeLisle Road and Worli The Naigaum scheme provides for 42 chawls, DeLisle Road for 33 and Worli for 121 to be increased to about 163 if sufficient additional land can be obtained from the Improvement Trust. All the chawls are to contain 80 tenements. Over 2,000 rooms are already occupied, and as the Chawls become available no difficulty has been met in securing tenants. The average economic rent of the chawls works out at Rs. 14-8-0 per tenement per mensem, and Government have fixed the minimum rent for the present at an average of Rs. 10. On this basis there is a loss of Rs. 54 per tenement per annum which is being met by the cotton cess.

Reclamation.—As regards **Back Bay** the quarry has been equipped for a continuous output of 2,000 tons a day, the product varying from crushed stone and ordinary rubble to blocks weighing up to 10 tons. There is through railway communication to the Marine Lines section, and this has been extended to the Colaba section. At Marine Lines 5,100 feet of the wall, mass concrete on a rubble bank, have been completed, and the first section of the wall at Colaba, 2,000 feet of mass concrete built directly on the reef is completed. The remainder of the wall at the Colaba end will consist of mass concrete built on a rubble mound, as at Marine Lines. 4000 feet of this rubble mound has been completed and the extension of the concrete wall is in progress. A cross wall, to form the first compartment for filling, is being made at Colaba and the filling was commenced, both at Colaba and Marine Lines, in the 1923-24 working season.

Salsette.—In Salsette a large part of the Bandra-Ghodbunder road up to Andheri has been widened, quarrying and reclamation works have been carried out at Gilbert Hill, Andheri, and progress has been made with works in several town planning schemes, including a road to Juhu island. The development scheme at Khar between the proposed Khar station and the sea, and a small scheme at Chapel Road, Bandra, have been worked out in detail. These provide for 863 and 166 building plots respectively. As a result of arrangements made with previous owners and Co-operative Societies, a considerable amount of land in both schemes has been disposed of, and the construction of roads in Khar is in Progress. Only preliminary work has been done on the large scheme, Sahar, for the area lying between the G. I. P. and B.B.& C.I. Railways. Detailed plans have been worked out for considerable areas adjoining Santa Cruz and Andheri stations. A detailed contour survey of the Kurla-Kirol industrial area has been completed and the layout of roads, factories, &c., has been designed and construction is proposed to be commenced shortly.

In Trombay there are 3 large schemes, Trombay North-East is intended to provide for (*a*) a new municipal slaughter-house, tanneries, dyeworks and other noxious trades which ought to be removed from the City; (*b*) a separate area for milch-cattle stables; (*c*) residential areas for the people employed in the tanneries, etc. Trombay North-West is intended to provide a residential area for the lower middle class on good land surrounding on 3 sides the existing Chembur village and extending to the south and east. The development of Trombay West will depend on the detailed proposals of the Port Trust as regards the new docks.

In Trombay North-West, which is intended to be a residential area, the development of a gross area of 570 acres, to provide over 3,100 building plots, has been worked out in detail and work on the roads has been commenced. This new estate will have railway access to Bombay from a new station to be opened temporarily on the Municipal line from Kurla Station. A detailed survey for the conversion of the first part of this line into a regular railway and its extension to Trombay has been carried out by the G. I. P. Railway. Estimates have been sanctioned, and the earth work is in progress. The preparation of the tannery area, a small part of which requires filling, has been completed.

The construction of the Salsette-Trombay Railway, to run from Pir Pau to Kurla and then through the Sahar Scheme lying between the G.I.P. and B.B. & C.I. Railways to Andheri, has been put in hand. The total length of the line is 10·4 miles, of which 5·8 miles towards Andheri and 2 miles towards Vadauli both from Kurla, are under construction. The line towards Andheri has been practically completed for about 5 miles and the permanent way laid. The work on the rest of the line is well in hand.

Industrial Town.—The development of the Ambernath Industrial Area showed marked progress during the year. The scheme aims at creating a new township to establish industries with all modern facilities. Out of the three factories which were in construction last year, two have been completed, and have started working. One is a chemical factory, the second one of its kind in the Presidency, and the other a leather cloth factory. The woollen mills are nearing completion. Water supply to these factories is obtained from a temporary water installation situated about a mile away from the railway station. Housing for the superior staff of these factories is being provided on the area south-east of the Railway station. A scheme of roads and buildings on this housing area is in hand. The roads connecting the factories with the main road have been completed. A temporary bazaar to serve the residents of the area has been provided. This will have its own water supply from the temporary water installation. A power house for electric supply is to be constructed and the work will be put in hand shortly.

Storm-water drainage for the protection of the mill area has been completed. The survey for railway sidings in the area is completed and work is to be commenced shortly. A temporary goods ramp has been built by the G.I.P. Railway to provide unloading facilities.

The main water scheme is located at Badlapur, 5 miles from Ambernath Station. The works comprise—(*a*) A barrage across the Uhlas River about 1½ miles from the railway station which has been completed. (*b*) A set of Paterson rapid filters to filter 3 million gallons of water. (*c*) Protection wall for the Uhlas left bank. The two latter works will be finished during the next year. The earthwork for the 18" pumping main is ready and the main itself has been laid. It will connect the pump house near the barrage with a reservoir to hold 3 million gallons of water now being erected on a hill two miles away from the pumping station. The earthwork for the delivery main from the reservoir to the Ambernath area has been completed and the laying of the delivery main itself will shortly be finished. It is expected that water will be available in the area from the new supply by May 1924. A special local train service was inaugurated during the year between Badlapur and Kalyan.

Supplies.—As regards materials, arrangements have been made with a group of Indian Companies for the supply of all the cement likely to be required by the Development Directorate for 10 years, the local bodies in Bombay having an option of participating, if they wish to do so. No single source of supply of sand and shingle, in adequate quantities and of suitable qualities, has been found. Additional sidings have been constructed at Mumbra, the principal place of supply at present. A suitable dredging plant for getting shingle and sand from the river beds has been ordered. Surveys have been made of other sources, and estimates for construction of sidings at the most promising of these are being prepared. Railway sidings from Mahaluxmi to the Worli Housing site and from Lower Parel to the DeLisle Road site, for the transport of materials, have been constructed. A depot has been established and sidings are completed at Matunga. These sidings will be used for materials required on development schemes in Bombay not accessible by rail, and facilities can be given to the public engaged in building in the north of the Island. A small fleet of steam wagons and trailers has been provided for the transport of materials, and in connection with the proposed development of Salsette and Trombay, small workshops capable of expansion as required have been erected near Kolikalyan and Wadavli near Chembur.

Military Lands.—Arrangements have been made with the Government of India involving the relinquishment by the military authorities of practically all the land they hold in the Fort area. The services displaced are to be reinstated partly at Deolali and partly at Colaba, where the military area is to be increased by about 265 acres at the southern end of the Back Bay Reclamation. The Government of India have to pay the Government of Bombay for this land, and this payment and the cost of new buildings, etc., due to the removal of the military from the Fort are to be covered by the sale of the land to be vacated. A large area of land on the Palton Road Estate (formerly the old Palton Road Lines) has been sold to the Bombay Municipality. A few plots on the estate and another in Carnac Road have also been sold, and the remainder of the Palton Road estate will be placed on the market when the Bombay Municipality has completed the roads. New Indian Infantry lines at Carnegy lines are completed, and new infantry lines at Deolali, and the motor transport depot at Colaba are being commenced. The Bombay Military Lands Scheme is in charge of a Board of Control, consisting of the Director of Development and the General Officer Commanding, Bombay District. The Audit Officer, Bombay Development Scheme, is also Financial Adviser and Audit Officer for the Military Scheme. The staff employed on this scheme do not form part of the Development Directorate, but work in the same building, and in conjunction with the Directorate. As military land becomes ready for disposal, it is handed over by the military authorities to the Bombay Government, and action in regard to its disposal is taken by the Development Directorate under the orders of Government.

Manners and Customs.

Next to the complexion of the people, which varies from fair to black, the tourist's attention in India is drawn by their dress and personal decoration. In its simplest form a Hindu's dress consists of a piece of cloth round the loins. Many an ascetic, who regards dress as a luxury, wears nothing more, and he would dispense with even so much if the police allowed him to. The Mahomedan always covers his legs, generally with trousers, sometimes with a piece of cloth tied round the waist and reaching to the ankles. Hill men and women, who at one time wore a few leaves before and behind and were totally innocent of clothing, do not appear to-day within the precincts of civilisation and will not meet the tourist's eye. Children, either absolutely nude or with a piece of metal hanging from the waist in front, may be seen in the streets in the most advanced cities, and in the homes of the rich. The child Krishna, with all the jewels on his person, is nude in his pictures and images.

Dress.—The next stage in the evolution of the Hindu dress brings the loincloth nearly down to the feet. On the Malabar coast, as in Burma, the ends are left loose in front. In the greater part of India, they are tucked up behind—a fashion which is supposed to befit the warrior, or one end is gathered up in folds before and the other tucked up behind. The simplest dress for the trunk is a scarf thrown over the left shoulder, or round both the shoulders like a Roman toga. Under this garment is often worn a coat or a shirt. When an Indian appears in his full indigenous dress, he wears a long robe, reaching at least down to the calves: the sleeves may be wide, or long and sometimes puckered from the wrist to the elbow. Before Europeans introduced buttons, a coat was fastened by ribbons, and the fashion is not obsolete. The Mahomedan prefers to button his coat to the left, the Hindu to the right. A shawl is tied round the waist over the long coat, and serves as a belt, in which one may carry money or a weapon, if allowed. The greatest variety is shown in the headdress. More than seventy shapes of caps, hats, and turbans, may be seen in the city of Bombay. In the Punjab and the United Provinces, in Bengal, in Burma and in Madras other varieties prevail. Cones and cylinders, domes and truncated pyramids, high and low, with sides at different angles: folded brims, projecting brims: long strips of cloth wound round the head or the cap in all possible ways, ingenuity culminating perhaps in the "parrot's beak" of the Maratha turban—all these fashions have been evolved by different communities and in different places, so that a trained eye can tell from the head-covering whether the wearer is a Hindu, Mahomedan or Parsi, and whether he hails from Poona or Dharwar, Ahmedabad or Bhavnagar.

Fashion Variations.—Fashions often vary with climate and occupation. The Bombay fisherman may wear a short coat and a cap, and may carry a watch in his pocket; yet, as he must work for long hours in water; he would not cover his legs, but suspend only a coloured kerchief from his waist in front. The Pathan of the cold north-west affects loose baggy trousers, a tall head-dress befitting his stature and covers his ears with its folds as if to keep off cold. The poorer people in Bengal and Madras do not cover their heads, except when they work in the sun or must appear respectable. Many well-to-do Indians wear European dress at the present day, or a compromise between the Indian and European costumes; notably the Indian Christians and Parsis. Most Parsis however have retained their own headdress, and many have not borrowed the European collar and cuffs. The majority of the people do not use shoes: those who can afford them wear sandals, slippers and shoes, and a few cover their feet with stockings and boots after the European fashion in public.

Women's Costumes.—The usual dress of a woman consists of a long piece of cloth tied round the waist, with folds in front, and one end brought over the shoulder or the head. The folds are sometimes drawn in and tucked up behind. In the greater part of India women wear a bodice: on the Malabar coast many do not, but merely throw a piece of cloth over the breast. In some communities petticoats, or drawers, or both are worn. Many Mussalman ladies wear gowns and scarfs over them. The vast majority of Mahomedan women are *gosha*, and their dress and persons are hidden by a veil when they appear in public: a few converts from Hinduism have not borrowed the custom. In Northern India Hindu women have generally adopted the Mussalman practice of seclusion. In the Dekhan and in Southern India they have not

As a rule the hair is daily oiled, combed, parted in the middle of the head, plaited and rolled into a chignon, by most women. Among high caste Hindu widows sometimes shave their heads in imitation of certain ascetics, or monks and nuns. Hindu men do not, as a rule, completely shave their heads, Mahomedans in most cases do. The former generally remove the hair from a part of the head in front, over the temples, and near the neck, and grow it in the centre, the quantity grown depending upon the fancy of the individual. Nowadays many keep the hair cropped in the European fashion, which is also followed by Parsis and Indian Christians. Most Mussalmans grow beards, most Hindus do not, except in Bengal and elsewhere, where the Mahomedan influence was paramount in the past. Parsis and Christians follow their individual inclinations. Hindu ascetics, known as Sadhus or Bairagis as distinguished from Sanyasis, do not clip their hair, and generally coil the uncombed hair of the head into a crest, in imitation of the god Shiva.

Hindu women wear more ornaments than others of the corresponding grade in society. Ornaments bedeck the head, the ears, the nose, the neck, the arms, wrists, fingers, the waist—until motherhood is attained, and by some even later—and the toes. Children wear anklets. Each community affects its peculiar ornaments, though imitation is not uncommon. Serpents with several heads, and flowers, like the lotus, the rose, and the champaka, are among the most popular object of representation in gold or silver.

Caste Marks.—Caste marks constitute a mode of personal decoration peculiar to Hindus, especially of the higher castes. The simplest mark is a round spot on the forehead. It represents prosperity or joy, and is omitted in mourning and on fast-days. It may be red, or yellowish as when it is made with ground sandalwood paste. The worshippers of Vishnu draw a vertical line across the spot, and as Lakshmi is the goddess of prosperity, it is said to represent her. A more elaborate mark on the forehead has the shape of U or V, generally with the central line, sometimes without it, and represents Vishnu's foot. The worshippers of Shiva adopt horizontal lines, made with sandalwood paste or ashes. Some Vaishnavas stamp their temples, near the corners of the eyes, with figures of Vishnu's conch and disc. Other parts of the body are also similarly marked. The material used is a kind of yellowish clay. To smear the arms and the chest with sandalwood paste is a favourite kind of toilet, especially in the hot season. Beads of Tulsi or sacred Basil, and berries of Rudraksha *elæocarpus ganitrus*, strung together are worn round their necks by Vaishnavas and Shaivas, respectively. The Lingayats, a Shaiva sect, suspend from their necks a metallic casket containing the Linga or phallus of their god. Bairagis, ascetics, besides wearing Rudraksha rosaries round their necks and matted hair, smear their bodies with ashes. Religious mendicants suspend from their necks figures of the gods in whose name they beg. Strings of cowries may also be seen round their necks. Muslim dervishes sometimes carry peacock's feathers.

Hindu women mark their foreheads with a red spot or horizontal line. High caste widows are forbidden to exhibit this sign of happiness, as also to deck themselves with flowers or ornaments. Flowers are worn in the chignon. Hindu women smear their faces, arms, and feet sometimes with a paste of turmeric, so that they may shine like gold. The choice of the same colour for different purposes cannot always be explained in the same way. The red liquid with which the evil eye is averted may be a substitute for the blood of the animal slaughtered for the purpose in former times. In many other cases this colour has no such associations. The Muslim dervish affects green, the Sikh Akali is fond of blue, the Sanyasi adopts orange for his robe, and no reason can be assigned with any degree of certainty.

Shiva.—India is a land of temples, mosques and shrines, and the Hindu finds at every turn some supernatural power to be appeased. Shiva has the largest number of worshippers. He has three eyes, one in his forehead, a moon's crescent in his matted hair, and at the top of the coil a woman's face representing the river Ganges. His abode is the Mount Kailas in the Himalayas, from which the river takes its source. Round his neck and about his ears and limbs are serpents, and he also wears a necklace of skulls. In his hands are several weapons, especially a trident, a bow, and a thunderbolt, and also a drum which he sounds while dancing for he is very fond of this exercise. He sits on a tiger's skin, and his vehicle is a white bull. His wife Parvati and his son Ganesha sit on his thighs. An esoteric meaning is attached to every part of his physical personality. The three eyes denote an insight into the past, present and future: the moon, the serpents, and the skulls denote months, years and cycles, for Shiva is a personification of time, the great destroyer. He is also worshipped as a Linga or phallus which represents creative energy.

Ganpati.—Ganesh or Ganpati, the controller of all powers of evil subject to Shiva, is worshipped by all sects throughout India. Every undertaking is begun with a prayer to him. He has the head of an elephant, a large abdomen, serpents about his waist and wrists, several weapons in his hands, and a piece of his tusk in one hand. He is said to have broken it off when he wanted to attack the moon for ridiculing him. The different parts of his body are also esoterically explained. His vehicle is a rat.

Parvati.—Parvati, the female energy of Shiva, is worshipped under various names and forms. She is at the head of all female supernatural powers, many of whom are her own manifestations. Some are benign and beautiful, others terrible and ugly. Kali, the tutelary deity of Kalighat or Calcutta, is one of her fierce manifestations. In this form she is black: a tongue smeared with blood projects from her gaping mouth: besides her weapons, she carries corpses in her hands, and round her neck are skulls. Bombay also takes its name from a goddess, Mumbadevi. Gouri, to whom offerings are made in Indian homes at an annual festival, is benign. On the other hand the epidemic diseases like the plague and small-pox are caused by certain goddesses or "mothers."

Vishnu, the second member of the Hindu trinity, is the most popular deity next to Shiva. He is worshipped through his several incarnations as well as his original personality. His home is the ocean of milk, where he reclines on the coils of a huge, many-headed serpent. At his feet sits Lakshmi, shampooing his legs. From his navel issues a lotus, on which is seated Brahma, the third member of the trinity. In his hands are the conch, which he blows on the battlefield, and the disc, with which the heads of his enemies are severed. Round his neck are garlands of leaves and flowers, and on his breast are shining jewels. As Shiva represents destruction, Vishnu represents protection, and his son is the god of love. To carry on the work of protection, he incarnates himself from time to time, and more temples are dedicated nowadays to his most popular incarnations, Rama and Krishna, than to his original personality. Rama is a human figure, with a bow in one of his hands. He is always accompanied by his wife Sita, often by his brother Lakshmana, and at his feet, or standing before him with joined hands, is Hanuman, the monkey chieftain, who assisted him in his expedition against Ravana, the abductor of his wife. Krishna is also a human figure, generally represented as playing on a flute, with which he charmed the damsels of his city, esoterically explained to mean his devotees.

Brahma is seldom worshipped: only a couple of temples dedicated to him have yet been discovered in all India.

Minor Deities.—The minor gods and goddesses and the deified heroes and heroines who fill the Hindu pantheon, and to whom shrines are erected and worship is offered, constitute a legion. Many of them enjoy a local reputation, are unknown to sacred literature, and are worshipped chiefly by the lower classes. Some of them, though not mentioned in ancient literature, are celebrated in the works of modern saints.

The **Jains** in their temples, adore the sacred personages who founded and developed their sect, and venerate some of the deities common to Hinduism. But their view of Divinity is different from the Hindu conception, and in the opinion of Hindu theologians they are atheists. So also the **Buddhists** of Burma pay almost the same veneration to Prince Siddhartha as if he was a god, and indeed elevate him above the Hindu gods, but from the Hindu standpoint they are also atheists.

Images.—Besides invisible powers and deified persons, the Hindus venerate certain animals, trees and inanimate objects. This veneration must have originated in gratitude, fear, wonder, and belief in spirits as the cause of all good or harm. Some of the animals are vehicles of certain gods and goddesses—the eagle of Vishnu: the swan of Brahma: the peacock of Saraswati: Hanuman, the monkey of Rama: one serpent upholds the earth, another makes Vishnu's bed: elephants support the ends of the universe, besides one such animal being Indra's vehicle: the goddess Durga or Kali rides on a tiger: one of Vishnu's incarnations was partly man and partly lion. The cow is a useful animal: to the Brahman vegetarian her milk is indispensable, and he treats her as his mother. So did the Rishi of old, who often subsisted on milk and fruits and roots. To the agriculturist cattle are indispensable. The snake excites fear. Stones, on which the image of a serpent is carved, may be seen under many trees by the roadside. The principal trees and plants worshipped are the Sacred Fig or Pipal, the Banyan, the Sacred Basil, the Bilva or Wood Apple, the Asoka, and the Acacia. They are in one way or another associated with some deity. The sun, the moon, and certain planets are among the heavenly bodies venerated. The ocean and certain great rivers are held sacred. Certain mountains, perhaps because they are the abodes of gods and Rishis, are holy. Pebbles from the Gandaki and the Narmada, which have curious lines upon them, are worshipped in many households and temples.

Worship.—Without going into a temple, one can get a fair idea of image worship by seeing how a serpent-stone is treated under a tree. It is washed, smeared with sandal, decorated with flowers: food in a vessel is placed before it, lamps are waved, and the worshipper goes round it, and bows down his head, or prostrates himself before the image. In a temple larger bells are used than the small ones that are brought to such a place: jewels are placed on the idol: and the offerings are on a larger scale. Idols are carried in public procession in palanquins or cars. The lower classes sacrifice animals before their gods and goddesses.

Domestic Life.—Of the daily domestic life of the people a tourist cannot see much. He may see a marriage or funeral procession. In the former he may notice how a bridegroom or bride is decorated: the latter may shock him, for a Hindu dead body is generally carried on a few pieces of bamboo lashed together: a thin cloth is thrown over it and the body is tied to the frame. The Mahomedan bier is more decent, and resembles the Christian coffin. Some Hindus, however, carry the dead to the burial ground in a palanquin with great pomp. The higher castes cremate the dead: others bury them. Burial is also the custom of the Muslims, and the Parsis expose the dead in Towers of Silence.

Indian Names.

The personal name of most Hindus denotes a material object, colour, or quality, an animal, a relationship, or a deity. The uneducated man, who cannot correctly pronounce long Sanskrit words, is content to call his child, father, brother, uncle, or mother, or sister, as the case may be. This practice survives among the higher classes as well. Appa Saheb, Anna Rao, Babaji, Bapu Lal, Bhai Shankar, Tatacharya, Jijibhai, are names of this description, with honorific titles added. It is possible that in early society the belief in the re-birth of departed kinsmen lent popularity to this practice. Nothing could be more natural than to call a man white, black, or red: gold or silver: gem, diamond, ruby, pearl, or merely a stone: small or tall, weak or strong: a lion, a snake, a parrot, or a dog: and to name a woman after a flower or a creeper. Thus, to take a few names from the epics, Pandu means white, and so does Arjuna: Krishna black: Bhima terrible: Nakula a mongoose: Shunaka a dog: Shuka a parrot: Shringa a horn. Among the names prevalent at the present day Hira is a diamond: Ratna or Ratan a jewel: Sonu or Chinna gold: Velli or Belli, in the Dravidian languages, means white metal or silver. Men are often called after the days of the week on which they were born, and hence they bear the names of the seven heavenly bodies concerned. When they begin to assume the names of the Hindu deities, they practically enter upon a new stage of civilisation. It is doubtful whether the Animists ever venture to assume the names of the dreaded spirits worshipped by them. To pronounce the name of a devil is to invite him to do harm. If the spirits sometimes bear the names of human beings, the reason seems to be that they were originally human.

High-caste practices.—The high caste Hindu, on the other hand, believes that the more often the name of a deity is on his lips, the more merit he earns. Therefore he deliberately names his children after his gods and goddesses, so that he may have the opportunity of pronouncing the holy names as frequently as possible. These are also sonorous and picturesque. Shiva is happy: Vishnu is a pervader: Govinda is the cowherd Krishna: Keshava has fine hair: Rama is a delighter: Lakshmana is lucky: Narayana produced the first living being on the primeval waters: Ganesha is the Lord of Shiva's hosts: Dinakara is the luminary that makes the day: Subrahmanya is a brother of Ganesha. Sita is a furrow: Saitri a ray of light: Tara a star: Radha prosperity: Rukmini is she of golden ornaments: Bhama of the glowing heart. Shiva and Vishnu has each got at least a thousand names, and they may be freely drawn upon and paraphrased in naming one's children; and the whole Hindu pantheon is as crowded as it is large. When a mother loses several children, she begins to suspect that some evil spirit has conspired against her and in order to make her off-spring unattractive to the powers of darkness, she gives them ugly names, such as Keru, rubbish, or Ukirda, dunghill, or Martoba, the mortal. Women are named after rivers, as Sarasvati, Ganga, Bhagirathi, Godavari, or Kaveri, just as men are sometimes called after mountains. Manu counsels young men not to choose a wife with such a name, perhaps because a river is an emblem of deviousness and inconstancy, as a hill is an emblem of stability. But the names of rivers have not been discarded. The Burmans have a curious custom: if a child is born on a Monday, its name must begin with a guttural, on Tuesday with a palatal, on Thursday with a labial, on Saturday with a dental.

Family names.—When a person rises in importance, he adds to his personal name a family or caste name. It was once the rule that the title Sharma might be added to a Brahman's name, Varma to a Kshatriya's, Gupta to a Vaishyas, and Dasa to a Shudra's. This rule is fairly well observed in the case of the first two titles, but the meaning of the other two has changed. Dasa means a slave or servant, and the proudest Brahman cannot disdain to call himself the servant of some god. Thus, although Kalidas, the famous poet, was a Shudra, Ramadas, the famous guru of Shivaji, was a Brahmin. The Vaishnavas have made this fashion of calling oneself a servant of some god exceedingly popular, and in Western India high caste Hindus of this sect very commonly add Das to their names. The Brahmans of Southern India add Aiyer or Aiyangar to their names. Shastri, Acharya, Bhat, Bhattacharya, Upadhyaya, Mukhopadhyaya, changed in Bengal into Mukerji, are among the titles indicative of the Brahmanical profession of studying and teaching the sacred books. Among warlike classes, like the Rajputs and Sikhs, the title Singh (lion) has become more popular than the ancient Varma. The Sindhi Mal, as in Gidumal, means brave and has the same force. Raja changed into Raya, Rao and Rai was a political title, and is not confined to any caste. The Bengali family names, like Bose and Ghose, Dutt and Mitra, Sen and Guha, enable one to identify the caste of their bearers, because the caste of a family or clan cannot be changed. Shet, chief of a guild or a town, becomes Chetty, a Vaishya title, in Southern India. Mudaliyar and Nayudu, meaning leaders, are titles which were assumed by castes of political importance under native rulers. Nayar and Menon are the titles of important castes in Malabar. Ram, Lal, Nand, Chand, are among the additions made to personal names in Northern India. Suffixes like Ji, as in Ramji or Jamshedji, the Kanarese Appa, the Telugu Garu, the feminine Bai or Devi, are honorific. Prefixes like Babu, Baba, Lala, Sodhi, Pandit, Raja, and the Burmese Maung are also honorific.

Professional names.—Family names sometimes denote a profession: in some cases they might have been conferred by the old rulers. Mehta, Kulkarni, Deshpande, Chitnavis, Mahalnavis are the names of offices held in former times. One family name may mean a flour seller, another a cane-seller, and a third a liquor-seller. To insert the father's name between one's personal and the family name is a common practice in Western India. It is rare elsewhere. When a family comes from a certain place, the suffix 'kar' or 'wallah' is added to the name of the place and it makes a family surname in Western India. Thus we may have Chiplunkars and Suratwallahs, or without these affixes we may have Bhavnagris. Malabaris and Bilimorias, as among Parsis. Thus Vasudev Pandurang Chiplunkar would be a Hindu, whose personal name is Vasudev's father's name Pandurang, and family name derived from the village of Chiplun, is Chiplunkar. In Southern India the village name precedes the personal name. The evolution of Musalman names follows the same lines as Hindu names. But Muslims have no god or goddesses, and their names are derived from their religious and secular history. These names and titles are often as long and picturesque as Hindu appellations. The agnomens Baksh, Din, Ghulam, Khwaje, Fakir, Kazi, Munshi, Sheikh, Syed, Begum, Bibi and others, as well as honorific additions like Khan have meanings which throw light of Muslim customs and institutions. The Parsis also have no gods and goddesses, and their personal names are generally borrowed from their sacred and secular history. Their surnames frequently indicate a profession or a place, as in the case of Hindus in Western India. Batliwallah, Readymoney, Contractor, Saklatwallah, Adenwallah and others like them are tell-tale names.

Conversions.—As a rule, a child is named soon after it is born, and in the case of males the appellation is not changed. The higher Hindu castes have a separate ceremony called the name-giving ceremony performed on the twelfth day after birth. When a girl is married in these castes, the husband's family give her a new personal name. When a boy is invested with the sacred thread and is made a twice-born, his name is not changed, but when a man joins an order of ascetics, his lay name is dropped, and he assumes a new name. So also when a Burman joins an order of monks or nuns, the lay name is superseded by a Pali name. Christian converts change their original name when they are baptised.

Indian Art.

In India there has never been so marked a separation between what are now known as the Fine Arts, and those applied to industry as was the case in Europe during the nineteenth century. As, however, Industrial art forms the subject of a special article in this book, the term Indian Art will here be confined to Architecture, Sculpture and Painting.

Historical.—The degree of proficiency attained in art by Indians prior to B. C. 250, can only be conjectured by their advancement in literature; and by the indirect evidences of indebtedness shown by the works of the historic period, to those which preceded them; or direct records of artistic work of an earlier date than B. C. 250 do not exist. The chief historic schools of architecture are as follows

Name.	Dates.	Locality of the best Examples.
Buddhist	..B.C.250—A.D.750.	Ellora, Ajanta, Kali, Sanchi.
Jaina ..	..A.D.1000—1300.	Ellora, Mount Abu, Palitana.
Brahminica	..A.D. 500 to the present day.	Ellora, Elephanta, Orissa, Bhuvaneswar, Dharwar.
Chalukyan	..A.D.1000—1200.	Umber, Somnathpur, Ballur.
Dravidian	..A.D.1350—1750.	Ellora, Tanjore, Madura, Tinnevelly.
Pathan	..A.D.1200—1550.	Delhi, Mandu, Jaunpore.
Indo-Saracenic	A.D.1520—1760	Lahore, Delhi, Agra, Amber, Bijapur.

Buddhist Architecture is mainly exemplified by the rock-cut temples and monasteries found in Western India and in the *Topes* or sacred mounds. The interior decorations, and external facades of the former, and the rails and gates surrounding the latter point unmistakably to their being derived from wooden structures of an earlier period. The characteristic features of these temples are horse-shoe openings in the facades to admit light, and collonades of pillars with richly ornamented caps in the interior halls. Jaina Architecture is found in its most highly developed form in the Dilwara temples at Mount Abu. The ground plan consists of a shrine for the god or saint; a porch, and an arcaded courtyard with niches for images. The characteristic of the style is grace and lightness, with decorative carving covering the whole interior, executed with great elaboration and detail. Constructional methods suggest that original types in wood have been copied in marble.

Brahminical, Chalukyan and Dravidian styles differ little in essential plan, all having a shrine for the god, preceded by pillared porches. The outer forms vary. The northern Brahminical temples have a curved pyramidal roof to the shrines, which in the southern or Dravidian style are crowned by a horizontal system of storied towers, and each story, decreasing in size, is ornamental with a central cell and figures in high relief. The Chalukyan style is affected by its northern and southern neighbours, taking features from each without losing its own special characteristics of which the star-shaped plan of the shrine, with the five-fold bands of external ornament, is the principal features. Pathan Architecture was introduced into India by the Mahomedan invasion of the thirteenth century. At old Delhi are fine examples in the Kutub Mosque and Minar. The characteristics of the style are severity of outline, which is sometimes combined with elaborate decoration due, it is stated, to the employment of Hindu craftsmen. The mosques and tombs at Ahmedabad already show Hindu influence; but purer examples are to be found at Jaunpore and Mandu. Indo-Saracenic Architecture reached the climax of its development during the reigns of the Moghul Emperors, Akbar, Jehangir and Shah Jahan. It eclipsed in richness of material and refinement of taste the building efforts of previous periods, its crowning example being the Taj Mahal at Agra. The buildings erected during the Adil Shahi dynasty at Bijapur at a slightly later date, exhibit a certain Turkish influence, especially in the great tomb of Mahmoud. Though less refined and lacking the attraction of precious materials in their decoration, these splendid edifices are held in higher esteem by some critics than those of the Moghals, on account of their simplicity, grandeur and fine proportions. The era of great civil architecture in India was revived by the Mahomedan powers. Splendid palaces and fortresses were built at Madras, Delhi, Agra, Fattehpore-Sikri and Bijapur, and the example thus set was copied by the Hindu princes at Jaipur, Udaipur and elsewhere in India. The application of great architectural treatment, unequalled in extent elsewhere, is to be seen in the Ghauts or steps enclosing lakes and on the banks of rivers. The most notable constructional contribution of the Mahomedans to Indian architecture was the introduction of the true arch and dome.

Sculpture.—The use of sculpture and painting in isolated works of art was practically non-existent in India until modern times. One or two reliefs and certain gigantic figures may be quoted as exceptions, but taken generally it may be stated that these arts were employed as the decorative adjuncts of architecture. No civil statuary, such as is now understood by the term, was executed; for no contemporary portrait figures, or busts in marble, or bronze, have come down to us from the ruins of ancient India, as they have from those of Egypt, Greece and Rome. Sculpture has been used exclusively as the handmaid of religion, and to this fact may be attributed the stereotyped forms to which it became bound. The lavish use of sculpture on Indian temples often exceeds good taste, and mars the symmetry and dignity of their mass and outline; but for exuberance of imagination, industrious elaboration and vivid expression of movement, Indian sculpture is perhaps without its equal elsewhere in the world. The most impressive specimens are the earliest, found in the Buddhist and Brahminical cave temples of Ellora, Ajanta and Elephanta. The great Trimurthi in the last named of these temples ranks for mystery

and expressive grandeur with the greatest masterpieces of Egyptian art. The outstanding characteristics of Hindu sculpture are the power displayed in suggesting movement; the fine sense of decorative arrangements of line and mass; and an overpowering ingenuity in intricate design. Mahomedan sculpture in India, though not exclusively confined to geometric forms as is that of the more severe Arabian school, is very restrained as compared with that of the Hindus. Floral motifs are often used in the ornaments to tombs and palaces, but rarely in those of mosques. Their geometric ornament shows great ingenuity and invention; and wonderful decorative use is made of Persian, Arabic and Urdu lettering in panels, and their borders. The representation of human or animal figures is rarely to be met with. Sculptured and modelled relief is, as a rule, kept very low; and is mainly confined to the decoration of mouldings, architraves, lintels, or the bands of ornament which relieve large exterior wall spaces. Buildings of purely Mahomedan design and workmanship show greater restraint than those upon which Hindu workmen have been employed and are more satisfactory; but at Ahmedabad the two celebrated windows are striking examples of a happy combination of the two styles.

Painting.—Much of the carved stonework upon ancient Indian buildings was first plastered and then decorated with colour, but the only paintings, in the modern acceptation of the term, now existing, which were executed prior to the Moghul period, are those upon the walls of the cave temples at Ajanta. These remarkable works were produced at intervals during the first 600 years of the Christian era. They exhibit all the finer characteristics of the best Indian sculpture, but with an added freedom of expression due to the more tractable vehicle employed. They remained hidden in the Deccan jungles for nearly twelve hundred years, until accidentally discovered in 1816. They are painted in a species of fresco; and when first brought to light were well preserved, but they have greatly deteriorated owing to the well meant, but misguided action of copyists, and the neglect of the authorities. Their origin is as wrapt in mystery as is that of the artists who painted them; for no other paintings of similar power and character are known to exist; and the artists, so far as is known, left no successors. Nine hundred years elapsed between the completion of the Ajanta paintings and the commencement of the second period of Indian painting. This owned its origin to the introduction of Persian artists by the Moghul Emperor Akbar; and the establishment of the indigenous Moghul school was due to the encouragement and fostering care of his successors, Jehangir and Shah Jahan. Unlike the works of the Ajanta painters, which were designed upon a large scale, the pictures of the Moghul school were miniatures. They were executed in a species of opaque watercolour upon paper or vellum, resembling in technique the illuminated missals produced by the monks in Europe during the middle ages. Some of the finest of the earlier specimens in India are of a religious character; this phase of development being closely allied to the art the caligraphist. As its range extended, a remarkable school of portrait painters arose notable for restrained but extremely accurate drawing, keen insight into character, harmonious colour, fine decorative feeling, and extraordinary delicacy and finish in the painting of detail. The artists of a Hindu off-shoot of this movement, known as the Rajput school, were less fully endowed with the technical and purely aesthetic qualities than were the Moghul painters; but they brought to their work poetry and sentiment which are not to be found in that of the Mahomedans. The pictures of both branches of the Moghul school, although highly decorative in character, were not intended for exhibition upon the walls of rooms, according to Western practice, and, when not used as illustrations or decorations to manuscript books, were preserved in portfolios. As this school of painting was the last expression of traditional art in India, in the restricted sense here applied to the term, and, as the question has a distinct bearing upon the modern development of painting, a few words may be added regarding the difference between the conventions followed by Eastern and Western painters. Until the middle of the fourteenth century the conventions of both East and West were practically the same, though the use of them differed according to environment and national temperament. These conventions the artists of the East have retained; and development has been upon the line of decorative fitness, harmony of colour, and expressive action. Their art has throughout been decorative, and when natural objects have been depicted, their treatment has been that of a flat pattern. The European painters, after the period above mentioned on the contrary, sought to attain the appearance of actuality in the objects depicted by the study of the science of light and shade, and perspective: and in achieving this end, and developing it into the realisation of atmosphere and light, they sacrificed a large measure of the decorative quality which characterised the work of the earlier school. Eastern artists have ignored or been blind to light and shade; and in works entirely free from European influence one will look in vain for any suggestion of it in their figures or for shadows of objects cast upon the ground. During the last fifty years there has been a strong movement toward a return to decorative conventions, on the part of European artists who have assimilated much that the East has to teach them, without thereby affecting the distinctively Western character of their work. Indian and Japanese artists have been less successful when attempting the reverse of this practice, and appear to lose whatever is best in their traditional practice without acquiring the finer qualities of that of the West.

Modern Painting.—As the reign of Shah Jahan exhibits the high tide of artistic development in India, so the reign of his successor Aurangzeb marks the period of its rapid decline. The causes of this are attributable to the absence of encouragement by this Emperor; to his long periods of absence from the court at Delhi or Agra, entailed by the continuous wars he waged in his efforts to bring the whole of the Peninsula under his rule; and partly to the tendency strongly inherent in the Indian artist

to become stereotyped in his practictice. All foreign designers, painters and craftsmen who had been attracted to India by the great works carried out by Akbar, Jehangir and Shah Jahan left the country, and their places were taken by no successors. The indigenous artists left to themselves in the isolated courts of small Indian princes, or collected in schools in remote districts, employed themselves mainly upon repeating the works of a previous age, instead of seeking new motifs for artistic treatment. So purely mechanical did the work become that in some of the schools or guilds of painters, the execution of a single picture was subdivided; one craftsman painting the face, a second the drapery, and a third the background. Such methods could only lead to deterioration and decay. At the time when the British East India Company ceased to be only a guild of merchants and became a great administrative power in 1757, very little vitality survived in the ancient art of the country. During the century of its administrative history between the battle of Plassey and the Indian Mutiny, the "Company" was too fully occupied in fighting for its existence, extending its borders and settling the internal economy of its ever increasing territories, to be able to give much attention to conserving any remnant of artistic practice which had survived. Without any deliberate intention of introducing western art into the country, Greek and its derivative styles of architecture were adopted for public and private buildings in Calcutta, Bombay and Madras because these were found to be more suitable for their purpose than buildings of indigenous pattern. The practical result was the same; for the Indian craftsmen employed upon their erection were confronted with styles affording no scope for the application of their traditional ornament and concerning which they had no knowledge or sympathy. As there were no sculptors in India capable of modelling or carving civil sculpture, the monuments to distinguish public servants were all imported from England; and the portraits, or other paintings which decorated the interior walls of the buildings, were furnished by European painters who visited India or by artists in England. Although a considerable amount of research work of a voluntary nature was done by Archæologists, no official interest was taken in artistic education until the Government of India was transferred to the British Crown in 1859. In England itself, the first fifty years of the nineteenth century was a period of gross commercialism and artistic degradation; but with the advent of the International Exhibition of 1851 the eyes of the nation were opened to the value of art as applied to industry.

The **Schools of Art** then instituted throughout England were imitated in a timid and tentative manner in India: and were attached to the educational system, which had been previously modelled upon a definitely European basis. These schools of art, it should be remembered, were specially established to assist the artistic industries of the country, and not to provide instruction in architecture, sculpture and painting. In fact at a subsequent period they narrowly escaped extinction by the Secretary of State, upon the ground that they had become schools of painting and had thus been diverted from performing the original function for which they were established. The work of the Schools of Art in regard to industrial art is referred to elsewhere; and as two of them, that at Madras and that at Lahore, have confined their activities almost exclusively to this branch of the subject it is necessary to mention only the work of the Schools at Calcutta and Bombay in the present article. The Calcutta school, except for occasional experiments in the application of the graphic arts to lithography, engraving and stained glass, has become a school of painting and drawing. That at Bombay covers a wider field; for in addition to classes for modelling, painting and design it possesses a special school of architecture; a range of technical workshops, in which instruction is given in the applied arts; and research laboratories and studios devoted solely to the improvement of the Pottery industry. It is in the principles underlying the instruction in painting that the schools at Calcutta and Bombay have taken almost diametrically opposite roads to reach the end they both have in view, namely, the revival of the art of painting in India by means of an indigenous school of Indian painters. Mr. Havell, who until a few years back was the Principal of the Calcutta School, banished from within its walls every vestige of European art; and claimed that the traditional art of India, in its old forms, is not dead, but merely sleeping or smothered by the blanket of European culture laid upon it for the last 150 years, and needed but to be released from this incubus to regain its pristine vigour. Well equipped with literary ability; backed by intense enthusiasm for the views he held, which he advocated with admirable persistence; he imposed upon his students an exclusive and severe study of the Moghul and Rajput schools of painting. He was fortunate in finding a willing and equally enthusiastic disciple in Mr. Abinandranath Tagore, an artist of fine imagination and fancy, endowed with technical ability of a high order, combined with a serious devotion to his art. He with other Bengal painters, inspired by Mr. Havell's precepts, founded, about fifteen years ago, what has since become known as the Calcutta School of painting. In their early work the painters of this school closely adhered to the conventions of Moghul and Rajput artists, whom they took as their models; and these early examples made a great impression upon all European critics who saw them. They were welcomed as the first sign of a genuine revival of Indian painting, based upon traditional lines, and it was confidently hoped that the movement would meet with the support it merited from Indians of all classes. Interesting as many individual works of the school undoubtedly are the anticipations which greeted its inception have scarcely been fulfilled by the Calcutta school. The painters themselves have never reached the high technical standard of the artists who produced the best works of the Moghul or Rajput school; and, as time has passed, their outlook appears to have shifted, and, while stemming the flood of western influence, they appear to have drifted into a backwater of Japanese conventions. The Indian public has failed to give the school the support it was hoped they would afford, and the movement has had to depend for encourage

ment mainly upon Europeans in England and India.

Bombay School of Art.—The attitude towards the development of art in modern India taken by Mr. Cecil Burns, who long guided the policy of the Bombay school, was diametrically opposite to that favoured by Mr. Havell. While yielding to no one in his admiration for the ancient art of India, and giving every encouragement to his students to study its masterpieces, the view he takes is that with European literature dominating the system under which the educated classes in India are trained; with European ideas, and science permeating the professional, commercial, industrial, and political life of the country, it is not possible for modern Indians now to recapture the spirit which alone gave vitality to the great works of the past; that without this spirit, the conventions the ancient artists adopted are mere dead husks; and that to copy these would be as unprofitable as it would be for the artists of Europe to harness themselves to the conventions of the Greek and Roman sculptors or to those of the mediæval painters; that with European pictures, often of inferior quality illustrating every educational text book, and sold in the shops of every large city, it is essential for the proper education of art students that they should have before them the masterpieces of European art; and that, with the wide adoption of European styles of architecture in India, it is necessary for a school of art to possess the best examples of ornament applicable to the great historic styles, for the purpose of study and reference. There are certain basic principles common to the technique of all great art, such as fine and accurate drawing in its widest sense, composition and design, and the science of colour harmony. By means of these an artist can express his individuality and emotions, and Mr. Burns held that the main function of a School of Art is to equip its students with the power of expression, untrammelled by any set conventions, so that when they leave the school, they do so with the capacity to employ their faculties in any direction their sympathies and tastes may impel them to take. Which of these two very divergent theories will produce the result both these gentlemen unite in wishing to see brought to pass, time alone will show. Certain it is that the driving force of any artistic impulse must come from within the nation, and that India, like every other country, in its art, as in other matters, must work out its own salvation.

One striking success of hopeful augury has been achieved by the Bombay School in recent years. This is the establishment of a flourishing school of architecture in which the study of Indian architecture takes an important place. Connected with this school is a students' architectural association designed to keep past students in touch with the school and with one another. As architecture embraces and influences every branch of decorative and industrial art, it is to be hoped that this school may be the means whereby the ancient glories of Indian architecture will be some day revived in new forms, bringing in its train a vitalising influence upon every other form of artistic activity.

Mural Painting.—Mr. W. E. Gladstone Solomon, the present Principal, has during the last four years studiously avoided any dogmatic theories as to the ultimate end which Indian art is destined to attain, though he has consistently pointed out the Indian's pre-eminence in the decoration of wall spaces. The guiding principle with Mr. Solomon has been to teach the students to draw and to paint what they see; and further to encourage by all possible means their natural progress in the direction towards which their inherent instinct most obviously urges them. The application of this close training in the study of form and colour from the life to a decorative purpose, which accords both with ancient traditions and modern manifestations of the Indian artistic genius, has recently taken a definite line in the production of the mural paintings executed by the students at Government House and elsewhere in Bombay. These paintings are regard as a hopeful augury for the future of Indian art demonstrating as they do the capacity of young Indian artists to grapple with the exacting problems of figure composition and to carry them out on a comprehensive scale. Specimens of mural paintings by the students of the Sir. T. T. School of Art, Bombay, are being sent to the Empire Exhibition at Wembley.

Posts and Telegraphs.

POST OFFICE.

The control of the Posts and Telegraphs of India is vested in an officer designated Director-General of Posts and Telegraphs who works in subordination to the Government of India in the Department of Industries and Labour. The superior staff of the Direction, in addition to the Director-General himself, consists on the postal side of two Deputy Directors-General (who are officers of the rank of Postmaster-General), and six Assistant Directors-General (whose status is similar to that of Deputy Postmasters-General).

For postal purposes, the Indian Empire is divided into nine circles as shown below, each of the first eight is in charge of a Postmaster-General and the Sind and Baluchistan Circle is controlled by a Deputy Postmaster-General:—Bengal and Assam, Bihar and Orissa, Bombay, Burma, Central, Madras, Punjab and North-West Frontier, United Provinces and Sind and Baluchistan. The Central Circle comprises roughly the Central Provinces and the Central India and Rajputana Agencies.

The Postmasters-General are responsible to the Director-General for the whole of the postal arrangements in their respective circles, with the exception of those connected with the conveyance of mails by railways and inland steamers which are entrusted to three officers bearing the designation of Deputy Postmaster-General, Railway Mail Service. All the Postmasters-General are provided with Personal Assistants, while those in charge of the largest circles are also assisted by Deputy Postmasters-General. The nine Postal Circles and the jurisdictions of the three Deputy Postmasters-General, Railway Mail Service, are divided into Divisions, each in charge of a Superintendent of Post Offices or Railway Mail Service as the case may be and each Superintendent is assisted by a certain number of officials styled Inspectors.

Generally there is a head post office at the head-quarters of each revenue district and other post offices in the same district are usually subordinate to the head office for purposes of accounts. The Postmasters of the Calcutta, Bombay, and Madras General Post Offices and of the larger of the other head post offices are directly under the Postmaster-General. The Presidency Postmasters, indeed, have one or more Superintendents subordinate to them. When the duties of the Postmaster of a head office become so onerous that he is unable to perform them fully himself, a Deputy Postmaster is appointed to relieve him of some of them, and if still further relief is required, one or more Assistant Postmasters are employed. The more important of the offices subordinate to the head office are designated sub-offices and are usually established only in towns of some importance. Sub-offices transact all classes of postal business with the public, submit accounts to the head offices to which they are subordinate, incorporating therein the accounts of their branch offices, and frequently have direct dealings with Government local sub-treasuries. The officer in charge of such an office works it either single-handed or with the assistance of one or more clerks according to the amount of business.

Branch offices are small offices with limited functions ordinarily intended for villages, and are placed in charge either of departmental officers on small pay or of extraneous agents, such as school-masters, shopkeepers, land-holders or cultivators who perform their postal duties in return for a small remuneration.

The audit work of the Post Office is entrusted to the Accountant-General, Posts and Telegraphs, who is an officer of the Finance Department of the Government of India and is not subordinate to the Director-General. The Accountant-General is assisted by Deputy Accountants-General, all of whom, with the necessary staff of clerks, perform at separate headquarters the actual audit work of a certain number of postal circles.

In accordance with an arrangement which has been in force since 1883, a large number of sub-post offices and a few head offices perform telegraph work in addition to their postal work and are known by the name of combined offices. The policy is to increase telegraph facilities everywhere and especially in towns by opening a number of cheap telegraph offices working under the control of the Post Office.

The **Inland Tariff** (which is applicable to Ceylon and Portuguese India except as indicated below) is as follows:—

	When the postage is prepaid.	When the postage is wholly unpaid.	When the postage is insufficiently prepaid.
Letters.	Anna.		
Not exceeding two and a half tolas ..	1	Double the prepaid rate (chargeable on delivery).	Double the deficiency (chargeable on delivery).
Every additional two and a half tolas or part of that weight	1		
Book and pattern packets.			
Every 5 tolas or part of that weight ..	½		

Postcards.

Single .. .. .. ½ anna.
Reply .. .. .. 1 „

(The postage on cards of private manufacture must be prepaid in full.)

Parcels (prepayment compulsory).

(*a*) Parcels not exceeding 440 tolas in weight:—

	Rs. a.
Not exceeding 20 tolas	0 2
Exceeding 20 tolas but not exceeding 40 tolas	0 3
For every additional 40 tolas or part of that weight	3 annas.

(*b*) Parcels exceeding 440 tolas in weight:—
Exceeding 440 tolas but not exceeding 480 tolas .. .. Rs. 3 0
4 annas for every additional 40 tolas or fraction thereof up to 800 tolas.

Registration is compulsory in the case of parcels weighing over 440 tolas.
These rates are not applicable to parcels for Portuguese India.
In the case of parcels for Ceylon a registration fee of 2 annas is chargeable on each parcel in addition to the rates shown above.

Registration fee.	Rs. a.
For each letter, postcard, book or pattern packet, or parcel to be registered	0 2

Ordinary Money Order fees.

On any sum not exceeding Rs. 10 ..	0 2
On any sum exceeding Rs. 10 but not exceeding Rs. 25	0 4
On any sum exceeding Rs. 25 up to Rs. 600	0 4

for each complete sum of Rs. 25, and 4 annas for the remainder; provided that, if the remainder does not exceed Rs. 10, the charge for it shall be only 2 annas.

Telegraphic money order fees.—The same as the fees for ordinary money orders *plus* a telegraph charge calculated at the rates for inland telegrams for the actual number of words used in the telegram advising the remittance, according as the telegram is to be sent as an "Express" or as an "Ordinary" message.

In the case of Ceylon the telegraph charge is calculated at the rates shown below:—

Express—Rs. 2 for the first 12 words and 3 annas for each additional word.

Ordinary.—Re. 1 for the first 12 words and 2 annas for each additional word. Telegraphic money orders cannot be sent to Portuguese India.

Value-payable fees.—These are calculated on the amount specified for remittance to the sender and are the same as the fees for ordinary money orders.

Insurance fees.—For every Rs. 50 of insured value 1 anna.
As regards Ceylon and Portuguese India see Foreign Tariff.

Acknowledgment fee.—For each registered article 1 anna.

The Foreign Tariff (which is not applicable to Ceylon except in respect of insurance fees or to Portuguese India except in respect of insurance fees and parcel postage) is as follows:—

Letters.

To the United Kingdom, other British Possessions and Egypt, including the Sudan.	2 annas for the first ounce and 1½ annas for each additional ounce or part of that weight.
To other countries, colonies or places.	3 annas for the first ounce and 1½ annas for every additional ounce or part of that weight.
Postcards Single	.. 1½ anna.
„ Reply	.. 3 annas.

Printed Papers.—½ anna for every 2 ounces or part of that weight.

Business Papers.—For a packet not exceeding 10 ounces in weight .. 3 annas.
For every additional 2 ounces or part of that weight .. .. ½ anna.

Samples.—½ anna for every 2 ounces or part of that weight, subject to a minimum charge of 1 anna for each packet.

(The rates shown above are those chargeable when the postage is prepaid.)

Parcels.—(Prepayment compulsory.) The rates vary with the countries to which they are addressed. The rates to the United Kingdom are:—

	Via Gibraltar. Rs. a. p.
Not over 3 lbs. ..	.. 1 8 0
„ „ 7 „ ..	.. 2 12 0
„ „ 11 „ ..	.. 3 15 0

Registration fee.—3 annas for each letter, postcard, or packet.

Insurance fees (for Registered Letters and Parcels only)—

(1) To all countries and places to which insurance is available with the exception of those named below—5 annas for £12 and 5 annas for every additional £12.
(2) To Mauritius and British Somaliland—5 annas for R 200, and 5 annas for every additional R 200.
(3) To Ceylon (*for both letters and parcels*) and Portuguese India (*for letters only*)—2 annas for R 100 and 2 annas for every additional R 100.
(4) To Portuguese India, the Seychelles and Zanzibar (*for parcels only*)—5 annas for R200, and 5 annas for every additional R 200.

Money Orders.—To countries on which money orders have to be drawn in rupee currency, the rates of commission are the same as in the case of inland money orders.

To countries on which money orders have to be drawn in sterling, the rates are as follows:—

	Rs.	a.
On any sum not exceeding £1 ..	0	3
,, ,, exceeding £1 but not exceeding £2	0	5
,, ,, ,, £2 ,, ,, £3	0	8
,, ,, ,, £3 ,, ,, £4	0	10
,, ,, ,, £4 ,, ,, £5	0	12
.. .. .. £5	0	12

for each complete sum of £5 and 12 annas for the remainder, provided that if the remainder does not exceed £1, the charge for it shall be 3 annas; if it does not exceed £2, the charge for it shall be 5 annas; if it does not exceed £3, the charge for it shall be 8 annas; and if it does not exceed £4, the charge for it shall be 10 annas.

Insurance fees—

	Annas.
For insurance of letters and parcels to Ceylon and of letters to Portuguese India—	
Where the value insured does not exceed Rs. 100	2
For every additional Rs. 100 or fraction thereof	2
For insurance of letters and parcels to Mauritius and the Somaliland Protectorate and of parcels to Portuguese India, the Seychelles or Zanzibar—	
Where the value insured does not exceed Rs. 200	5
For every additional Rs. 200 or fraction thereof	5
For insurance to the United Kingdom and to British Possessions and foreign countries other than those mentioned above and for insurance of letters to the Seychelles—	
Where the value insured does not exceed £12	5
For every additional £12 or fraction thereof	5

Acknowledgment fee.—3 annas for each registered article.

Growth of the Post Office.—At the end of 1897-98 the total number of post offices was 11,742 and the total length of mail lines 126,351 miles. For the 31st March 1921 the corresponding figures were 19,496 and 157,301. During the year 1897-98, the total number of letters, postcards, newspapers and packets given out for delivery was 460,899,344, while for the year 1920-21 the total number of unergistered articles of the same classes given out for delivery *plus* the number of registered letters and packets posted amounted to 1,375,266,446. The number of parcel mail articles given out for delivery in the former year was 4,119,781 as compared with 14,111,036 such articles posted during the latter year. The total number and value of money orders issued increased from 11,795,041 and Rs. 24,79,45,455 in 1897-98 to 38,504,814 and Rs. 98,36,48,317, respectively, in 1920-21. During the former year the total number of articles insured for transmission by post was 326,645 with an aggregate declared value of Rs. 10,00,62,590 and the corresponding figures for 1910-11 were 1,169,428 and Rs. 26,88,78,925. As the result, however, mainly of the introduction in 1911-12 of the rule under which inland articles containing currency notes or portions thereof must be insured, the figures for 1920-21 stand at 4,510,471 and Rs. 1,37,66,71,002. The number of accounts open on the books of the Post Office Savings Bank grew from 730,387 on the 31st March 1898 to 1,877,957 at the end of 1920-21, with an increase from Rs. 9,28,72,978 to Rs. 22,86,21,716 in the total amount standing at the credit of depositors. The total staff on the 31st March 1921 numbered 102,885. The net financial result of the working of the Post Office for the year 1920-21 was a deficit of Rs. 45,99,372.

This account of the activities of the Post Office would not be complete if it were not mentioned that on the 31st March 1921 there were 33,258 active Postal Life Insurance policies with an aggregate assurance of Rs. 4,88,87,682 and that during 1920-21 it disbursed a sum of Rs. 75,46,103 to Indian Military pensioners; sold over 51¼ lakhs of cash certificates to the public; collected at its own expense a sum of Rs. 50¼ lakhs on account of customs duty on parcels and letters from abroad; and sold 15,484 lbs. of quinine to the public.

TELEGRAPH DEPARTMENT.

Telegraphs.—Up to 1912 the telegraph system in India was administered as a separate department by an officer designated Director-General of Telegraphs who worked in subordination to the Government of India in the Department of Commerce and Industry. In that year it was decided to vest the control of Posts and Telegraphs in a single officer as an experimental measure with a view to the eventual amalgamation of the two Departments.

In pursuance of this policy an experimental amalgamation of the two services was introduced in the Bombay and Central Circles from the 1st July 1912. The fundamental principles of this scheme which followed closely the system in force in the United Kingdom and several other European countries were that the traffic and engineering work of the Telegraph Department should be separated, the former branch of work in each Circle being transferred to the Postmaster-General assisted by a Deputy Postmaster-General and a suitable number of attached officers and the engineering branch being controlled by a Director of Telegraphs in charge of the two Circles. Subordinate to this officer there were several Divisional Superintendents who were assisted by a number of attached officers.

In 1914 the complete amalgamation of the two Departments was sanctioned by the Secretary of State and introduced from 1st April. The superior staff of the Direction, in addition to the Director-General himself, consists on the engineering side of a Chief Engineer, Telegraphs, with two Dy. Chief Engineers. For traffic work there is a Deputy Director-General, with an Assistant and two Assistant Directors-General. On the 27th March 1920 a Controller of Telegraph Traffic was appointed to assist the Deputy Director-General in the inspection of offices and in controlling telegraph traffic. In the Circles the scheme which has been introduced follows closely on the lines of the experimental one referred to above. For telegraph engineering purposes India is divided up into five Circles, each in charge of a Director. For Burma special arrangements were considered necessary and the engineering work is in charge of the Postmaster-General who is a Telegraph officer specially selected for the purpose. These six Circles are

divided into twenty-one Divisions each of which is in charge of a Divisional Engineer.

The telegraph traffic work is under the control of the Postmasters-General, each of whom is assisted by a Deputy Postmaster-General and a suitable staff of attached officers.

The audit work of the Telegraph Department is, like that of the Post Office, entrusted to the Accountant-General, Posts and Telegraphs, assisted by a staff of Deputy and Assistant Accountants-General.

Inland Telegrams and Tariff.—Telegrams sent to or received from places in India or Ceylon are classed as Inland telegrams. The tariff for inland telegrams is as follows:—

	For delivery in India *Private and State.*		For delivery in Ceylon. *Private and State.*	
	Express.	Ordinary.	Express.	Ordinary.
	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Minimum charge,	1 8	0 12	2 0	1 0
Each additional word over 12..	0 2	0 1	0 3	0 2

The address is charged for.

Additional charges.

Minimum for reply-paid telegram .. .. } Minimum charge for an ordinary telegram.
Acknowledgment of receipt .. .. .. } Minimum charge for an ordinary telegram.
Multiple telegrams, each 100 words or less .. .. 4 annas.
Collation .. .. ..One quarter of charge for telegram.

For acceptance of an Express telegram during the hours when an office is closed.	Rs.
If both the offices of origin and destination are closed ..	2
If only one of the offices is closed.	1
If the telegram has to pass through any closed intermediate office an additional fee in respect of each such office	1

Signalling by flag or semaphore to or from ships—per telegram .. .. .. } The usual inland charge *plus* a fixed fee of 8 annas.
Boat hire .. .. ..Amount actually necessary.
Copies of telegrams, each 100 words or less .. .. ..4 annas.

	For delivery in India. *Press.* Express.	Ordinary.	For delivery in Ceylon. *Press.* Express.
	Rs. a.	Rs. a.	Rs. a.
Minimum charge ..	1 0	0 8	1 0
Each additional 6 words over 48 in respect of India, each additional four words over 32 in respect of Ceylon..	2	0 1	0 2

The address is free.

Foreign Tariff.—The charges for foreign telegrams vary with the countries to which they are addressed. The rates per word for private and state telegrams to all countries in Europe are as follows:—

	Urgent	Ordinary.	Deferred.	State.
	Rs. a.	Rs. a.	Rs. a.	Rs. a.
All countries in Europe *via* Eastern	3 12	1 4	0 10	0 10

Radio-Telegrams.—For radio-telegrams addressed to ships at sea from offices in India or Burma and transmitted *via* the coast stations at Bombay, Calcutta, Diamond Island, Karachi Madras, Port Blair, Rangoon or Victoria Point the charge is eleven annas per word in nearly all cases. Full particulars are given in Section XXIII of the Post and Telegraph Guide.

Growth of Telegraphs.—At the end of 1897-98 there were 50,305 miles of line and 155,088 miles of wire and cable, as compared with 411,898 wire including cable and 91,760 line including cable miles, respectively, on the 31st March 1922. The numbers of departmental telegraph offices were 257 and 182, respectively, while the number of telegraph offices worked by the Post Office rose from 1,634 to 3,437. The increase in the number of paid telegrams dealt with is shown by the following figures:—

		1897-98.	1921-22.
Inland ..	Private ..	4,107,270	14,835,276
	State ..	860,382	1,557,848
	Press ..	35,910	348,341
Foreign..	Private ..	735,679	2,889,103
	State ..	9,896	49,731
	Press ..	5,278	25,695
		5,754,415	19,697,994

The outturn of the workshops during 1921-22 represented a total value of Rs. 83,12,526. At the end of the year the total staff numbered 14,183. The total capital expenditure up to the close of 1921-22 amounted to Rs. 18,05,91,007. The net revenue for the year was Rs. 45,91,406.

Wireless.—The total number of Departmental wireless stations open at the end of 1921-22 was twenty-two, *viz.*, Allahabad, Bombay, Calcutta, Delhi, Diamond Island, Jutogh, Karachi, Lahore, Madras, Maymyo, Mhow, Nagpur, Patna, Peshawar, Poona, Port Blair, Quetta, Rangoon, Sandheads (two pilot vessels), Secunderabad and Victoria Point; of these only Diamond Island, Port Blair and Victoria Point book telegrams direct from the public. The stations at Patna and Poona were opened and that at Table Island closed during the year. New stations are under construction at Madras (St. Thomas' Mount) and Rangoon (Mingaladon).

Telephones.—On the 31st March 1922 the number of telephone exchanges established by the Department was 253 with 11,973 connections. Of these exchanges, 97 were worked departmentally. The number of telephone exchanges established by Telephone Companies was 10 with 23,958 connections.

Indian Architecture.

I. ANCIENT.

The architecture of India has proceeded on lines of its own, and its monuments are unique among those of the nations of the world. An ancient civilization, a natural bent on the part of the people towards religious fervour of the contemplative rather than of the fanatical sort, combined with the richness of the country in the sterner building materials—these are a few of the factors that contributed to making it what it was, while a stirring history gave it both variety and glamour. Indian architecture is a subject which at the best has been studied only imperfectly, and a really comprehensive treatise on it has yet to be written. The subject is a vast and varied one, and it may be such a treatise never will be written in the form of one work at any rate. The spirit of Indian art is so foreign to the European of art culture that it is only one European in a hundred who can entirely understand it, while art criticism and analysis is a branch of study that the modern Indian has not as yet ventured upon to any appreciable extent. Hitherto the one, and with a few exceptions the only recognized authority on the subject has been Fergusson, whose compendious work is that which will find most ready acceptance by the general reader. But Fergusson attempted the nearly impossible task of covering the ground in one volume of moderate dimensions, and it is sometimes held that he was a man of too purely European a culture, albeit wide and eclectic, to admit of sufficient depth of insight in this particular direction. Fergusson's classification by races and religions is, however, the one that has been generally accepted hitherto. He asserts that there is no stone architecture in India of an earlier date than two and a half centuries before the Christian era, and that "India owes the introduction of the use of stone for architectural purposes, as she does that of Buddhism as a state religion, to the great Asoka, who reigned B.C. 272 to 236."

Buddhist Work.

Fergusson's first architectural period is then the Buddhist, of which the great tope at Sanchi with its famous Northern gateway is perhaps the most noted example. Then we have the Gandharan topes and monasteries. Perhaps the examples of Buddhist architecture of greatest interest and most ready access to the general student are to be found in the Chaitya halls or rock-cut caves of Karli, Ajunta, Nasik, Ellora and Kanheri. A point with relation to the Gandhara work may be alluded to in passing. This is the strong European tendency, variously recognized as Roman, Byzantine but most frequently as Greek, to be observed in the details. The foliage seen in the capitals of columns bears strong resemblance to the Greek acanthus, while the sculptures have a distinct trace of Greek influence, particularly in the treatment of drapery, but also of hair and facial expression. From this it has been a fairly common assumption amongst some authorities that Indian art owed much of its best to European influence, an assumption that is strenuously combated by others as will be pointed out later.

The architecture of the Jains comes next in order. Of this rich and beautiful style the most noted examples are perhaps the Dilwara temples near Mount Abu, and the unique "Tower of Victory" at Chittore.

Other Hindu Styles.

The Dravidian style is the generic title usually applied to the characteristic work of the Madras Presidency and the South of India. It is seen in many rock-cut temples as at Ellora, where the remarkable "Kylas" is an instance of a temple cut out of the solid rock, complete, not only with respect to its interior (as in the case of mere caves) but also as to its exterior. It is, as it were, a life-size model of a complete building or group of buildings, several hundred feet in length, not built, but sculptured in solid stone, an undertaking of vast and, to our modern ideas, unprofitable industry. The Pagoda of Tanjore, the temples at Srirangam, Chidambaram, Vellore, Vijayanagar, &c., and the palaces at Madura and Tanjore are among the best known examples of the style.

The writer finds some difficulty in following Fergusson's two next divisions of classification, the "Chalukyan" of South-central India, and the "Northern or Indo-Aryan style." The differences and the similarities are apparently so intermixed and confusing that he is fain to fall back on the broad generic title of "Hindu"—however unscientific he may thereby stand confessed. Amongst a vast number of Hindu temples the following may be mentioned as particularly worthy of study:—Those at Mukteswara and Bhuvaneswar in Orissa, at Khajuraho, Bindrabun, Udaipur, Benares, Gwalior, &c. The palace of the Hindu Raja Man Singh at Gwalior is one of the most beautiful architectural examples in India. So also are the palaces of Amber, Datiya, Urcha, Dig and Udaipur.

Indo-Saracenic.

Among all the periods and styles in India the characteristics of none are more easily recognizable than those of what is generally called the "Indo-Saracenic" which developed after the Mahomedan conquest. Under the new influences now brought to bear on it the architecture of India took on a fresh lease of activity and underwent remarkable modifications. The dome, not entirely an unknown feature hitherto, became a special object of development, while the arch, at no time a favourite constructional form of the Hindu builders, was now forced on their attention by the predilections of the ruling class. The minaret also became a distinctive feature. The requirements of the new religion,—the mosque with its wide spaces to meet the needs of organized congregational acts of worship—gave opportunities for broad and spacious treatments that had hitherto been to some extent denied. The Moslem hatred of idolatry set a tabu on the use of sculptured representations of animate objects in the adornment of the buildings, and led to the development

of other decorative forms. Great ingenuity came to be displayed in the use of pattern and of geometrical and foliated ornament. This Moslem trait further turned the attention of the builders to a greater extent than before to proportion, scale and mass as means of giving beauty, mere richness of sculptured surface and the aesthetic and symbolic interest of detail being no longer to be depended on to the same degree.

The art was thus the gainer by the new conditions. It gained in power and variety much as "Classic" architecture gained under the Romans. But it equally lost something too. The Indo-Saracenic is apt to appear cold and hard. The writer was impressed by this on his first view of the Gwalior palace already mentioned. Though a Hindu building that palace has yet much of what might be called the more sophisticated quality of the Indo-Saracenic work as well as some similarity of detail. It has, being Hindu, a certain amount of sculptured ornament of animated forms, and the general effect of roundness, richness and interest thereby imparted seemed eloquent in suggestion as to what is lacking in so many of the Mahometan buildings.

Foreign Influence.

There would appear to be a conflict between archæologists as to the extent of the effect on Indian art produced by foreign influence under the Mahometans. The extreme view on the one hand is to regard all the best of the art as having been due to foreign importation. The Gandharan sculptures with their Greek tendency, the development of new forms and modes of treatment to which allusion has been made, the similarities to be found between the Mahometan buildings of India and those of North Africa and Europe, the introduction of the minaret and, above all, the historical evidences that exist of the presence in India of Europeans during Mogul times, are cited in support of the theory. On the other hand those of the opposite school hold the foregoing view to be due to the prevailing European preconception that all light and leading must come by way of Europe, and the best things in art by way of Greece. To them the Gandharan sculpture, instead of being the best, is the worst in India even because of its Greek tincture. They find in the truly indigenous work beauties and significances not to be seen in the Graeco-Bactrian sculptures, and point to those of Borobudur in Java, the work of Buddhist colonists from India, wonderfully preserved by reason of an immunity from destructive influences given by the insular position, as showing the best examples of the art extant. It is probable that a just estimate of the merits of the controversy, with respect to sculpture at any rate, cannot be formed till time has obliterated some of the differences of taste that exist between East and West.

To the adherents of the newer school the undisputed similarities between Indo-Mahometan and Hindu buildings outweigh those between Indian and Western Mahometan work, especially in the light of the dis-similarities between the latter. They admit the changes produced by the advent of Islam, but contend that the art, though modified, yet remained in its essence what it had always been, indigenous Indian. The minaret, the dome, the arch, they contended, though developed under the Moslem influence, were yet, so far as their detailed treatment and craftsmanship are concerned, rendered in a manner distinctively Indian. Fergusson is usually regarded as the leader of the former school, while the latter and comparatively recent school has at present found an eager champion in Mr. E. B. Havell, whose works, on the subject are recommended for study side by side with those of the former writer. Mr. Havell practically discards Fergusson's racial method of classification into styles in favour of a chronological review of what he regards to a greater extent than did his famous precursor as being one continuous homogeneous Indian mode of architectural expression, though subject to variations from the influences brought to bear upon it and from the varied purposes to which it was applied.

Agra and Delhi.

Agra and Delhi may be regarded as the principal centres of the Indo-Saracenic style—the former for the renowned Taj Mahal, for Akbar's deserted capital of Fatehpur Sikri, his tomb at Secundra, the Moti Musjid and palace buildings at the Agra fort. At Delhi we have the great Jumma Musjid, the Fort, the tombs of Humayon, Sufdar Jung, &c., and the unique Qutb Minar. Two other great centres may be mentioned, because in each there appeared certain strongly marked india vidualities that differentiated the varieties of the style there found from the variety seen at Delhi and Agra, as well as that of one from that of the other. These are Ahmedabad in Gujarat and Bijapur on the Dekhan, both in the Bombay Presidency.

Ahmedabad.

At Ahmedabad with its neighbours Sirkhej and Champanir there seems to be less of a departure from the older Hindu forms, a tendency to adhere to the lintel and bracket rather than to have recourse to the arch, while the dome though constantly employed, was there never developed to its full extent as elsewhere, or carried to its logical structural conclusion. The Ahmedabad work is probably most famous for the extraordinary beauty of its stone "jali"—or pierced lattice-work, as in the palm tree windows of the Sidi Sayyid Musjid.

Bijapur.

The characteristics of the Bijapur variety of the style are equally striking. They are perhaps more distinctively Mahomedan than those of the Ahmedabad buildings in that here the dome is developed to a remarkable degree, indeed the tomb of Mahmud—the well-known "Gol Gumbaz"—is cited as shewing the greatest space of floor in any building in the world roofed by a single dome, not even excepting the Pantheon. The lintel also was here practically discarded in favour of the arch. The Bijapur style shews a bold masculine quality and a largeness of structural conception that is unequalled elsewhere in India, though in richness and delicacy it does not attempt to rival the work of the further North. In this we recognize among other influences

that of the prevailing material, the hard uncompromising Dekhan basalt. In a similar manner the characteristics of the Ahmedabad work with its greater richness of ornamentation are bound up with the nature of the Gujarat freestone, while at Delhi and Agra the freer choice of materials available—the local red and white sandstones, combined with access to marble and other more costly materials—was no doubt largely responsible for the many easily recognizable characteristics of the architecture of these centres.

II. MODERN.

The modern architectural work of India divides itself sharply into two classes. There is first that of the indigenous Indian "Master-builder" to be found chiefly in the Native States, particularly those in Rajputana. Second there is that of British India, or of all those parts of the peninsula wherever Western ideas and methods have most strongly spread their influence, chiefly, in the case of architecture, through the medium of the Department of Public Works. The work of that department has been much animadverted upon as being all that building should not be, but, considering it has been produced by men of whom it was admittedly not the *metier*, and who were necessarily contending with lack of expert training on the one hand and with departmental methods on the other, it must be conceded that it can shew many notable buildings. Of recent years there has been a tendency on the part of professional architects to turn their attention to India, and a number of these has even been drafted into the service of Government as the result of a policy initiated in Lord Curzon's Viceroyalty. In time, therefore, and with the growth of the influence of these men, such of the reproach against the building of the British in India as was just and was not merely thoughtlessly maintained as a corollary to the popular jape against everything official, may gradually be removed. If this is so as to Government work progress should be even more assured in the freer atmosphere outside of official life. Already in certain of the greater cities, where the trained modern architect has established himself, in private practice, there are signs that his influence is beginning to be felt. He still complains, however, that the general public of India needs much educating up to a recognition of his value, both in a pecuniary sense and otherwise. It is also to be observed that the survival of a relic of the popular idea of the time before his advent, to the effect that though an architect might occasionally "design" a building it was always an engineer who built it, is still indicated by the architect in some cases deeming it advisable to style himself "architect and engineer."

To the work of the indigenous "master-builder" public attention has of recent years been drawn with some insistence, and the suggestion has been pressed that efforts should be directed towards devising means for the preservation of what is pointed out—and now universally acknowledged— to be a remarkable survival—almost the only one left in the world—of "living art," but which is threatened with gradual extinction by reason of the spread of Western ideals and fashions. The matter assumed some years ago the form of a mild controversy centring round the question of the then much discussed project of the Government of India's new capital at Delhi. It was urged that this project should be utilised to give the required impetus to Indian art rather than that it should be made a means of fostering European art which needed no such encouragement at India's expense. The advocates of this view appear for the most part to have been adherents of the "indigenous Indian" school of archæologists already mentioned, and to have based their ideas on their own reading of the past. They still muster a considerable following not only amongst the artistic public of England and India, but even within the Government services. Their opponents, holding what appears to be the more official view both as to archæology and art, have pointed to the "death" of all the arts of the past in other countries as an indication of a natural law, and deprecate as waste of energy all efforts to resist this law, or to institute what they have termed "another futile revival." The British in India they contend, should do as did the ancient Romans in every country on which they planted their conquering foot. As those were wont to replace indigenous art with that of Rome, so should we set our seal of conquest permanently on India by the erection of examples of the best of British art. This is the view which, as we have indicated, appears to have obtained for the moment the more influential hearing, and the task of designing and directing the construction of the principal buildings in the new Capital has accordingly been entrusted jointly to a London and to a South African architect, neither of whom can be unduly influenced by either past or recent architectural practice so far as India is concerned.

The results cannot but be awaited with the keenest interest, and meanwhile the controversy, with suspended judgment, naturally falls into abeyance. It is, moreover, however vital to the interests of the country's architecture, too purely technical and academic for its merits to be estimated by the general reader or discussed here. Its chief claim on our attention has in the fact that it affords an added interest to the tourist, who may see the fruits of both schools of thought in the various modern buildings of British India as well as examples of the "master builders" work in nearly every native town and bazaar. The town of Lashkar in Gwalior State may be cited as peculiarly rich in instances of picturesque modern Indian street architecture, while at Jaipur, Udaipur, Benares, etc., this class of work may be studied in many different forms both civil and religious. The extent to which the "unbroken tradition from the past" exists may there be gauged by the traveller who is architect enough for the purpose.

Archæology.

The archæological treasures of India are as varied as they are numerous. Those of the pre-Muhammadan period may roughly be divided into (1) architectural and sculptural monuments and (2) inscriptions. No building or sculpture in India with any pretensions to be considered an example of architecture or art can be ascribed to a time earlier than that of Asoka (circa 250 B.C.). In the pre-Asoka architecture of India, as in that of Burma or China at the present day, wood was solely or almost solely employed. Even at the close of the 4th century, B.C., Megasthenes, the Greek Ambassador at the court of Chandragupta, grandfather of Asoka, describes Patalliputra, the capital of the Indian monarch, as "surrounded by a wooden wall pierced with loop-holes for the discharge of arrows." If the capital itself was thus defended, we can easily infer that the architecture of the period was wooden. And long long after stone was introduced the lithic styles continued to be influenced by, or copied from, the wooden.

Monumental Pillars.—The first class of works that we have to notice are the monumental pillars, known as *lats*. The oldest are the monolithic columns of Asoka, nearly thirty in number, of which ten bear his inscriptions. Of these the Lauriya-Nandangarh column in the Champaran District, Tirhut, is practically uninjured. The capital of each column, like the shaft, was monolithic, and comprised three members, *viz.*, a Persepolitan bell, abacus, and crowning sculpture in the round. By far the best capital of Asoka's time was that exhumed at Sarnath near Benares. The four lions standing back to back on the abacus are carved with extraordinary precision and accuracy. Of the post-Asokan period one pillar (B.C. 150) stands to the north-east of Besnagar in the Gwalior State, another in front of the cave of Karli (A.D. 70), and a third at Eran in Central Provinces belonging to the 5th Century, A. D. All these are of stone; but there is one of iron also. It is near the Qutb Minar at Delhi, and an inscription on it speaks of its having been erected by a king called Chandra, identified with Chandragupta II. (A.D. 375-413) of the Gupta dynasty It is wonderful "to find the Hindus at that age forging a bar of iron larger than any that have been forged even in Europe to a very late date, and not frequently even now." Pillars of later style are found all over the country, especially in the Madras Presidency. No less than twenty exist in the South Kanara District. A particularly elegant example faces a Jaina temple at Mudabidri, not far from Mangalore.

Topes.—*Stupas*, known as *dagabas* in Ceylon and commonly called Topes in North India, were constructed either for the safe custody of relics hidden in a chamber often near the base or to mark the scene of notable events in Buddhist or Jaina legends. Though we know that the ancient Jainas built *stupas*, no specimen of Jaina *stupas* is now extant. Of those belonging to the Buddhists, the great Tope of Sanchi in Bhopal, is the most intact and entire of its class. It consists of a low circular drum supporting a hemispherical dome of less diameter Round the drum is an open passage for circumambulation, and the whole is enclosed by a massive stone railing with lofty gates facing the cardinal points. The gates are essentially wooden in character, and are carved, inside and out, with elaborate sculptures. The *stupa* itself probably belonged to the time of Asoka, but as Sir John Marshall's recent explorations have conclusively shown, the railing and the gateways were at least 150 and 200 years later, respectively. Other famous Buddhist *stupas* that have been found are those of Bharhut between Allahabad and Jubbulpore, Amravati in the Madras Presidency, and Piprahwa on the Nepalese frontier. The tope proper at Bharhut has entirely disappeared, having been utilised for building villages, and what remained of the rail has been removed to the Calcutta Museum. The bas-reliefs on this rail which contain short inscriptions and thus enable one to identify the scenes sculptured with the *Jatakas* or Birth Stories of Buddha give it a unique value. The *stupa* at Amravati also no longer exists, and portions of its rail, which is unsurpassed in point of elaboration and artistic merit, are now in the British and Madras Museums. The *stupa* at Piprahwa was opened by Mr. W. C. Peppe in 1898, and a steatite or soap-stone reliquary with an inscription on it was unearthed. The inscription, according to many scholars, speaks of the relics being of Buddha and enshrined by his kinsmen, the Sakyas. And we have thus here one of the *stupas* that were erected over the ashes of Buddha immediately after his demise.

Caves.—Of the rock excavations which are one of the wonders of India, nine-tenths belong to Western India. The most important groups of caves are situated in Bhaja Bedsa, Karli, Kanheri, Junnar, and Nasik in the Bombay Presidency, Ellora and Ajanta in Nizam's Dominions, Barabar 16 miles north of Gaya, and Udayagiri and Khandagiri 20 miles from Cuttack in Orissa. The caves belong to the three principal sects into which ancient India was divided, *viz.*, the Buddhists, Hindus and Jainas. The earliest caves so far discovered are those of Barabar which were excavated by Asoka and his grandson Dasaratha, and dedicated to Ajivikas, a naked sect founded by Makkhali Gosala. This refutes the theory that cave architecture was of Buddhist origin. The next earliest caves are those of Bhaja, Pitalkhora and cave No. 9 at Ajanta and No. 19 at Nasik. They have been assigned to 200 B.C. by Fergusson and Dr. Burgess. But there is good reason to suppose from Sir John Marshall's recent researches and from epigraphic considerations that they are considerably more modern. The Buddhist caves are of two types—the *chaityas* or chapel caves and *viharas* or monasteries for the residence of monks. The first are with vaulted roofs and horse-shoe shaped windows over the entrance and have interiors consisting of a nave and side aisles with a small *stupa* at the inner circular end They are thus remarkably similar to Christian basilicas. The second class consist of a hall surrounded by a number of cells. In the later *viharas* there was a sanctum in the centre of the back wall containing a large image of Buddha. Hardly a *chaitya* is found without one or more *viharas* adjoining it. Of the Hindu cave tem-

ples that at Elephanta near Bombay is perhaps the most frequented. It is dedicated to Siva and is not earlier than the 7th century A.D. But by far the most renowned cave-temple of the Hindus is that known as Kailasa at Ellora. It is on the model of a complete structural temple but carved out of solid rock. It also is dedicated to Siva and was excavated by the Rashtrakuta king, Krishna I, (A. D. 768), who may still be seen in the paintings in the ceilings of the upper porch of the main shrine. Of the Jaina caves the earliest are at Khandgiri and Udayagiri; those of the mediæval type, in Indra Sabha at Ellora; and those of the latest period, at Ankai in Nasik. The ceilings of many of these caves were once adorned with fresco paintings. Perhaps, the best preserved among these are those at Ajanta, which were executed at various periods between 350-650 A.D. and have elicited high praise as works of art. Copies were first made by Major Gill, but most of them perished by fire at the Crystal Palace in 1866. The lost ones were again copied by John Griffiths of the Arts School, Bombay, half of whose work was similarly destroyed by a fire at South Kensington. They were last copied by Lady Herringham during 1909-11. Her pictures, which are in full scale, are at present exhibited at the Indian Section of the Victoria and Albert Museum, South Kensington, and have been reproduced in a volume brought out by the India Society.

Gandhara Monuments.—On the north-west frontier of India, anciently known as Gandhara, are found a class of remains, ruined monasteries and buried *stupas*, among which we notice for the first time representations of Buddha and the Buddhist pantheon. The free use of Corinthian capitals, friezes of nude Erotes bearing a long garland, winged Atlantes without number, and a host of individual motifs clearly establish the influence of Hellenistic art. The mound at Peshawar, locally known as Shah-ji-ke-Dheri, which was explored in 1909, brought to light several interesting sculptures of this school together with a reliquary casket, the most remarkable bronze object of the Gandhara period. The inscription on the casket left no doubt as to the mound being the *stupa* raised over the bones of Buddha by the Indo-Scythian king Kanishka. They were presented by Lord Minto's Government to the Buddhists of Burma and are now enshrined at Mandalay. To about the same age belong the *stupas* at Manikyala in the Punjab opened by Ranjit Singh's French Generals, Ventura and Court, in 1830. Some of them contained coins of Kanishka.

Structural Temples.—Of this class we have one of the earliest examples at Sanchi, and another at Tigowa in the Central Provinces. In South India we have two more examples, *viz.*, Lad Khan and Durga temples at Aihole in Bijapur. All these belong to the early Gupta period and cannot be later than 500 A.D. The only common characteristic is flat roofs without spires of any kind. In other respects they are entirely different and already here we mark the beginning of the two styles, Indo-Aryan and Dravidian, whose differences become more and more pronounced from the 7th century onwards. In the Indo-Aryan style, the most prominent lines tend to the perpendicular, and in the Dravidian to the horizontal. The salient feature of the former again is the curvilinear steeple, and of the latter, the pyramidal tower. The most notable examples of the first kind are to be found among the temples of Bhubaneswar in Orissa, Khajarah in Bundelkhand, Osia in Jodhpur, and Dilwara on Mount Abu. One of the best known groups in the Dravidian style is that of the Mamallapuram Raths, of 'Seven Pagodas', on the seashore to the south of Madras. They are each hewn out of a block of granite, and are rather models of temples than *raths*. They are the earliest examples of typical Dravidian architecture, and belong to the 7th century. To the same age has to be assigned the temple of Kailasanath at Conjeeveram, and to the following century some of the temples at Aihole and Pattadkal of the Bijapur District, Bombay Presidency, and the monolithic temple of Kailasa at Ellora, referred to above. Of the later Dravidian style the great temple at Tanjore and the Srirangam temple of Trichinopoly are the best examples.

Intermediate between these two main styles comes the architecture of the Deccan, called Chalukyan by Fergusson. In this style the plan becomes polygonal and star-shaped instead of quadrangular; and the high-storeyed spire is converted into a low pyramid in which the horizontal treatment of the Dravidian is combined with the perpendicular of the Indo-Aryan. Some fine examples of this type exist at Dambal, Rattihali, Tilliwalli and Hangal in Dharwar, Bombay Presidency, and at Ittagi and Warangal in Nizam's Dominions. But it is in Mysore among the temples at Hallebid, Belur, and Somnathpur that the style is found in its full perfection.

Inscriptions.—We now come to inscriptions, of which numbers have been brought to light in India. They have been engraved on varieties of materials, but principally on stone and copper. The earliest of these are found incised in two distinct kinds of alphabet, known as Brahmi and Kharoshthi. The Brahmi was read from left to right, and from it have been evolved all the modern vernacular scripts of India. The Kharoshthi was written from right to left, and was a modified form of an ancient Aramaic alphabet introduced into the Punjab during the period of the Persian domination in the 5th century B.C. It was prevalent up to the 4th century A.D., and was supplanted by the Brahmi. The earliest dateable inscriptions are the celebrated edicts of Asoka. One group of these has been engraved on rocks, and another on pillars. They have been found from Shahbazgarhi 40 miles north-east of Peshawar, to Nigliva in the Nepal Tarai, from Girnar in Kathiawar to Dhauli in Orissa, from Kalsi in the Lower Himalayas to Siddapur in Mysore, showing by the way the vast extent of territory held by him. The reference in his Rock Edicts to the five contemporary Greek Princes, Antiochus II. of Syria, Ptolemy Philadelphus, and so forth is exceedingly interesting, and fixes B.C. 269 as the date of his coronation. His Rummindei pillar inscription, again, discovered in Nepal Tarai, now settles, beyond all doubt, the birth-place of Buddha which was for long disputed. Another noteworthy record is the inscription of the Besnagar pillar. The pillar had been known for a long time, but Sir John

Marshall was the first to notice the inscription on it. It records the erection of this column, which was a Garuda pillar, in honour of the god Vasudeva by one Heliodoros, son of Dion, who is described as an envoy of King Antialkidas of Taxila. Heliodoros is herein called a *Bhagavata*, which shows that though a Greek he had become a Hindu and presumably a Vaishnava. Another inscription worth noticing and especially in this connection is that of Cave No. 10 at Nasik. The donor of this cave, Ushavadata, who calls himself a Saka and was thus an Indo-Scythian, is therein spoken of as having granted three hundred thousand kine and sixteen villages to gods and Brahmans and as having annually fed one hundred thousand Brahmans. Here is another instance of a foreigner having embraced Hinduism. Thus for the political, social, economical and religious history of India at the different periods the inscriptions are invaluable records, and are the only light but for which we are 'forlorn and blind.'

Saracenic Architecture.—This begins in India with the 13th century after the permanent occupation of the Muhammadans. Their first mosques were constructed of the materials of Hindu and Jaina temples, and sometimes with comparatively slight alterations. The mosque called *Adhai-din-ka-jhompra* at Ajmer and that near the Qutb Minar are instances of this kind. The Muhammadan architecture of India varied at different periods and under the various dynasties, imperial and local. The early Pathan architecture of Delhi was massive and at the same time was characterised by elaborate richness of ornamentation. The Qutb Minar and tombs of Altamsh and Ala-ud-din Khilji are typical examples. Of the Sharqi style we have three mosques in Jaunpur with several tombs. At Mandu in the Dhar State, a third form of Saracenic architecture sprung up, and we have here the Jami Masjid, Hoshang's tomb, Jahaz Mahall and Hindola Mahall as the most notable instances of the secular and ecclesiastical styles of the Malwa Pathans. The Muhammadans of Bengal again developed their own style, and Pandua, Malda, and Gaur teem with the ruins of the buildings of this type, the important of which are the Adina Masjid of Sikandar Shah, the Elakhi mosque, Kadam Rasul Masjid, and so forth. The Bahmani dynasty of Gulbarga and Bidar were also great builders, and adorned their capitals with important buildings. The most striking of these is the great mosque of Gulbarga, which differs from all mosques in India in having the whole central area covered over so that what in others would be an open court is here roofed by sixty-three small domes. "Of the various forms which the Saracenic architecture assumed," says Fergusson, "that of Ahmedabad may probably be considered to be the most elegant." It is notable for its carved stone work; and the work of the perforated stone windows in Sidi Sayyid's mosque, the carved niches of the minars of many other mosques, the sculptured *Mihrabs* and domed and panelled roofs is so exquisite that it will rival anything of the sort executed elsewhere at any period. No other style is so essentially Hindu. In complete contrast with this was the form of architecture employed by the Adil Shahi dynasty of Bijapur. There is here relatively little trace of Hindu forms or details. The principal buildings now left at Bijapur are the Jami Masjid, Gagan Mahall, Mihtar Mahall, Ibrahim Rauza and mosque and the Gol Gumbaz. Like their predecessors, the Pathans of Delhi, the Moghuls were a great building race. Their style first began to evolve itself during the reign of Akbar in a combination of Hindu and Muhammadan features. Noteworthy among the emperor's buildings are the tomb of Humayun, and the palaces at Fatehpur, Sikri and Agra. Of Jehangir's time his mosque at Lahore and the tomb of Itimad-ud-daula are the most typical structures. "The force and originality of the style gave way under Shah Jahan to a delicate elegance and refinement of detail." And it was during his reign that the most splendid of the Moghul tombs, the Taj Mahal at Agra, the tomb of his wife Mumtaz Mahall, was constructed. The Moti Masjid in Agra Fort is another surpassingly pure and elegant monument of his time.

Archæological Department.—As the archæological monuments of India must attract the attention of all intelligent visitors, they would naturally feel desirous to know something of the Archæological Department. The work of this Department is primarily two-fold, conservation, and research and exploration. None but spasmodic efforts appear to have been made by Government in these directions till 1870 when they established the Archæological Survey of India and entrusted it to General (afterwards Sir) Alexander Cunningham, who was also the first Director-General of Archæology. The next advance was the initiation of the local Surveys in Bombay and Madras three years after. The work of these Surveys, however, was restricted to antiquarian research and description of monuments, and the task of conserving old buildings was left to the fitful efforts of the local Governments, often without expert guidance or control. It was only in 1878 that the Government of India under Lord Lytton awoke to this deplorable condition, and sanctioned a sum of 3½ lakhs to the repair of monuments in United Provinces, and soon after appointed a conservator, Major Cole, who did useful work for three years. Then a reaction set in, and his post and that of the Director-General were abolished. The first systematic step towards recognising official responsibility in conservation matters was taken by Lord Curzon's Government, who established the seven Archæological Circles that now obtain, placed them on a permanent footing, and united them together under the control of a Director-General, provision being also made for subsidising local Governments out of imperial funds, when necessary. The Ancient Monuments Preservation Act was passed for the protection of historic monuments and relics especially in private possession and also for State control over the excavation of ancient sites and traffic in antiquities. Under the direction of Sir John Marshall, Kt., C.I.E., Director-General of Archæology, a comprehensive and systematic campaign of repair has been prosecuted, and the result of it is manifest in the present altered conditions of old buildings. One has only to see for example the Moghul buildings at Agra, Delhi, Lahore and Ajmer, in order to be convinced how the work of careful reconstruc-

tion and repair has converted these decayed and desecrated monuments with their modern excrescences into edifices of unrivalled loveliness. Another noteworthy feature of this work has been the rescue of many of these buildings from profane and sacrilegious uses. It is well-known that the superb Pearl Mosque of Jahangir in the Lahore Fort contained a Government treasury, and the Sleeping Hall of Shah Jahan served as a Church for the British troops. At Bijapur two mosques have been recovered, one of which was used as Dak Bungalow and the other as Post Office. The local Kutcherry has now been expelled from the lovely musjid of Sidi Sayyid at Ahmedabad. The Cave temples at Trichinopoly are no longer godowns. Nor has research work been in any way neglected under the new order of things. A unique feature of it for the first time introduced under the guidance and advice of Sir John Marshall has been the scientific excavation of buried sites, such as Sarnath where Buddha preached his first sermon, Kasia or Kusinara where he died, Saheth-Maheth the ancient Srasvasti, Taxila or Takshasila, the seat of the ancient Hindu University, Patna or Pataliputra, the Mauryan capital, Besnagar or the ancient Vidisa, and so forth. The results achieved, especially at the last three places, are of a sensational character. At Taxila Sir John has brought to light the remains of a palace of the Assyrian style and a massive and imposing temple dedicated to Zoroastrian worship and resembling a Greek peripteral temple with the addition of a solid tower of the Likkurat type rising behind the shrine. At Patna Dr. D. B. Spooner has found traces of a Mauryan palace which is an actual replica of the Achæmenian palace at Persepolis. At Besnagar Mr. D. R. Bhandarkar has excavated a temple of Vasudeva of the third century B.C., which proves to be the oldest of all Hindu shrines in India. Among other results of this excavation is the noteworthy discovery that the art of forging steel was practised in India more than two thousand years ago and that mortar was used in the construction of brick masonry at least as early as the third century B.C.

TIDAL CONSTANTS.

The approximate standard time of High Water may be found by adding to, or subtracting from, the time of High Water at London Bridge, given in the calendar, the correction given as below :—

		H.	M.			H.	M.
Gibraltar	*sub.*	0	32	Rangoon River Entrance ..	*add*	1	35
Malta	*add*	1	34	Penang	*sub.*	1	39
Karachi	*sub.*	2	33	Singapore	,,	3	25
Bombay	,,	1	44	Hongkong	,,	4	27
Goa	,,	2	44	Shanghai	,,	0	34
Point de Galle	*add*	0	12	Yokohama	*add*	3	6
Madras	*sub.*	5	6	Valparaiso	*sub.*	4	40
Calcutta	,,	0	19	Buenos Ayres	*add*	4	9
Rangoon Town	*add*	2	41	Monte Video	,,	0	32

Travel in India.

Thirty years ago, a tour in India was possible only to the wealthy, the leisured and those who had friends in the country. The cost of the journey was very high, the methods of transportation were very slow; and the facilities for travel were so indifferent that he was a bold man who consigned himself to the mercies of the country without a sheaf of letters of introduction. Now the mail which is posted in London on Thursday night, reaches Bombay in 14 days, and the passenger can travel by the same route and with the same speed as the mail. A dozen lines have covered the sea route between Europe and India and Ceylon with a plexus of regular services. The Indian Railways provide facilities on the trunk lines unsurpassed by the *trains-de-luxe* of Europe, and the Indian hotel has grown into a really comfortable caravanseral.

In the touring season, which extends from November to March, there is the attraction of a perfect climate. It is never very hot; in the North indeed it is really cool, it is always fine and fresh and bracing. If there is one country in the world to which that elusive term applies, here we have at the season when the tourist arrives the real "Indian summer." Then there is its infinite variety. India is in no sense a nation and never will be. Its peoples are wide as the Poles asunder, each has its own art, its own architecture, its own customs and its own civilisation. A certain superficial resemblance runs through each; beneath lies a never-ending variety which age cannot wither nor custom stale.

The Grand Tour.—People coming to India for the first time so often ask:—"Where shall I go?" Well, wherever else the tourist may go, whatever else he should leave out, he should omit nothing on the Grand Tour. It is the foolish custom nowadays to sneer at those who follow the beaten tracks, but the visitor who shuns any part of the orthodox journey across India misses what nothing else can repay. **Bombay** is by far the most convenient point of departure, for here "the world end steamers wait," here is one of the finest cities in the British Empire, and here the traveller can best complete his outfit and arrangements. From Bombay stretch northwards the two great trunk lines of India. One, the **Bombay Baroda & Central India Railway**, leads through the pleasant garden of Gujarat to Ahmedabad, the ancient Moslem capital of the Province containing fine examples of Mahomedans and Jain architecture; thence to Abu for the famous Jain temples of Dilwara, and on to Ajmere, Jaipur and Agra. The other by the **Great Indian Peninsula Railway** carries the tourist over the Western Ghats by a superb mountain railway to Gwalior, whose rock fortress rises like a giant battleship from the plain, and so on to Agra. Of the glories of the Taj Mahal, Agra Fort, and the deserted city of Fatehpur Sikri it were supererogatory to speak. Another easy stage leads to **Delhi** that amazing collection of cities, dominated by the little Ridge where British valour kept the mutinous hordes at bay, and finally drove them from the city by a feat of arms unsurpassed in history. Then from Delhi the East Indian line leads comfortably to Benares, Lucknow and Calcutta with the opportunity of an excursion to Cawnpore, if the spirit moves. The great charm of the Grand Tour is that it reveals the best that India can show. This route has the additional advantage that it fits in with any digressions which the time and purse of the traveller may permit. No one who can spare the time should fail to push northwards from Delhi to Peshawar, where the flower of the army keeps watch and ward over the Khyber, and up the dread Pass to the eyrie where the fort of Ali Masjid bars the way to all invaders. **Calcutta** is the best starting point for Darjeeling, though unfortunately the magnificent mountain panorama visible from there is often obscured at this season by mists. Then from Calcutta two alternatives open. A fine service of mail steamers leads to **Burma**, and one of the unforgettable memories of the East is a voyage down the Irrawaddy from Bhamo or Mandalay to Prome. Again, either direct from Calcutta, or *via* Burma, is an easy route to **Madras** and by way of Madura and Trichinopoly, with their peerless Hindu temples, back to Bombay, or on through Tuticorin to **Colombo**. But indeed the possibilities of expanding this tour are endless. Bombay is the best centre for the rock temples of Elephanta, Kenheri, Karli, Ellora and Ajanta. Calcutta is only a short distance from Puri the one Indian temple where there is no caste, and perhaps the most remarkable Hindu temple in the country. From Calcutta also start the river steamers which thread the steamy plains of Bengal and run to the tea gardens of Assam

SPECIMEN TOURS

A number of specimen tours in India are given below. They are taken from one of Messrs Thos. Cook & Son's publications, from which firm further information may be obtained. The

traveller will also find he can obtain assistance from the principal Shipping Agents and Railway Companies, or from Messrs. Cox & Co., Messrs. Grindlay & Co., and Messrs King, King & Co.

	1st Class.	2nd Class Rail, 1st Class Steamer.
	Rs. a.	Rs. a.
FROM BOMBAY TO CALCUTTA.		
Via the North-West Provinces to Calcutta (including side trip from Calcutta to Darjeeling).		
TOUR I.—From Bombay per B. B. & C. I. Railway *via* Ahmedabad, Abu Road (for Mount Abu), Ajmer, Jaipur, Delhi, Agra, Cawnpore, Lucknow and Benares to Calcutta, thence to Darjeeling, and back to Calcutta	340 9	170 6
TOUR II.—From Bombay per G. I. P. Railway *via* Itarsi, Gwalior, Agra, Delhi, Tundla Junction, Cawnpore, Lucknow and Benares to Calcutta, thence to Darjeeling, and back to Calcutta	345 13	172 15
FROM BOMBAY TO COLOMBO.		
Via the North-West Provinces, Calcutta and Southern India to Colombo (including side trip from Calcutta to Darjeeling).		
TOUR III.—From Bombay as in Tour No. I (*via* B. B. & C. I. Ry., Jaipur and the North-West Provinces) to Calcutta side trip to Darjeeling and back to Calcutta, thence *via* Khurda Road, for Puri (Juggannath), Madras, Tanjore, Trichinopoly, Madura, Danushkodi and Talaimannar to Colombo	556 6	279 0
TOUR IV.—From Bombay as in Tour No. II (*via* G. I. P. Ry., Itarsi, Agra and the North-West Provinces) to Calcutta, side trip to Darjeeling and back to Calcutta, thence as in Tour No. III to Colombo (*via* Southern India)	561 9	281 9
Via the North-West Provinces, Calcutta (including Darjeeling), Burma and Southern India.		
TOUR V.—From Bombay as in Tour No. I (*via* B. B. & C. I. Ry., Jaipur and the North-West Provinces) to Calcutta, side trip to Darjeeling and back to Calcutta, thence British India Steamer to Rangoon, Rail to Mandalay. Irrawaddy Steamer to Prome, Rail to Rangoon; British India Steamer to Madras, Rail *via* Tanjore, Trichinopoly, Madura to Danushkodi; Steamer to Talaimannar and Rail to Colombo ..	752 0	504 0
TOUR VI.—From Bombay as in Tour No. II (*via* G. I. P. Ry., Itarsi, Agra and the North-West Provinces) to Calcutta, thence as in Tour No. V to Colombo	758 0	507 0
FROM BOMBAY TO RANGOON.		
Via the North-West Provinces and Calcutta to Rangoon (including a tour in Burma, also including a side trip from Calcutta to Darjeeling).		
TOUR VII.—From Bombay as in Tour No. I (*via* B. B. & C. I. Ry., Jaipur and the North-West Provinces) to Calcutta side trip to Darjeeling and back to Calcutta, thence British India Steamer to Rangoon, Rail to Mandalay, Irrawaddy Steamer to Prome, Rail to Rangoon	560 0	456 0
TOUR VIII.—From Bombay as in Tour II (*via* G. I. P. Ry., Itarsi, Agra and the North-West Provinces) to Calcutta, side trip to Darjeeling and back to Calcutta, thence British India Steamer to Rangoon. Rail to Mandalay, Irrawaddy, Steamer to Prome, Rail to Rangoon	568 0	460 0

	1st Class.	2nd Class Rail, 1st Class Steamer.
FROM CALCUTTA TO BOMBAY. *Via the North-West Provinces.*	Rs. a.	Rs. a
TOUR IX.—From Calcutta *via* Benares, Lucknow, Cawnpore, Tundla, Agra, Delhi, Rewari, Jaipur, Ajmer (for Udaipur), Abu Road (for Mt. Abu), Ahmedabad and Baroda to Bombay	231 3	115 11
TOUR X.—From Calcutta *via* Benares, Moghal Serai, Cawnpore, Tundla, Agra, Delhi, Rewari, Jaipur, Ajmer (for Udaipur), Abu Road (for Mt. Abu) Ahmedabad and Baroda to Bombay	213 8	106 13
TOUR XI.—From Calcutta *via* Benares, Moghal Serai, Cawnpore, Tundla, Agra, Gwalior and Itarsi to Bombay..	187 8	93 13
TOUR XII.—From Calcutta *via* Benares, Moghal Serai, Cawnpore, Delhi, Muttra, Agra, Gwalior and Itarsi to Bombay	211 14	105 15
CIRCULAR TOUR FROM CALCUTTA.		
TOUR XIII.—From Calcutta *via* Benares, Lucknow, Cawnpore, Tundla Agra, Bandikui, Jaipur, Delhi, and Allahabad to Calcutta	268 13	164 8
Extensions, Via Southern India to Colombo.		
TOUR XIV.—From Bombay *via* Poona, Hyderabad, Wadi, Raichur, Madras, Tanjore, Trichinopoly, Madura, Danushkodi, and Talaimannar to Colombo	224 6	112 15
TOUR XV.—From Bombay *via* Poona, Hyderabad, Wadi, Guntakal, Bangalore, Erode, Trichinopoly, Madura, Danushkodi, and Talaimannar to Colombo	216 9	108 15
Extensions to above Tours.		
From Ajmer to Udaipur and return	53 8	26 12
From Abu Road to Mount Abu and return, one seat in motor (This excursion is strongly recommended, the scenery being very beautiful) ..	11 0	....
From Delhi to Lahore and return *via* Umballa and Amritsar	84 4	42 2
From Delhi *via* Bhatinda, Ferozepore to Lahore returning *via* Amritsar Umballa to Delhi	79 4	39 10
From Calcutta to Darjeeling and return	109 6	54 11
From Colombo to Kandy and return	16 4	10 3
From Kurda Road to Puri (Jagganath) and return	7 12	3 14

(All fares subject to change without previous notice.)

LIST OF HOTELS IN INDIA.

The following list of hotels is largely based on information kindly supplied by Messrs. Thos. Cook & Son, Bombay:—

AGRA.—Cecil, Laurie's Great Northern, Metropole.

AHMEDABAD.—Grand.

ALLAHABAD.—Grand, Central.

BANGALORE.—West End, Cubbon

BENARES.—Clark's, Hotel de Paris.

BOMBAY.—Taj Mahal, Majestic, Metropole, Apollo, Watson's Ballard Pier.

CALCUTTA.—Great Eastern, Grand, Spence's, Continental.

CAWNPORE.—Civil and Military.

DELHI.—Maiden's, Cecil, Brandon's, Northern, Civil and Military, Elysium.

GOA.—Crescent.

GULMARG.—Nedou's.

GWALIOR.—Grand.

JEYPORE.—Jeypore, Kaisar-i-Hind, The New Hotel.

JUBBULPORE—Jackson's.

KALKA.—Lourie's.

KARACHI.—North-Western, Killarney, Bristol.

LAHORE.—Nedou's, Cecil, Faletti's Stiffles.

LUCKNOW.—Royal, Carlton, Civil and Military.

MADRAS.—Hotel D'Angelis, Connemara.

MEERUT.—Empress.

PESHAWAR.—Flashmans.

POONA.—Napier, Poona, Connaught.

RANGOON.—Strand, Royal, Minto Mansions, Allandale.

RAWAL PINDI—Flashmans, Imperial.

SECUNDERABAD—Montgomery's, Majestic.

HOTELS IN PRINCIPAL HILL STATIONS:—

COONOOR.—Glenview.

DARJEELING.—Woodland's, Mount Everest, Grand (Rockville), Drum Druid, Central, Park.

MAHABLESHWAR.—Race View.

MASHOBRA.—Wild Flower Hall.

MATHERAN.—Rugby, Granville.

MOUNT ABU.—Rajputana, Skeltonia.

MURREE.—Viewforth.

MUSSOORIE.—Charleville, Savoy, Cecil, Hakman's Grand.

NAINI TAL.—Metropole, Grand, Royal.

OOTACAMUND.—Sylk's, Centre, Firgrove.

PACHMARHI.—Hill.

SIMLA.—Corstorphon's, Grand, Laurie's Longwood, Faletti's, Royal.

An Indian Glossary.

ABKARI.—Excise of liquors and drugs.

AIN.—A timber tree TERMINALIA TOMENTOSA.

AKALI.—Originally, a Sikh devotee, one of a band founded by Guru Govind Singh (who died 1708): now, a member of the politico-religious army (*dal*) of reforming Sikhs.

AKHARA.—A Hindu school of gymnastics.

ALIGHOL.—Literally a Mahomedan circle. A kind of athletic club formed for purposes of self defence.

AMIL.—A subordinate executive official under native rule; in Sind the name is still applied to Hindus of the clerical class.

ANICUT.—A dam or weir across a river for irrigation purposes, Southern India.

ANJUMAN.—A communal gathering of Mahomedans.

APHUS.—Believed to be a corruption of ALPHONSE, the name of the best variety of Bombay mango.

AUS.—The early rice crop, Bengal, syn. Ahu, Assam.

AVATAR.—An incarnation of Vishnu.

BABU.—(1) A gentleman in Bengal, corresponding to Pant in the Deccan and Konkan. (2) Hence used by Anglo-Indians of a clerk or accountant.

BABUL.—A common thorny tree, the bark of which is used for tanning, ACACIA ARABICA.

BADMASH—A bad character: a rascal.

BAGHLA.—(1) A native boat (Buggalow). (2) The common pond heron or paddybird.

BAIRAGI.—A Hindu religious mendicant.

BAJRA OR BAJRI.—The bulrush millet, a common food-grain, PENNISETUM TYPHOIDEUM; syn. cambu, Madras.

BAND.—A dam or embankment (Bund).

BANYAN.—A species of fig-tree, FICUS BENGALENSIS.

BARSAT.—(1) A fall of rain, (2) the rainy season.

BASTI.—(1) A village, or collection of huts; (2) A Jain temple, Kanara.

BATTA.—Lit. 'discount' and hence allowances by way of compensation.

BAZAR.—(1) A street lined with shops, India proper; (2) a covered market, Burma.

BER.—A thorny shrub bearing a fruit like a small plum, ZIZYPHUS JUJUBA.

BEWAR.—Name in Central Provinces for shifting cultivation in jungles and hill-sides; syn. taungya, Burma; jhum, North-Eastern India.

BHADOI.—Early autumn crop, Northern India, reaped in the month Bhadon.

BHANG.—The dried leaves of the hemp plant, CANNABIS SATIVA, a narcotic.

BHANWAR.—Light sandy soil; syn. bhur.

BHARAL.—A Himalayan wild sheep, OVIS NAHURA.

BHENDI.—A suculent vegetable (HIBISCUS ESCULENTUS).

BHUSA.—Chaff, for fodder.

BHUT.—The spirit of departed persons.

BIDRI.—A class of ornamental metalwork, in which blackened pewter is inlaid with silver, named from the town of Bidar, Hyderabad.

BIGHA.—A measure of land varying widely; the standard bigha is generally five-eights of an acre.

BIR (BID).—A grassland—North India.

BLACK COTTON SOIL.—A dark-coloured soil, very retentive of moisture, found in Central and Southern India.

BOARD OF REVENUE.—The chief controlling revenue authority in Bengal, the United Provinces and Madras.

BOR.—See BER.

BRINGAL.—A vegetable, SOLANUM MELONGENA; syn. egg-plant.

BUNDER, or bandar.—A harbour or port.

BURUJ.—A bastion in a line of battlements.

CADJAN.—Palm leaves used for thatch.

CHABUTRA.—A platform of mud or plastered brick, used for social gatherings, Northern India.

CHADAR.—A sheet worn as a shawl by men and sometimes by women. (Chudder.)

CHAITYA.—An ancient Buddhist chapel.

CHAMBAR (CHAMAR).— A caste whose trade is to tan leather.

CHAMPAK.—A tree with fragrant blossoms MICHELIA CHAMPACA.

CHAPATI.—A cake of unleavened bread. (Chaupatti.)

CHAPRASI.—An orderly or messenger, Northern India; syn. pattawala, Bombay; peon, Madras.

CHARAS.—The resin of the hemp plant, CANNABIS SATIVA, used for smoking.

CHARKHA.—A spinning wheel.

CHARPAI (charpoy).—A bedstead with four legs, and tape stretched across the frame for a mattress.

CHAUDHRI.—Under native rule, a subordinate revenue official; at present the term is applied to the headman or representative of a trade guild.

CHAUKIDAR.—The village watchman and rural policeman.

CHAUTH.—The fourth part of the land revenue, exacted by the Marathas in subject territories.

CHELA.—A pupil, usually in connexion with religious teaching.

CHHAONI.—A collection of thatched huts or barracks; hence a cantonment.

CHHATRI.—(1) An umbrella, (2) domed building such as a cenotaph.

Note.—According to the Hunterian system of transliteration here adopted the vowels have the following values:—a either long as the a in 'father' or short as the u in 'cut,' e as the ai in 'gain,' i either short as the i in 'bib,' or long as the ee in 'feel,' o as the o in 'bone,' u either short as the oo in 'good,' or long as the oo in 'boot,' ai as the i in 'mile,' au as the ou in 'grouse.' This is only a rough guide. The vowel values vary in different parts of India in a marked degree. The consonantal values are too intricate for discussion here.

CHIEF COMMISSIONER.—The administrative head of one of the lesser Provinces in British India.

CHIKOR.—A kind of partridge, CACCABIS CHUCAR.

CHIKU.—The Bombay name for the fruit of ACHRAS SAPOTA, the Sapodilla plum of the West Indies.

CHINAR.—A plane tree, PLATANUS ORIENTALIS.

CHINKARA.—The Indian gazelle, GAZELLA BENNETTI, often called 'ravine deer.'

CHITAL.—The spotted deer, CERVUS AXIS.

CHOLAM.—Name in Southern India for the large millet, ANDROPOGON SORGHUM; syn. jowar.

CHOLI.—A kind of short bodice worn by women.

CHUNAM, chuna.—Lime plaster.

CIRCLE.—The area in charge of—(1) A Conservator of forests; (2) A Postmaster or Deputy Postmaster-General; (3) A Superintending Engineer of the Public Works Department.

CIVIL SURGEON.—The officer in medical charge of a District.

COGNIZABLE.—An offence for which the culprit can be arrested by the police without a warrant.

COLLECTOR.—The administrative head of a District in Regulation Provinces corresponding to the Deputy Commissioner in non-regulation areas.

COMMISSIONER.—(1) The officer in charge of a Division or group of Districts; (2) the head of various departments, such as Stamps, Excise, etc.

COMPOUND.—The garden and open land attached to a house. An Anglo-Indian word perhaps derived from 'kumpan', a hedge.

CONSERVATOR.—The Supervising Officer in charge of a Circle in the Forest Department.

COUNCIL BILLS.—Bills or telegraphic transfers drawn on the Indian Government by the Secretary of State in Council.

COUNT.—Cotton yarns are described as 20's, 30's, etc., counts when not more than a like number of hanks of 840 yards go to the pound avoirdupois.

COURT OF WARDS.—An establishment for managing estates of minors and other disqualified persons.

CRORE, karor.—Ten millions.

DAFFADAR.—A non-commissioned native officer in the army or police.

DAH OR DAO.—A cutting instrument with no point, used as a sword, and also as an axe, Assam and Burma.

DAK (dawk).—A stage on a stage coach route Dawk bungalow is the travellers' bungalow maintained at such stages in days before railways came.

DAKAITI, DACOITY.—Robbery by five or more persons.

DAL.—A generic term applied to various pulses.

DAM.—An old copper coin, one-fortieth of a rupee.

DARBAR.—(1) A ceremonial assembly, especially one presided over by the Ruler of a State hence (2) the Government of a Native State.

DARGAH.—A Mahomedan shrine or tomb of a saint.

DARI, Dhurrie—A rug or carpet, usually of cotton, but sometimes of wool.

DAROGHA.—The title of officials in various departments; now especially applied to subordinate controlling Officers in the Police and Jail Departments.

DARWAN.—A door-keeper.

DARWAZA.—A gateway.

DEBOTTAR.—Land assigned for the upkeep of temples or maintenance of Hindu worship.

DEODAR.—A cedar, CEDRUS LIBANI or C. DEODARA.

DEPUTY COMMISSIONER.—The Administrative head of a District in non-regulation areas corresponding to the Collector in Regulation Provinces.

DEPUTY MAGISTRATE AND COLLECTOR.—A subordinate of the Collector, having executive and judicial (revenue and criminal) powers; equivalent to Extra Assistant Commissioner in non-regulation areas.

DESAI.—A revenue official under native (Maratha) rule.

DESH.—(1) Native country; (2) the plains as opposed to the hills, Northern India; (3) the plateau of the Deccan above the Ghats.

DESHMUH.—A petty official under native Maratha) rule.

DEVA.—A deity.

DEVASTHAN.—Land assigned for the upkeep of a temple or other religious foundation.

DEWAN.—See DIWAN.

DHAK.—A tree, BUTEA FRONDOSA, with brilliant orange-scarlet flowers used for dyeing, and also producing a gum; syn. palas, Bengal and Bombay; Chhiul, Central India.

DHAMANI.—A heavy shighram or tonga drawn by bullocks.

DHARMSALA.—A charitable institution provided as a resting-place for pilgrims or travellers, Northern India.

DHATURA.—A stupefying drug, DATURA FASTUOSA.

DHENKLI.—Name in Northern India for the lever used in raising water; syn. picottah.

DHOBI.—A washerman.

DHOTI.—The loincloth worn by men.

DISTRICT.—The most important administrative unit of area.

DIVISION.—(1) A group of districts for administrative and revenue purposes, under a Commissioner; (2) the area in charge of a Deputy Conservator of Forests, usually corresponding with a (revenue) District; (3) the area under a Superintendent of Post Offices; (4) a group of (revenue) districts under an Executive Engineer of the Public Works Department.

DIWAN.—The chief minister in a Native State.

DIWANI.—Civil, especially revenue, administration; now used generally in Northern India of civil justice and Courts.

DOAB.—The tract between two rivers, especially that between the Ganges and Jumna.

DRY CROP.—A crop grown without artificial irrigation.

DRY RATE.—The rate of revenue for unirrigated land.

DUN.—A valley, Northern India.

EKKA.—A small two-wheeled conveyance drawn by a pony, Northern India.

EXTRA ASSISTANT COMMISSIONER.—See Deputy Magistrate and Collector.

FAKIR.—Properly an Islamic mendicant or a mendicant who has no creed, but often loosely used of Hindu mendicants also.

FAMINE INSURANCE GRANT.—An annual provision from revenue to meet direct famine expenditure, or the cost of certain classes of public works, or to avoid debt.

FARMAN.—An imperial (Mughal) order or grant.

FAUJDARI.—Under native rule, the area under a Faujdar or subordinate governor; now used generally of Magistrates' Criminal Courts.

FINANCIAL COMMISSIONER.—The chief controlling revenue authority in the Punjab, Burma and the Central Provinces.

GADDI, Gadi.—The cushion or throne of (Hindu) royalty.

GANJA.—The unfertilised flowers of the cultivated female hemp plant, CANNABIS SATIVA, used for smoking.

GAUR.—Wild cattle, commonly called 'bison', BOS GAURUS.

GAYAL.—A species of wild cattle, BOS FRONTALIS, domesticated on the North-East Frontier; syn. mithan.

GHADR.—Mutiny, Revolution.

GHAT, Ghaut.—(1) A landing-place on a river; (2) the bathing steps on the bank of a tank; (3) a pass up a mountain; (4) in European usage, a mountain range. In the last sense especially applied to the Eastern and Western Ghats.

GHATWAL.—A tenure-holder who originally held his land on the condition of guarding the neighbouring hill passes (ghats), Bengal.

GHI, Ghee.—Clarified butter.

GINGELLY.—See TIL.

GODOWN.—A store room or warehouse. An Anglo-Indian word derived from the Malay 'gadang.'

GOPURAM.—A gateway, especially applied to the great temple gateways in Southern India.

GOSAIN, Goswami.—A (Hindu) devotee; lit. one who restrains his passions.

GOSHA.—Name in Southern India for 'caste' women; lit. 'one who sits in a corner'; syn. parda.

GRAM.—A kind of pea, CICER ARIETINUM. In Southern India the pulse DOLICHOS BIFLORUS is known as horse gram.

GUARANTEED.—(1) A class of Native States in Central India; (2) A class of railways.

GUNJ.—The red seed with a black 'eye' of ABRUS PRECATORIUS, a common wild creeper, used as the official weight for minute quantities of opium 12th TOLA.

GUR, Goor—Crude sugar; syn. jaggery, Southern India; tanyet, Burma.

GURAL.—A Himalayan goat antelope, CEMAGORAL.

GURDWARA.—A Sikh Shrine.

GURU.—(1) A Hindu religious preceptor, (2) a schoolmaster, Bengal.

HAJ.—Pilgrimage to Mecca.

HAJJI.—A Mahomedan who has performed the haj. He is entitled to dye his beard red.

HAKIM.—A native doctor practising the Mahomedan system of medicine.

HALALKHOR.—A sweeper or scavenger; lit. one to whom everything is lawful food.

HALI.—Current. Applied to coin of Native States, especially Hyderabad.

HAMAL.—(1) A porter or cooly, (2) a house servant.

HEJIRA, (HIJRAH)—The era dating from the flight of Mahomed to Mecca, June 20th, 622 A.D.

HILSA.—A kind of fish, CLUPEA ILISHA.

HTI.—An iron pinnacle placed on a pagoda in Burma.

HUKKA, HOOKAH.—The Indian tobacco pipe.

IDGAH.—An enclosed place outside a town where Mahomedan services are held on festivals known as the Id., etc.

INAM.—Lit. 'reward'. Hence land held revenue free or at a reduced rate, often subject to service. See DEVASTHAN, SARAMJAM, WATAN.

INUNDATION CANAL.—A channel taken off from a river at a comparatively high level, which conveys water only when the river is in flood.

JACK FRUIT.—Fruit of ARTOCARPUS INTEGRIFOLIA, ver. PHANAS.

JAGGERY, jagri.—Name in Southern India for crude sugar; syn. gur.

JAGIR.—An assignment of land, or of the revenue of land held by a Jagirdar.

JATHA.—An association.

JAZIRAT-UL-ARAB.—The Sacred Island of Arabia, including all the countries which contain cities sacred to the Mahomedans: Arabia, Palestine and Mesopotamia.

JEMADAR.—A native officer in the army or police.

JHIL.—A natural lake or swamp, Northern India; syn. bil, Eastern Bengal and Assam.

JIHAD.—A religious war undertaken by Musalmans.

JIRGA.—A council of tribal elders, North-West frontier.

JOWAR.—The large millet, a very common food-grain, ANDROPOGON SORGHUM, or SORGHUM VULGARE; syn. cholam and jola, in Southern India.

JUDICIAL COMMISSIONER.—An officer exercising the functions of a High Court in the Central Provinces, Oudh, and Sind.

KACHERI, kachahri.—An office or office building, especially that of a Government official.

KADAB, karbi.—The straw of jowari (*q. v.*)—a valuable fodder.

KAJU, kashew.—The nut of ANACARDIUM OCCIDENTALE, largely grown in the Konkan.

KAKAR.—The barking deer, CERVULUS MUNTJAC.

KALAR, kallar.—Barren land covered with salt or alkaline efflorescences, Northern India.

KAMARBAND, Cummerbund.—A waistcloth, or belt.

KANAT.—The wall of a large tent.

KANGAR.—A kind of portable warming-pan, carried by persons in Kashmir to keep themselves warm.

KANKAR.—Nodular limestone, used for metalling roads, as building stones or for preparation of lime.

KANS.—A coarse glass which spreads and prevents cultivation especially in Bundelkhand, SACCHARUM SPONTANEUM.

KANUNGO.—A revenue Inspector.

KARAIT.—A very venomous snake, BUNGARUS CANDIDUS or CAERULEUS.

KARBHARI.—A manager.

KAREZ.—Underground tunnels near the skirts of hills, by which water is gradually led to the surface for irrigation, especially in Baluchistan.

KARKUN.—A clerk or writer, Bombay.

KARMA.—The doctrine that existence is conditioned by the sum of the good and evil actions in past existences.

KARNAM.—See PATWARI

KAZI.—Under native rule, a judge administering Mahomedan law. Under British rule, the kazi registers marriages between Mahomedans and performs other functions, but has no powers conferred by law.

KHADI (or KHADDER).—Cotton cloth handwoven from hand-spun yarn.

KHALASI.—A native fireman, sailor, artilleryman, or tent-pitcher.

KHALSA.—Lit. 'pure.' (1) Applied especially to themselves by the Sikhs, the word Khalsa being equivalent to the Sikh community; (2) land directly under Government as opposed to land alienated to grantees, etc., Northern India.

KHANDI, candy.—A weight especially used for cotton bales in Bombay-equivalent to 20 mds.

KHARAB.—In Bombay of any portion ran assessed survey No. which being uncultivable is left unassessed.

KHARIF.—Any crops sown just before or during the main S. W. monsoon.

KHAS.—Special, in Government hands. Khas tahasildar, the manager of a Government estate.

KHASADAR.—Local levies of foot soldiers, Afghanistan.

KHAS-KHAS, Kus-Kus.—A grass with scented roots, used for making screens which are placed in doorways and kept wet to cool a house by evaporation, ANDROPOGON SQUARROSUS.

KHEDDA, kheda.—A stockade into which wild elephants are driven; also applied to the operations for catching.

KHICHADI, kejjeree.—A dish of cooked rice and other ingredients, and by Anglo-Indians specially used of rice with fish.

KHILAT.—A robe of honour.

KHUTBA.—The weekly prayer for Mahomedans in general and for the reigning sovereign in particular.

KILLA.—A fort.

KINCOB, kamkhwab.—Silk textiles brocaded with gold or silver.

KIRPAN.—A Sikh religious emblem; a sword.

KODALI.—The implement like a hoe or mattock in common use for digging; syn. mamuti, Southern India.

KONKAN.—The narrow strip of low land between the Western ghats and the sea.

KOS.—A variable measure of distance, usually estimated at about two miles. The distance between the kos-minars or milestones on the Mughal Imperial roads averages a little over 2 miles, 4 furlongs, 150 yards.

KOT.—Battlements.

KOTHI.—A large house.

KOTWAL.—The head of the police in a town, under native rule. The term is still used in Hyderabad and other parts of India.

KOTWALI.—The chief police station in a head-quarters town.

KUCHA BANDI—A barrier or gateway erected across a Lane.

KULKARNI.—See PATWARI.

KUMBHAR.—A potter.

KURAN.—A big grass land growing grass fit for cutting.

KYARI.—Land embanked to hold water for rice cultivation.

KYAUNG.—A Buddhist monastery, which always contains a school, Burma.

LAKH, lac.—A hundred thousand.

LAMBARDAR.—The representative of the cosharers in a zamindari village, Northern India.

LANGUR.—A large monkey, SEMNOPITHECUS ENTELLUS.

LASCAR, correct lashkar.—(1) an army, (2) in English usage a native Sailor.

LAT.—A monumental pillar.

LATERITE.—A vesicular material formed of disintegrated rock, used for buildings and making roads; also probably valuable for the production of aluminium. Laterite produces a deep brichord soil.

LINGAM.—The phallic emblem, worshipped as the representative of Shiva.

LITCHI.—A fruit tree grown in North India (LITCHI CHINENSIS).

LOKAMANYA.—(lit.) Esteemed of the world or the people; a national hero.

LONGYI.—A waistcloth, Burma.

LOTA.—A small brass water-pot.

LUNGI, loongi—(1) A turban; (2) a cloth worn by women.

MADRASA.—A school especially one for the higher instruction of Mahomedans.

MAHAJAN.—The guild by Hindu or Jain merchants in a city. The head of the Mahajans is the Nagarsheth (*q. v.*).

MAHAL.—(1) Formerly a considerable tract of country; (2) now a village or part of a village for which a separate agreement is taken for the payment of land revenue; (3) a department of revenue, *e.g.*, right to catch elephants, or to take stone; (4) in Bombay a small Taluka under a MAHALKARI.

MAHANT.—The head of a Hindu conventual establishment.

MAHARAJA.—A title borne by Hindus, ranking above Raja.

MAHATMA.—(lit.) A great soul; applied to men who have transcended the limitations of the flesh and the world.

MAHSEER, mahasir.—A large carp, BARBUS FOR (lit. 'the big-headed').

MAHUA.—A tree, BASSIA LATIFOLIA, producing flowers used (when dried) as food or for distilling liquor, and seeds which furnish oil.

MAIDAN.—An open space of level ground; the park at Calcutta.

MAJOR WORKS.—Irrigation works for which separate accounts are kept of capital, revenue, and interest.

MAKTAB.—An elementary Mahomedan school.

MALGUZAR (revenue payer).—(1) The term applied in the Central Provinces to a co-sharer in a village held in ordinary proprietary tenure: (2) a cultivator in the Chamba State.

MALI.—A gardener.

MAMLATDAR.—The officer in charge of a taluka, Bombay whose duties are both executive and magisterial; syn. tahasildar.

MANDAP, or mandapam.—A porch or pillared hall, especially of a temple.

MANGOSTEEN.—The fruit of GARCINIA MANGOSTANA.

MARKHOR.—A wild goat in North Western India, CAPRA FALCONERI.

MASJID.—A mosque. Jama Masjid, the principal mosque in a town, where worshippers collect on Fridays.

MASNAD.—Seat of state or throne, Mahomedan; syn. gaddi.

MATH.—A Hindu conventual establishment.

MAULVI.—A person learned in Muhammadan law.

MAUND, ver. Man.—A weight varying in different localities. The Ry. maund is 80 lbs.

MAYA.—Sanskrit term for delusion.

MEHEL or MAHAL.—A palace.

MELA.—A religious festival or fair.

MIHRAB.—The niche in the centre of the western wall of a mosque.

MIMBAR.—Steps in a mosque, used as a pulpit.

MINAR.—A pillar or tower.

MINOR WORKS.—Irrigation works for which regular accounts are not kept, except, in some cases, of capital.

MISTRI.—(1) a foreman, (2) a cook.

MONSOON.—Lit. 'season,' and specifically (1) The S. W. Monsoon, which is a Northward extension of the S. E. trades, which in the Northern Summer cross the equator and circulate into and around the low pressure area over North India, caused by the excessive heating of the land area, and (2) The N. E. monsoon, which is the current of cold winds blowing down during the Northern winter from the cold land areas of Central Asia, giving rain in India only in S. E. Madras and Ceylon through moisture acquired in crossing the Bay of Bengal, and passing across the equator into the low pressure areas of the Australasian Southern summit.

MOPLAH (Mappila).—A fanatical Mahomedan sect in Malabar.

MUFASSAL, mofussil.—The outlying parts of a District, Province or Presidency, as distinguished from the head-quarters (Sadr).

MUKADDAM, muccadum.—A representative or headman.

MUKHTAR (corruptly mukhtiar).—(1) A legal practitioner who has not got a sanad, and therefore cannot appear in court as of right; (2) any person holding a power of attorney on behalf of another person.

MUKHTIARKAR.—The officer in charge of a taluka, Sind, whose duties are both executive and magisterial; syn. tahasildar.

MUKTI, 'release.'—The perfect rest attained by the last death and the final reabsorption of the individual soul into the world—soul, syn. NIRVANA, MOKSHA.

MUNG, mug.—A pulse, PHASEOLUS RADIATUS: syn. mag. Gujarat.

MUNJ.—(1) A tall grass (SACCHARUM MUNJA) in North India, from which mats are woven, and the Brahman sacred thread worn; (2) the said thread.

MUNSHI.—A teacher of Hindustani or any Perso-Arabian language.

MUNSIF.—Judge of the lowest Court with civil jurisdiction.

MURUM, moorum.—Gravel, used for metalling roads.

NACHANI-NAGLI—See RAGI.

NAGARKHANA, Nakkarkhana.—A place where drums are beaten.

NAGARSHETH.—The head of the trading guild of Hindu and Jain Merchants in a city.

NAIB.—Assistant or Deputy.

NAIK.—A leader, hence (1) a local chieftain, in Southern India: (2) a native officer of the lowest rank (corporal) in the Indian army.

NAT.—A demon or spirit, Burma.

NAWAB.—A title borne by Musalmans, corresponding roughly to that of Raja among Hindus.

NAZAR, nazarana.—A due paid on succession or on certain ceremonial occasions.

NET ASSETS.—(1) In Northern India, the rent or share of the gross produce of land taken by the landlord; (2) in Madras and Lower Burma, the difference between the assumed value of the crop and the estimate of its cost of production.

NEWAR.—Broad cockney woven across bedsteads instead of iron slats.

NGAPI.—Pressed fish or salted fish paste, largely made and consumed in Burma.

NILGAI.—An antelope, BOSELAPHUS TRAGOCAMELUS.

NIM, neem.—A tree, MELIA AZADIRACHTA, the berries of which are used in dyeing.

NIRVANA.—See MUKTI.

NIZAM.—A title borne by the ruler of Hyderabad State.

NIZAMAT.—A sub-division of a Native State, corresponding to a British District, chiefly in the Punjab and Bhopal.

NON-AGRICULTURAL ASSESSMENT.—Enhanced assessment imposed when land already assessed as agricultural is diverted to use as a building site or for industrial concerns.

NON-COGNIZABLE.—An offence for which the culprit cannot be arrested by the police without a warrant.

NON-OCCUPANCY TENANTS.—A class of tenants with few statutory rights, except in Oudh, beyond the terms in their leases or agreements.

NON-REGULATION.—A term formerly applied to certain Provinces to show that the regulations of full code of legislation was not in force in them.

NULLAH, NALA.—A ravine, watercourse, or drain.

OCCUPANCY TENANTS.—A class of tenants with special rights in Central Provinces, in United Provinces.

PADAUK.—A well known Burmese tree (PTEROCARPUS sp.) from the behaviour of which the arrival of the monsoon is prognosticated.

PADDY.—Unhusked rice.

PAGA.—A troop of horses among the Marathas.

PAGI.—A tracker thieves of strayed or stolen animals.

PAIGAH.—A tenure in Hyderabad State.

PAIK.—(1) A foot soldier; (2) in Assam formerly applied to every free male above sixteen years.

PAIREE.—The name of the second best variety of Bombay mango, distinguishable from the APHUS (*q. v.*) by its pointed tip, and by the colour being less yellow and more green and red.

PALAS.—See DHAK.

PALKI.—A palanquin or litter.

PAN.—The betel vine, PIPE BETLE.

PARAB.—A public place for the distribution of water, maintained by charity.

PARABADI.—A platform with a smaller platform like a dovecot on a centre pole or pillar built and endowed or maintained by charity, where grain is put every day for animals and birds.

PANCHAMA.—Low caste, Southern India.

PANCHAYAT.—(1) A committee for management of the affairs of a caste, village, or town; (2) arbitrators. Theoretically the panchayat has five (panch) members.

PANDIT.—A Hindu title, strictly speaking applied to a person versed in the Hindu scriptures, but commonly used by Brahmans. In Assam applied to a grade of Inspectors of primary schools.

PANSUPARI.—Distribution of PAN and SUPARI (*q. v.*) as a form of ceremonial hospitality.

PARDA, purdah.—(1) A veil or curtain; (2) the practice of keeping women secluded; syn. gosha.

PARDESI.—Foreign. Used in Bombay especially of Hindu servants, syces, &c., from North India.

PARGANA.—Fiscal area or petty sub-division of a tahsil, Northern India.

PASHM.—The fine wool of the Tibetan goat.

PASO.—A waistcloth.

PAT, put.—A stretch of firm, hard clay.

PATEL.—A village headman, Central and Western India; syn. reddi, Southern India, gaonbura, Assam; padhan, Northern and Eastern India; Mukhi, Guzarat.

PATIDAR.—A co-sharer in a village, Gujarat.

PATTAWALLA.—See CHAPRASI.

PATWARI.—A village accountant; syn. karnam, Madras; kulkarni, Bombay Deccan; talati, Gujarat; shanbhog, Mysore, Kanara and Coorg; Mandal, Assam; Tapedar, Sind.

PEON.—See CHAPRASI.

PESHKASH.—A tribute or offering to a superior.

PHULAV, (Pilow).—A dish of rice and other ingredients, and by Anglo-Indians specifically used of chicken with rice and spices.

PHULKARI.—An embroidered sheet; lit. flower-work.

PICE, paisa.—A copper or bronze coin worth one farthing; also used as a generic term for money.

PICOTTAH.—A lever for raising water in a bucket for irrigation, Southern India; syn. dhenkul or dhenkuli, or dhikli, Northern India.

PIPAL.—A sacred tree, FICUS RELIGIOSA.

PIR.—A Mahomedan religious teacher or saint.

PLEADER.—A class of legal practitioner.

PONGYI.—A Buddhist monk or priest, Burma.

POSTIN, poshteen.—A coat or rug of sheepskin tanned with the wool on, Afghanistan.

PRANT.—An administrative sub-division in Maratha States, corresponding to a British District (Baroda) or Division (Gwalior); also in Kathiawar.

PRESIDENCY.—A former Division of British India.

PROTECTED.—Forests over which a considerable degree of supervision is exercised, but less than in the case of 'reserved' forests.

PROVINCE.—One of the large Divisions of British India.

PUJA.—Worship, Hindu.

PUJARI.—The priest attached to a temple.

PUNDIT.—See Pandit.

PURANA.—Lit. 'old' Sanskrit (1) applied to certain Hindu religious books, (2) to a geological 'group'; (3) also to 'punch-marked' coins.

PUROHIT—A domestic chaplain or spiritual guide, Hindu.

PWE.—An entertainment, Burma.

PYALIS—Bands of revellers who accompany the Muharram processions.

RABI.—Any crop sown after the main South-West monsoon.

RAGI (ELEUSINE COROCANA).—A small millet used as a food-grain in Western and Southern India; syn. marua, Nagli Nachni.

RAJA.—A title borne by Hindus and occasionally by Musalmans, corresponding roughly to that of Nawab which is peculiar to Musalmans.

RAMOSHI.—A caste whose work is watch and ward in the village lands and hence used of any chaukidar (*q. v.*).

RANA.—A title borne by some Rajput chiefs equivalent to that of Raja.

RANI.—The wife or widow of a Raja.

RAO.—A title borne by Hindus, either equivalent to, or ranking below, that of Raja.

REGAR.—Name for a black soil in Central and Southern India, which is very retentive of moisture, and suitable for growing cotton.

REGULATION.—A term formerly applied to certain provinces to show that the Regulations or full code of legislation applied to them.

REH.—Saline or alkaline efflorescences on the surface of the soil, Northern India.

RESERVED.—Forests intended to be maintained permanently.

RICKSHAW.—A one or two seat vehicle on two wheels drawn by coolies, used in the hills.

ROHU.—A kind of fish, LABEO ROHITA.

RYOTWARI.—The system of tenure in which land revenue is imposed on the actual occupants of holdings.

SADR, sudder.—Chief (adjective). Hence the headquarters of a District; formerly applied to the Appellate Courts.

SAFA JANG—A long-handled battleaxe carried by Jat Sikhs.

SAFFLOWER.—A thistle which yields a yellow dye from its petals and oil from its seeds (CARTHAMUS TINCTORIUS), ver. Kardai, Kushanti.

SAL.—A useful timber tree in Northern India, SHOREA ROBUSTA.

SAMBAR.—A deer, CERVUS UNICOLOR; syn. sarau.

SAN.—Bombay hemp, CROTALARIA JUNCEA.

SANAD.—(1), A charter or grant, giving its name to a class of States in Central India held under a sanad, (2) any kind of deed of grants.

SANGATHAN.—Literally tying together. A movement which aims at unity and the knowledge of the art of self-defence among Hindus. Roughly similar to Fascismo.

SANNYASI.—A Hindu mendicant.

SARI.—A long piece of cloth worn by women as a shawl.

SARANJAM.—Land held revenue free or on a reduced quit-rent in consideration of political services rendered by the holder's ancestors.

SARKAR.—(1) The Government; (2) a tract of territory under Muhammadan rule, corresponding roughly to a Division under British administration.

SARSUBAH.—An officer in charge of a Division in the Baroda State corresponding to Commissioner of British territories.

SATI.—Suicide by a widow, especially on the funeral pyre of her husband.

SATYAGRAHA.—(lit.) One possessed by the truth; one who follows the truth wherever it may lead. (Commonly used to denote the passive resistance movement.)

SAWBWA.—A title borne by chiefs in the Shan States, Burma.

SEMAL or cotton tree.—A large forest tree with crimson flowers and pods containing a quantity of floss, BOMBAY MALABARICUM.

SEROW, sarau.—A goat antelope, NEMORHAEDUS BUBALINUS.

SETTLEMENT.—(1) The preparation of a cadastral record and the fixing of the Government revenue from land; (2) the local inquiry made before Forest Reserves are created; (3) the financial arrangement between the Government of India and Local Governments

SHAHID—A martyr

SHANBHOG.—See PATWARI.

SHASTRAS.—The religious law-books of the Hindus.

SHEGADI, seggaree.—A pan on 3 feet with live charcoal in it.

SHER, ser, seer—A weight, or measure varying much in size in different parts of the country. The Railway ser is about 2 lbs.

SHETH, shethia.—A Hindu or Jain merchant

SHIGURAM.—See TONGA.

SHISHAM or sissu.—A valuable timber tree, DALBERGIA SISSOO.

SHUDDHI.—Literally purification. A movement started in Rajputana and Northern India for the reconversion to Hinduism of those, like the Malakhana Rajputs, who, though Mahomedans for some generations, have retained many Hindu practices.

SILLADAR.—A native trooper who furnishes his own horse and equipment.

SOLA.—A water-plant with a valuable pith, AESCHYNOMENE ASPERA.

SOWAR.—A mounted soldier or constable.

STUPA or tope.—A Buddhist tumulus, usually of brick or stone, and more or less hemispherical, containing relics.

SUBAH.—(1) A province under Mahomedan rule; (2) the officer in charge of a large tract in Baroda, corresponding to the Collector of a British District; (3) a group of Districts or Division, Hyderabad.

SUBAHDAR.—(1) The governor of a province under Mahomedan rule; (2) a native infantry officer in the Indian Army; (3) an official in Hyderabad corresponding to the Commissioner in British territory.

SUB-DIVISION.—A portion of a District in charge of a junior officer of the Indian Civil Service or a Deputy Collector.

SUPARI.—The fruit of the betel palm, ARECA CATECHU.

SUPERINTENDENT.—(1) The chief police officer in a District; (2) the official in charge of a hill station; (3) the official, usually of the Indian Medical Service, in charge of a Central Jail.

SURTI.—Native of Surat, specially used of persons of the Dhed or Mahar caste who work as house servants of Europeans, and whose house speech is Gujarati.

SYCE, sais.—A groom.

TABUT.—See TAZIAH.

TAHSIL.—A revenue sub-division of a District; syn. taluka, Bombay; taluka, Madras and Mysore; township, Burma.

TAHSILDAR.—The officer in charge of a tahsil; syn. Mamlatdar, Bombay; township officer or myo-ok, Burma; Mukhtiarkar, Sind; Vahivatdar, Baroda. His duties are both executive and magisterial.

TAKAVI.—Loans made to agriculturists for seed, bullocks, or agricultural improvements; syn. tagai, Bombay.

TALATI.—See PATWARI.

TALAV, or talao.—A lake or tank.

TALUK, taluka.—The estate of a talukdar in Oudh. A revenue sub-division of a District, in Bombay, Madras and Mysore; syn. tahsil.

TALUKDAR.—A landholder with peculiar tenures in different parts of India. (1) An official in the Hyderabad State, corresponding to the Magistrate and Collector (First Talukdar) or Deputy Magistrates and Collectors (Second and Third Talukdars); (2) a landholder with a peculiar form of tenure in Gujarat.

TAMTAM, tumtum.—A North Indian name for a light trap or cart.

TANK.—In Southern, Western, and Central India, a lake formed by damming up a valley; in Northern India, an excavation holding water.

TAPEDAR.—See PATWARI.

TARAI.—A moist swampy tract; the term especially applied to the tract along the foot of the Himalayas.

TARI, toddy—The sap of the date, palmyra, or cocoanut palm, used as a drink, either fresh or after fermentation. In Northern India the juice of the date is called Sendhi.

TASAR, tussore.—Wild silkworms, ANTHERAEA PAPHIA; also applied to the cloth made from their silk.

TAZIA.—Lath and paper models of the tombs of Hasan and Husain, carried in procession at the Muharram festival; syn. tabut.

TEAK.—A valuable timber tree in Southern and Western India and Burma, TECTONA GRANDIS.

TELEGRAPHIC TRANSFERS.—See Council bills.

THAGI, thuggee.—Robbery after strangulation of the victim.

THAKUR.—(1) The modern equivalent of the caste name Kshattriya in some parts of Northern India; (2) a title of respect applied to Brahmans; (3) a petty chief; (4) a hill tribe in the Western Ghats.

THAMIN.—The brow-antlered deer, Burma, CERVUS ELDI.

THANA.—A police station, and hence the circle attached to it.

TIKA.—(1) Ceremonial anointing on the forehead; (2) vaccination.

TIKAM.—The English pickaxe (of which the word is a corruption).

TIL.—An oilseed, SESAMUM INDICUM; also known as gingelly in Madras.

TINDAL, tandel.—A foreman, subordinate officer of a ship.

TIPAI, Teapoy.—A table with 3 legs, and hence used of any small European style table.

TOLA.—A weight equivalent to 180 grains (troy).

TONGA.—A one or two horsed vehicle with a covered top; syn. SHIGRAM.

TSINE.—Wild cattle found in Burma and to the southward, BOS SONDAICUS; syn. hsaing and banteng.

UNIT.—A term in famine administration denoting one person relieved for one day.

URIAL.—A wild sheep in North-Western India, OVIS VIGNEI.

URID, UDID.—A pulse, 'black grain,' (PHASEOLUS MUNGO).

UMBAR.—A wild pig—(FICUS GLOMERATA).

USAR.—Soil made barren by saline efflorescence, Northern India.

VAHIVATDAR.—Officer in charge of a revenue sub-division, with both executive and magisterial functions, Baroda; syn. tahsildar.

VAID or baidya, Bengal.—A native doctor practising the Hindu system of medicine.

VAKIL.—(1) A class of legal practitioner; (2) an agent generally.

VIHARA.—A Buddhist monastery.

VILLAGE.—Usually applied to a certain area demarcated by survey, corresponding roughly to the English parish.

VILLAGE UNION.—An area in which local affairs are administered by a small committee.

WADA or WADI.—(1) an enclosure with houses built round facing a centre yard; (2) private enclosed land near a village.

WAKF.—A Muhammadan religious or charitable endowment.

WAO.—A step well.

WATAN.—A word of many senses. In Bombay Presidency used mostly of the land or cash allowance enjoyed by the person who performs some service useful for Government or to the village community.

WAZIR.—The chief minister at a Mahomedan court.

WET RATE.—The rate of revenue for land assured of irrigation.

YOGI.—A Hindu ascetic who follows the yoga system, a cardinal part of which is that it confers complete control over the bodily functions enabling the practiser, for instance to breathe in through one nostril and out at the other.

YUNANI.—Lit. Greek; the system of medicine practised by Mahomedans.

ZAMINDAR.—A landholder.

ZAMINDARI.—(1) An estate; (2) the rights of a landholder, zamindar; (3) the system of tenure in which land revenue is imposed on an individual or community occupying the position of a landlord.

ZANANA.—The women's quarters in a house hence private education of women.

ZIARAT.—A Mahomedan shrine, North-Western Frontier.

ZILA.—A District.

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- Vol. II.—Financial.
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Report on the Administration of Civil Justice for each Province.

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Report on the working of the Criminal Tribes Act (Bombay, Punjab and United Provinces).

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Return of Net Income and Expenditure for eleven years (Parliamentary Paper).

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Mint Reports for Calcutta and Bombay.

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Statistics compiled from the Finance and Revenue Accounts.

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Land Revenue Administration: Provincial Reports for Lower Provinces (Bengal, Bihar and Orissa, Assam), United Provinces, Bombay Presidency (including Sind), Punjab, Central Provinces and Berar, Burma, and Madras.

Report on Land Revenue Administration, Land Records, Settlement Operations, Alienation of Land Act, &c., for North-West Frontier Province.

Madras Survey, Settlement and Land Records Department Report.

Reports of Land Records Department for Bombay, Burma, Bengal, United Provinces, and Punjab.

Report on Settlement Operations, Punjab.

Reports on Survey and Settlement Operations, Bengal, Bihar and Orissa, and Assam.

Reports on Operations of the Land Records and Settlement Departments, Central Provinces and Berar.

Report of the Talukdari Settlement Officer, Bombay.

Provincial Reports on the Administration of Estates under the Court of Wards.

Report on the Punjab Canal Colonies.

Separate Revenue (Salt, Excise, &c.)—

Salt Department Reports: Northern India, Madras, Bombay, Sind, Bengal, Burma, Bihar and Orissa.

Excise Report for each Province.

Report on the operations of the Opium Department.

Stamp Department Report for each Province.

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Report on the Progress of Agriculture in India.

Report of the Agricultural Research Institute and College, Pusa.

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Statistics compiled from the Reports of the Provincial Civil Veterinary Departments.

Report of the Camel Specialist.

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Co-operative Societies.—

Statements showing Progress of the Co-operative Movement in India

Reports on Co-operative Societies for each Province.

Reports of Conferences of Registrars of Co-operative Societies, India and Provincial

Fisheries —

Report of the Fisheries Department, Bengal, Bihar and Orissa, Madras and Punjab

Forests.—
Annual Return of Statistics relating to Forest Administration in British India.
Report on Forest Administration for each Province.
Reports of the Forest Research Institute and the Imperial Forest College, Dehra Dun.
Quinquennial Forest Review.
Indian Forest Memoirs.
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Annual Statements of Sea-borne Trade and Navigation, India and Provincial (Madras, Bombay, Sind, Bengal, Bihar and Orissa, Burma).
Review of the Trade of India (Parliamentary Paper).
Tables of the Trade of India (Parliamentary Paper).
Provincial Reports on Maritime Trade and Customs (including working of Merchandise Marks Act) for Bengal, Bihar and Orissa, Bombay, Sind, Madras, and Burma.
Accounts relating to the Sea-borne Trade and Navigation of British India (monthly and for Calendar Year).
Accounts relating to the Trade by Land of British India with Foreign Countries (monthly).
Annual Statement of Coasting Trade of British India.
Report on the Trade and Navigation of Aden.
Accounts of Trade carried by Rail and River in India.
Report on Inland, Rail-borne, or Rail-and-River-borne Trade for each Province.
External Land Trade Reports for Bengal, Bihar and Orissa, Assam, Burma, United Provinces, Punjab, North-West Frontier Province, Sind, and British Baluchistan.
Indian Trade Journal (weekly).
Statistics relating to Joint-Stock Companies in British India and Mysore.
Report on the working of the Indian Companies Act for each Province.
Report on the working of the Indian Factories Act for each Province.
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Administration Report on Railways.
Reports on Public Works (Buildings and Roads), for Madras, Bombay, Punjab, North-West Frontier Province, and Burma.
Review of Irrigation.
Report on Irrigation Revenue for each Province (except Madras).
Administrative Reports on Irrigation, Madras and Bombay.
Report on Architectural Work in India.

Posts and Telegraphs.—
Reports on the Posts & Telegraphs of India.
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Report on the Operations of the Survey of India.
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Records and Memoirs of the Geological Survey of India.
Report of the Indian Meteorological Department.
Indian Weather Review, Annual Summary.
Rainfall data of India.
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Report of the Meteorologist, Calcutta.
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Report and Records of the Botanical Survey.

Education.—
Education Reports for India and each Province.
Quinquennial Review of Education (Parliamentary Paper).

Local Self-Government.—
Reports on Municipalities for each Province and for Calcutta, Bombay City, Madras City, and Rangoon.
Report on District and Local Boards or Local Funds for each Province.
Reports of Port Trusts of Calcutta, Bombay, Madras, Rangoon, Karachi, and Aden.

Medical, Sanitary, and Vital Statistics.—
Report of the Sanitary Commissioner with the Government of India.
Report on Sanitary Measures in India (Parliamentary Paper).
Report of the Sanitary Commissioner for each Province.
Vaccination Report for each Province.
Report on Civil Hospitals and Dispensaries for each Province.
Report on Lunatic Asylums for each Province.
Report of the Chemical Examiner and Bacteriologist for each Province.
Scientific Memoirs by Officers of the Medical and Sanitary Departments.
Reports of the All-India Sanitary Conferences.
Reports of the Imperial Malaria Conferences.
Indian Journal of Medical Research (Quarterly).

Emigration and Immigration.—
Calcutta Port Emigration Report.
Bengal Inland Emigration Report.
Assam Immigration Report.

Prices and Wages.—
Prices and Wages in India.
Variations in Indian Price Levels.
Reports of Provincial Wage Censuses.

Political Writings.—
Gandhi and Anarchy by Sir Sankaran Nair.
Indian Unrest by Alfred Nundy.
Revolution or Evolution.

Bibliography of India.

The general work of reference in one compact volume about India is still the late Sir William W. Hunter's *The Indian Empire: Its Peoples, History and Products* (Smith Elder, 1893, 28/-) which contains within its 800 pp. all the information, excellently arranged and indexed, that the general reader requires about this country. Its historical sections are particularly good giving a rapid and comprehensive bird's-eye-view of the course of Indian history from the advent of the Mahomedans in the eighth century down to nearly the close of the nineteenth century. Its statistics are based on the Census of 1891 and are therefore somewhat out of date. But, with this slight drawback which can be remedied by consulting the latest annual "Statistical Abstract" (see below), it gives in the compass of one volume a comprehensive view, neither too blurred nor too diffuse, of the Indian Empire and its past and present state. A more detailed account of India is to be found in the first four volumes of *The Imperial Gazetteer of India* (Clarendon Press, 1907 Vols. I-IV, 6/-each). These volumes, which are introductory to the alphabetical Gazetteer (Vols. V-XXIV), are an expansion of Hunter's one volume work mentioned above; but all the chapters, with the exception of those on the history of British Rule, have been rewritten by expert writers who have been in most cases Indian administrators also. The statistics in these volumes are based on the Census of 1901. The second volume of the *Oxford Survey of the British Empire* (Clarendon Press, 1914, 15/-) is mostly devoted to India and contains an excellent concise account by various well known writers of the Indian Empire as it is to-day. The statistics of this volume are based on the latest Census of 1911. Sir Thomas Holdich's volume on *India* in the "Regions of the World" Series (Clarendon Press, 1904, 10/6) is a compact geographical account by an authoritative writer. The same author's *Gates of India* (Macmillan, 12 s. 6d.) is a useful historical and geographical work on the North-West Frontier of India. A short account of the problems of India's frontiers and their defence is given in Arthur Vincent's *defence of India* (Oxford University Press). Rs.2 Dr. George Smith's *Student's Manual of the Geography of British India* (Murray, 1882, 7/6) may still be used with profit, though parts of it are obsolete. Sir Thomas Holderness (fourth) edition, 1911, of Sir John Strachey's *India*, originally published in 1888, contains the best, succint account of Indian administration and progress (Macmillan, 1911, 10/-). The same editor's little book in the Home University Library, *Peoples and Problems of India* (Williams and Norgate, 1912, 1/-) is a useful introduction to the study of present day India. A very good *Atlas of India* is published as Vol. XXVI of the *Imperial Gazetteer* (separately, 17/6 Clarendon Press, 1909). It contains 28 general and 18 provincial maps besides 16 plans of Cities, including 3 of Bombay, 2 of Calcutta and 1 of Madras, Delhi, Simla, etc., each. A somewhat older though still excellent atlas is *Constable's Hand Atlas of India* (Constable, 1893, 14/-). It has 60 maps and plans and is accompanied by an index of 86 pp. The companion volume *Hand Gazetteer of India* by Jas. Bartholomew (Constable, 1894, 12/-) is a very concise gazetteer based on the second edition of 1886 of Hunter's *Imperial Gazetteer*. An older and fuller gazetteer, though still having the advantage of being in one compact volume, is Lethbridge and Wollaston's revised abridgment of *Thornton's Gazetteer of India* (W. H. Allen, 1888, 21/-).

Official Publications.—The principal official publications of general interest and utility are the Annual Reviews (*India in* 1920 is the latest) by Mr. L. F. Rushbrook Williams, published by the Government of India and their accompaniment. *The Statistical Abstract for British India* (issued towards the close of the year, about 1/6); the report on the Census of 1911 (Vol. I, Calcutta, Rs. 5, Text, Vol. II, Appendix giving tables, etc.); *Statistics of British India* (4 Vol., Calcutta) Administrative, Judicial, &c., annual *Statement of the Trade of British India* with Foreign Countries (Calcutta) and the annual *Review of Trade* (Eyre and Spottiswoode, 2/-); *Financial Statement of the Government of India* (Eyre and Spottiswoode). Every ten years is issued an elaborate review of the period as a Decennial number of the Moral and Material blue-book (now diswntinued) and those by J. S Cotton (pub. 1885) and by Sir Athelstane Baines (pub. 1894) are specially valuable. A "Memorandum on some of the Results of Indian Administration during the past Fifty Years of British Rule in India" issued in 1909 by the India Office (reprinted at Government Press, Calcutta, 1911, six annas, in a handy octavo) is a valuable summary of the improvements since 1858.

History.—It is still the fashion to call James Mill's *History of British India* (Vols. I-VI up to 1805; continuation by H. H. Wilson, Vols. VII-IX, index Vol. X., last ed. 1858, W. H. Allen) the standard work on the subject, but it is out of date and in parts wrong-headed. No other author of equal ability and repute has treated the subject on a large scale with the exception of Mr. Vincent Smith whose *Oxford History of India* has become the standard work. It is a handy volume copiously illustrated, (Clarendon Press, 1920, 12-6). Sir W. W. Hunter made the attempt but lived only to write two volumes dealing with the first century of the English in India up to 1700. (History of British India, Vols. I-II, 1899-1900, Longmans, 30/-). A masterly historical sketch of the whole period is to be found in Sir Alfred Lyall's *British Dominion in India*, (Murray, 1894, latest ed. 1907, 5/-) which is specially remarkable for the writer's theory that the British dominion in India grew and expanded on a regular plan foreseen by its founders and was not as is generally supposed the result of a happy chance. Another excellent and interesting sketch is contained in the *Historical Geography of India* by P. E. Roberts, who had assisted Hunter in the above mentioned work (Clarendon Press, 1920, 8/6). Miss Gabrielle Festing's two works, *When Kings Rode to Delhi* (Blackwood, 1912, 7/6) and *Strangers Within the Gates* (Blackwood, 1914, 7/6) give a popular

but accurate presentment of the Mughal and British periods. Marshman's *History of India* (3 Vols., Longmans, 1871, 22-6) gives an excellent account, neither too detailed nor too concise, of the whole history and may be recommended as the most readable history of India till the Mutiny. There is an abridgment of Marshman in one volume (Blackwood, 6/-). Trotter's *History of India*, recently revised and brought up to date by W. H. Hutton (S. P. C. K., 1917, 10/-) is a good and accurate compendium, as also is Meadows Taylor's *Students' Manual of Indian History* (Longmans, 7/6) which has long been well known for presenting a vast amount of facts in a small compass and in an agreeable style. For the Mahomedan period the standard work is Elphinstone's *History of India* (Murray, 16/-). A much more elaborate work for the same period is Sir Henry Elliot and Jas Dowson's *History of India as told by its own Historians* (8 Vols., 1867-1877, £ 8-8-0) giving translations of the chief Mahomedan historians. For the pre-Mahomedan period Vincent Smith's *Early History of India* (Clarendon Press, 3rd ed., 1914, 16/-) is the latest and best work. Mr. Vincent Smith is also the author of *The Oxford History of India*, from the earliest times to the end of 1911 (Clarendon Press, 12/6). Romesh Dutt's *History of Ancient Civilisation in India* (2 Volumes, Trubner's Oriental Series, 21/-, 1893) and Mrs. Manning's earlier work *Ancient and Mediæval India* (2 Vols., 1869, 30/-, W. H. Allen) deal mainly with literature rather than history proper though they give a more or less vivid picture of those early times. The following books, which are published by the Clarendon Press, are of particular interest. *Hindu Manners, Customs and Ceremonies* by J. A. Dubois: The Abbe Dubois lived for many years amongst the people of S. India and gained an extraordinary insight of their customs and habits (6*s.*), *Travels in the Mogul Empire*, 1656-68 by Francis Bernier (7*s.* 6*d.*), *Observations of the Mussulmans of India* made during twelve years' residence in their immediate society by Mrs. Meer Hassan Ali, an Englishwoman who married an Indian Mahomedan (7*s.* 6*d.*), *Rambles and Recollections of an Indian Official* by Major-General Sleeman (6*s.*), *Annals and Antiquities of Rajasthan* in 3 volumes (52*s.* 6*d.*), *The Story of My Life* by Col. Meadows Taylor, (16*s.*), *Early Travels in India*, 1583-1619, by William Foster, C.I.E., (10*s.* 6*d.*), *The Rites of the Twice Born* by Mrs. Sinclair Stevenson, the latest and best book on the Brahman Caste (21*s.*), *A History of the Maratha People*, by C. A. Kincaid and R. Parasnis (16*s.*)

Historical Biography.—The principal characters of Indian history, Hindu 'Mahomedan and British such as Asoka, Babar, Akbar, Clive, Warren Hastings, Dalhousie, etc, are individually treated in the well known *Rulers of India* series of historical and biographical monographs (28 Vols., Clarendon Press, 1890-1902, 2/6 each). In the English *Men of Action* series (Macmillan, 2/6 each) there are also volumes on famous Anglo-Indian statesmen, such as Sir Alfred Lyall's *Warren Hastings*, Archibald Forbes' *Havelock*, Sir Richard Temples *Lord Lawrence*, Sir W. Butler's *Charles Napier*. Among biographies of Anglo-Indian worthies may be mentioned as specially interesting and valuable Sir George Forrest's *Life of Lord Clive* (Cassell, two vols., 1919), Col. Malleson's *Warren Hastings* (Chapman and Hall, 1894, 16/-), Bosworth Smith's *Lord Lawrence* (2 Vols., Smith Elder, 1883, new ed., Nelson's series, 1/-). Herbert Edwardes and Merivale's *Sir H. Lawrence* (2 Vols., Smith Elder 1872), Sir W. Hunter's *Lord Mayo* (2 Vols., Smith Elder, 1875, 24/-), Sir W. Lee Warner's *Lord Dalhousie* (2 Vols., Macmillan, 1904, 25/-), Sir Alfred Lyall's *Lord Dufferin* (2 Vols., Murray, 1905, new ed., Nelson's series 1/-), Marshman's *Sir H. Havelock* (Longmans, 3/6), Martineau's *Sir Bartle Frere* (2 Vols., Murray, 1895, 32/-), Mallet's *Earl of Northbrook* (Longmans, 1910, 16/-), Lord Roberts' *Forty-one Years in India* (Macmillan, 1897, new ed. 6/-), Colebrooke's *Mountstuart Elphinstone* (2 Vols., Murray, 1884, 25/-), Trotter's *John Nicholson* (1897, Murray, 2/6) and *Bayard of India* (Outram) (Blackwood 5/-). Among noteworthy works treating of recent history since 1858 are Lovat Fraser's *India under Lord Curzon and After* (Heinemann, 1911, 16/-). Lady Betty Balfour's *Lord Lytton's Indian Administration* (Longmans, 1899, 18/-), Sir W. Hunter's *Bombay*, 1885–1900, a Study of Indian Administration (Clarendon Press, 1892, 16/-), Col. Hanna's *Second Afghan War* (3 Vols., Constable, 1899-1907, 36/-), *Official History of the Second Afghan War* (Murray, 1905, 21/-). Sir John Adye *Indian Frontier Policy*, a historical sketch (Macmillan 1897, 6/-), Trotter's *India under Victoria* (2 Vols., W. H. Allen, 1886, 30/-).

For the Indian Mutiny the standard history is Kaye and Malleson's *History of the Indian Mutiny* (new ed. 6 vols. Longmans, 21/-). Sir George Forrest's *History of the Mutiny* (4 vols., 1904-1914, Blackwood, 64/-) gives the chief records in the Indian archives. The best one-volume narratives are Malleson's shorter work, *Indian Mutiny* (in Messrs. Seeley's "Events of Our Own Times" series 5/-) and T. Rice Holmes' History of *The Indian Mutiny* (1883, W. H. Allen, new ed. Macmillan, 15/-s).

Constitution and Administration.—The changes lately effected in the constitution of the Indian Government have been embodied in the Report on Indian Constitutional Reforms, drawn up by the Secretary of State and the Viceroy (the Montagu-Chelmsford Scheme) and published in a handy octavo (Government Press, Calcutta, July 1918, one rupee.) The most comprehensive book on the new constitution is *Dyarchy* by Lionel Curtis (Clarendon Press, 1921: 31-6) which contain all the documents etc., relating to the reform scheme. At the head of books on the Indian Constitution, stands Sir Courtenay Ilbert's "*The Government of India* being a Digest of the Statute Law relating thereto with historical introduction and explanatory matter" (Clarendon Press, 1st ed., 1898 2nd ed., 1907, 3rd ed., 1915, 14/-1922, 10s 6d) the first edition contains important constitutional documents such as minutes, despatches, charters, etc., covering 130 pp. which have been omitted in the subsequent issues.) The Digest drawn up by Sir C. Ilbert many years ago has been now embodied in the main in the "Government of India Act of 1915" which contains the entire body of law relating to the Government of India and which has been officially issued in octavo form (price 7*d.* Eyre and Spottiswoode). A supple-

ment to Ilbert's third edition gives a comparison between the Digest given in the book and this Act (1916, 1/-) The constitutional documents from the Regulating Act of 1773 down to the Consolidating Act of 1915 have been printed in handy form in P. Mukerji's *Indian Constitutional Documents* (1915, Calcutta, Thacker, Spink Rs. 6); of the second ed. Vol. II, Rs. 3 has been issued in 1918 containing an historical introduction divided into two parts dealing with English political institutions and the present working constitution of India. The important constitutional documents have been also included in A. R. Iyengar's *Indian Constitution* (1909, 2nd enlarged ed. 1913, Loganatham, Madras, Rs. 3) which contains an historical view of the various administrative institutions. The documentary matter extends to nearly 250 pp. Chesney's *Indian Polity* (3rd ed. 1894, Longmans) gives an excellent historical view of the system of administration as it grew up from the early days of the English in India down to the end of the nineteenth century. Another useful work is B. K. Thakore's *Indian Administration to the down of responsible Government*, 1765-1920 (Taraporewala, Bombay. Rs. 4). Sir William LeeWarner's *The Citizen of India* (1897, Macmillan 2/6) gives in brief outline a very good sketch of Indian administration. A more up-to-date work is G. Anderson's *British Administration in India* (Macmillan). H. A. D. Phillips' *Our Administration of India* (1888, W. Thacker, London, 6/-) gives an account of the Revenue and Collectorate Administration in all departments, and though this is done with special reference to Bengal, it is more widely useful. A. Mackenzie's *How India is Governed* (1882, Kegan Paul, 2) is a very brief sketch of the Indian constitution and administration and of England's work in India. For the system of judicial administration Herbert Cowell's *History and Constitution of the Courts and Legislative Authorities in India* (1872, 2nd ed., 1884, Thacker Spink, Calcutta, Rs. 6) is still useful, for the historical part.

Economics, Famines, etc.—Baden Powell's Land Revenue and Tenure in British India (2nd ed., 1907, revised by Sir T. Holderness, with an appendix added in 1912, 5/-, Clarendon Press) gives an account of land revenue system in India. Sir W. Hunter's *Annals of Rural Bengal* (1868, new ed., 1897, Smith Elder, 16/-) and his *Orissa* (2 vols., 1872, Smith Elder, 32/-) give a good idea of the economic condition of eastern India when it passed under British Rule. J. C. Jack's *The Economic Life of a Bengal District* (1916, Clarendon Press, 7/6) is an economic study of the people's life based on the minute data collected from innumerable families for the record of rights of Bengal and is of great value in estimating the resources of the people and the economic results of British rule. Dr. H. Mann's *Land and Labour in a Deccan Village* (Oxford University Press: 2 vols., Rs. 6) and Dr. Slater's *Some South Indian villages* (Oxford University Press, Rs. 5) deal with agricultural economics. Sir Theodore Morison's *Industrial Organisation of an Indian Province* (1906, Murray. 10/6) reviews the principal economic facts and shows their relation to the abstract science of economics. The author treats specially of the United Provinces to which his personal observation was mainly confined. Morison's *Economic Transition in India* (1911, Murray) deals with the development of industrial and economic resources of the country. Romesh Dutt's *Economic History of India under Early British Rule* (1902, Kegan Paul, 16) and the same in the *Victorian Age* (1904, Kegan Paul, 1904) are a powerful though one-sided indictment of British economic and land revenue policy. Valuable books on the co-operative system are R. B. Ewbank's *Indian Co-operative Studies* (Oxford University Press.) and C. F. S. Strickland's *Introduction to Co-operation in India* (Oxford University Press.) Rs. 2. Dutt, who is a staunch champion of the Permanent System of land tenure in vogue in Bengal and of its introduction into other parts of India, in his *Famines and Land Assessments in India* (1899, Kegan Paul, 7/6) on the same lines asserts that famines are due to the land policy of the Government. On Famines the best books are the Reports of the Famine Commissions pub. 1885, 1887, 1898 (Eyre and Spottiwoode). A good narrative of the last great famine of 1899–1900 is to be found in Vaughan Nash's *The Great Famine, its causes* (1900, Longmans, 6/-). On the earlier great Bengal Famine, Sir Bartle Frere's *The Impending Bengal Famine*, and how to prevent future famines in India, (1874, Murray, 5/-) is useful and suggestive. Charles Blair's *Indian Famines* in their historical and financial aspects (1874, Blackwood 5/-) contains good remarks on preventive and mitigating measures. Loveday's *History and Economics of Indian Famines* (2s. 6d.) is a later book of the same kind. For public works, Railways, etc., Thornton's *Indian Public Works* (1875, Kegan Paul, 5/-) MacGeorge's *Ways and Works in India* (1893, Constable, 14/-), Horace Bell's *Railway Policy in India* (1894, 12/-), Deakin's *Irrigated India* (1893, Spon, 8/6), Buckley's *Irrigation Works of India* (1905 Spon, 42/-) *Irrigation in India*, By D. G Marris. (Oxford University Press.) Rs. 2. Valentine Ball's *Coal Fields of India* (new edition, 1914, Calcutta), Report of the *Irrigation Commission* (1905, Eyre and Spottiwoode).

On **Finance** the work of the Strachey Brothers, Sir John and Sir Richard, *Finances and Public Works of India* (1882, Kegan Paul, 10/6) is valuable as describing the system of Indian Finance by persons who had intimate knowledge and personal experience. Reports of the Indian Currency Committee, 1898 and 1899, and of the Royal Commission on the administration of the expenditure of India, 1900, contain a vast mass of useful material. *Indian Currency* (1878, Longmans 2/-), by Dunning Macleod, treats of the means of introducing a Gold Currency in India, and of extending Banking and Paper Currency. H. J. Tozer's *British India and its Trade* (1902) gives a good view of the trade and surveys its growth during the latter half of the nineteenth century. A more recent work is Prof. K. T. Shah's *Trade, Tariffs and Transport in India* (National Book Depot, Bombay: 1923.) Rs. 10. Prof. Lees Smith's *Studies in Indian Economics* (1909, Constable, 3/6) and Jadunath Sarkar's *Economics of British India* (4th ed., 1917, Sarkar and Sons, Calcutta) are good introductions to the subject. The former is a series of lectures delivered by the author for the Bombay

Government. The Exchange question is briefly explained in F. V. Rushforth's *The Indian Exchange Problem* (Oxford University Press 1921. Re. 1-6).

The Protected States.—Malleson's *Native States of India* (1875, W. H. Allen, 18/-), gives an historical sketch of the various states. The author was then connected with the state of Mysore as the guardian of its young ruler. The work of another official who was connected with Mysore as its Resident at the end of his Indian career, Sir W. Lee-Warner, *The Native States of India* (2nd ed., 1910, Macmillan, 12*s*. 6d. 1st ed., 1894, under title "Protected Princes of India") whilst giving what he calls an "Account of India under Home Rule", chiefly discusses the question of the position of these states in relation to the British Government. A Punjab official, Sir Charles Tupper, in his *Our Indian Protectorate* (1893, Longmans, 16/-) similarly treats of the relations between the British Government and its Feudatories, but goes more into the past and has instructive chapters on indigenous home rule under the Mahrattas, the Sikhs, the Mahomedans, etc. This valuable work is now thoroughly out of print, but a good vernacular translation in Gujarati by A. N Buch (1900 Rajkot) is available. Sir Lepel Griffin's *Punjab Chiefs* (1865 Trubner) and *Baias of the Punjab* (1870, 2nd ed. 1873, Trubner, 20/-) give in considerable detail the history of the principal Punjab states like Patiala, Kapurthala, Nabha, etc. Massy prepared a new edition of the former book (1889, Allahabad, Pioneer Press) and completed it by another *Chiefs and Families of Note in the Punjab* (1890, Allahabad, Pioneer Press) and they give short notices of all the ruling chiefs of the Punjab. Aberigh Mackay who was tutor to the Raja of Ratlam in Central India and Principal of Rajkumar College at Indore, wrote on the *Chiefs of Central India* (1879) and on the *Native Chiefs and their States in 1877* (1878). Both books are noteworthy. Aitchison's *Treaties, Engagements and Sanads* relating to India and the neighbouring countries (3rd ed., 1893, 11 volumes, Calcutta, Government Press, Rs. 34) is the standard collection of all the treaties with the Native Feudatory States. The relations with the Nizam are investigated in H. G. Brigg's *The Nizam* (2 vols., 1861, Quaritch, 28/-) and Hastings Fraser's *Our Faithful Ally, the Nizam* (1865, Smith Elder 18/-). The relations with the Gaekwar of Baroda are exhaustively treated in *The Gaicowar and his Relations with the British Government* (1863, Education Press, Bombay) by Col. R. Wallace who was Resident at Baroda.

INTEREST TABLE.

From 5 to 12 per cent. on Rupees 100;

Calculated for 1 *Year*, 1 *Month* (*Calendar*), 1 *Week, and* 1 *Day* (365 *Day to Year*), *the Decimal Fraction of a Pie for the Day being shown for the Day.*

Per cent.	1 *Day.*	1 *Week.*	1 *Month.*	1 *Year.*
	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
5	0 0 2·630	0 1 6	0 6 8	5 0 0
6	0 0 3·156	0 1 10	0 8 0	6 0 0
7	0 0 3·682	0 2 1	0 9 4	7 0 0
8	0 0 4·208	0 2 5	0 10 8	8 0 0
9	0 0 4·734	0 2 9	0 12 0	9 0 0
10	0 0 5·260	0 3 0	0 13 4	10 0 0
11	0 0 5·786	0 3 4	0 14 8	11 0 0
12	0 0 6·312	0 3 8	1 0 0	12 0 0

Bombay Stamp Duties.

	Rs.	a.
Acknowledgment of Debt ex. Rs. 20 ..	0	1
Affidavit or Declaration	2	0
Agreement or Memo. of Agreement—		
(a) If relating to the sale of a bill of exchange	0	4
(b) If relating to sale of a Government security, or share in an incorporated company or other body corporate—Subject to a maximum of Rs. 20, a. 2 for every Rs. 10,000 or part.		
(c) If not otherwise provided for ..	1	0
Appointment in execution of a power—		
(a) Of trustees	15	0
(b) Of property moveable or immoveable	30	0
Articles of Association of Company—		
(a) Where the company has no share capital or the nominal share capital does not exceed Rs. 2,500.	25	0
(b) Where the nominal share capital exceeds Rs. 2,500 but does not exceed Rs. 1,00,000.	50	0
(c) Where the nominal share capital exceeds Rs. 1,00,000.	100	0
Articles of Clerkship	250	0
Award, any decision in writing by an Arbitrator, other than by an Order of the Court. The same duty as a Bond for the amount or value of the property to which the award relates as set forth in such award subject to a maximum	20	0
Bill of Exchange payable on demand..	0	1
Where payable otherwise than on demand but not more than one year after date or sight (if drawn singly)—Not exc. Rs. 200, a. 3; exc. Rs. 200, not exc. Rs. 400, a. 6; exc. Rs. 400, not exc. Rs. 600, a. 9; exc. Rs. 600, not exc. Rs. 800, a. 12; exc. Rs. 800, not exc. Rs. 1,000, a. 15; exc. Rs. 1,000, not exc. Rs. 1,200, R. 1 a. 2; exc. Rs. 1,200, not exc. Rs. 1,600, R. 1 a. 8; exc. Rs. 1,600, not exc. Rs. 2,500, Rs. 2, a. 4; exc. Rs. 2,500, not exc. Rs. 5,000, Rs. 4 a. 8; exc. Rs. 5,000, not exc. Rs. 7,500, Rs. 6 a. 12; exc. Rs. 7,500, not exc. Rs. 10,000. Rs. 9; exc. Rs. 10,000, not exc. Rs. 15,000, Rs. 13 a. 8; exc. Rs. 15,000, not exc. Rs. 20,000, Rs. 18; exc. Rs. 20,000, not exc. Rs. 25,000, Rs. 22 a. 8; exc. Rs. 25,000, not exc. Rs. 30,000, Rs. 27; and for every add. Rs. 10,000, or part thereof, in excess of Rs. 30,000, Rs. 9.		
Where payable at more than one year after date or sight, same duty as a Bond.		
Bill of Lading	0	8
Bond (not otherwise provided for)—		
Not exc. Rs. 10..	0	2
Exc. Rs. 10, but not exc. Rs. 50 ..	0	4
Exc. Rs. 50, but not exc. Rs. 100 ..	0	8
Exc. Rs. 100 & does not exc. Rs. 200	1	0
Exc. Rs. 200 & does not exc. Rs. 300	2	4
Up to Rs. 1,000, every Rs. 100 or part	0	12
For every Rs. 500 or part, beyond Rs. 1,000	3	12
Bond, Administration, Customs, Security or Mortgage Deed—For amount not exceeding Rs. 1,000, same duty as a Bond.		
In any other case..	10	0
Cancellation	5	0
Certificate or other Document relating to Shares	0	2
Charter Party	2	0
Cheque	0	1
Composition—Deed	20	0
Conveyance, not being a Transfer—		
Not exceeding Rs. 50	0	8
Exceeding Rs. 50, not exceeding Rs. 100	1	0
Exceeding Rs. 100 but does not exceed Rs. 200	2	0
Exceeding Rs. 200 but does not exceed Rs. 300	4	8
For every Rs. 100 or part in excess of Rs. 100 up to Rs. 1,000	1	8
For every Rs. 500, or part thereof, in excess of Rs. 1,000..	7	8
Copy or Extract—If the original was not chargeable with duty, or if duty with which it was chargeable does not exceed 1 Rupee..	1	0
In any other case	2	0
Counterpart or Duplicate—If the duty with which the original instrument is chargeable does not exceed one rupee —The same duty as is payable on the original. In any other case	2	0
Delivery Order	0	1
Entry in any High Court of an Advocate or Vakil 500	0	
In the case of an Attorney 500	0	
Instrument—Apprenticeship 10	0	
Divorce	2	0
Other than Will, recording an adoption or conferring or purporting to confer Authority to adopt	20	0
Lease—Where rent is fixed and no premium is paid, for less than 1 year, same duty as Bond for whole amount; not more than 3 years, same as Bond for average annual rent reserved; over 3 years, same as Conveyance for consideration equal to amount or value of the average annual rent reserved; for indefinite term, same as Conveyance for a consideration equal to the amount or value of the average annual rent which would be paid or delivered for the first ten years if the lease continued so long; in perpetuity, same as Conveyance for consideration equal to one-fifth of rents paid in respect of first 50 years. Where there is premium and no rent, same as Conveyance for amount of premium; premium with		

	Rs.	a.
rent, same as Conveyance or amount of premium in addition to the duty which would have been payable on the lease if no fine or premium or advance had been paid or delivered.		
Letter—Allotment of Shares	0	2
Credit	0	2
License	10	0
Memo. of Association of Company—If accompanied by Articles of Association	30	0
If not so accompanied	80	0
Notarial Act	2	0
Note or Memo. intimating the purchase or sale—		
(*a*) Of any Goods exceeding in value Rs. 20	0	4
(*b*) Of any Stock or marketable Security exceeding in value Rs. 20—Subject to a maximum of Rs. 20, a. 2 for every Rs. 10,000, or part.		
Note of Protest by a Ship's Master ..	1	0
Partnership—Where the capital does not exceed Rs. 500	5	0
In any other case	20	0
Dissolution of	10	0
Policy of Insurance—		
(1) *Sea*—Where premium does not exceed rate of 2a., or ½ per cent. of amount insured	0	1
In any other case for Rs. 1,500 or part thereof	0	1
(2) *For time*—For every Rs. 1,000 or part insured, not exc. 6 months ..	0	2
Exceeding 6 and not exceeding 12 months	0	4
If drawn in duplicate, for each part:—Half the above rates, for Sea and Time.		
(3) *Fire*—When the sum insured does not exceed Rs. 5,000..	0	8
In any other case	1	0
In respect of each receipt for any payment of a premium on any renewal of an original policy—One half of the duty payable in respect of the original policy in addition to the amount, if any, chargeable under Art. 53 (*Receipt*).		
(4) *Accident and Sickness*—Against Railway accident, valid for a single journey only	0	1
In any other case—for the maximum amount which may become payable in the case of any single accident or sickness where such amount does not exceed Rs. 1,000, and also where amount exc. Rs. 1,000, for every Rs. 1,000 or part	0	2
(5) *Life, or other Insurance, not specifically provided for*—		
For every sum insured not exceeding Rs. 250	0	2
For every sum insured exceeding Rs. 250 but not exceeding Rs. 500	0	4
For every sum of Rs. 1,000 in excess of Rs. 500	0	6
If drawn in duplicate, for each part—		
Half the above rates.		
In case of a re-insurance by one Company with another—¼ of duty payable in respect of the original insurance, but not less than 1 anna, or more than 1 R.		
Policies of all classes of Insurance not included in Article 47 of Schedule 1 of Stamp Act of 1899 covering goods Merchandise personal effects, crops and other property against loss or damage, are liable to the same duty as Policies of Fire Insurance.		
Power of Attorney—		
For the sole purpose of procuring the registration of one or more documents in relation to a single transaction or for admitting execution of one or more such documents	1	0
When required in suits or proceedings under the Presidency Small Causes Courts Act, 1882	1	0
Authorising 1 person or more to act in a single transaction other than that mentioned above	2	0
Authorising not more than 5 persons to act jointly and severally in more than 1 transaction, or generally ..	10	0
Authorising more than 5 but not more than 10 persons to act	20	0
When given for consideration and authorising the Attorney to sell any immovable property—The same duty as a *Conveyance* for the amount of the consideration.		
In any other case, for each person authorised	2	0
Promissory Notes—		
(*a*) When payable on demand—		
(i) When the amount or value does not exceed Rs. 250	0	
(ii) When the amount or value exceeds Rs. 250 but does not exceeds Rs. 1,000	0	2
(iii) In any other case	0	4
(*b*) When payable otherwise than on demand—The same duty as a Bill of exchange for the same amount payable otherwise than on demand.		
Protest of Bill or Note	2	0
Protest by the Master of a Ship	2	0
Proxy	0	2
Receipt for value exc. Rs. 20	0	1
Reconveyance of mortgaged property—		
(*a*) If the consideration for which the property was mortgaged does not exceed Rs. 1,000—the same duty as a bond for the amount of such consideration as set forth in the Reconveyance.		
(*b*) In any other case	10	0

	Rs. a.
Release—that is to say, any instrument whereby a person renounces a claim upon another person or against any specified property—	
(*a*) If the amount or value of the claim does not exceed Rs. 1,000—the same duty as a Bond for such amount or value as set forth in the Release.	
(*b*) In any other case	10 0
Respondentia Bond—The same duty as a Bond for the amount of the loan secured.	
Security Bond—(*a*) when the amount secured does not exceed Rs. 1,000—the same duty as a Bond for the amount secured.	
(*b*) In any other case	10 0
Settlement—The same duty as a Bond for the sum equal to the amount or value of the property—settled as set forth in such settlement.	
Revocation of Settlement.—The same duty as a Bond for a sum equal to the amount or value of the property concerned as set forth in the instrument of revocation but not exceeding ten rupees.	
Share-warrant to bearer issued under the Indian Companies Act.—One and a half times the duty payable on a conveyance for a consideration equal to the nominal amount of the shares specified in the warrant.	
Shipping Order	0 1

	Rs. a.
Surrender of Lease—When duty with which lease is chargeable does not exceed Rs. 5:—The duty with which such Lease is chargeable.	
In any other case	5 0
Transfer of Shares—One-half of the duty payable on a Conveyance for a consideration equal to the value of the share.	
Transfer of any Interest secured by a Bond, Mortgage-deed, or Policy of Insurance—If duty on such does not exceed Rs. 5—The duty with which such Bond, &c., is chargeable.	
In any other case	10 0
—Of any property under the Administrator General's Act 1874, Section 31..	10 0
—of any trust property without consideration from one trustee to another trustee or from a trustee to a beneficiary—five rupees or such smaller amount as may be chargeable for transfer of shares.	
Transfer of Lease by way of assignment and not by way of under-lease—The same duty as a conveyance for a consideration equal to the amount of the consideration for the transfer.	
Trust, Declaration of—Same duty as a Bond for a sum equal to the amount or value of the property concerned, but not exceeding	15 0
Revocation of—Ditto, but not exceeding	10 0
Warrant for Goods..	0 8

WIRELESS TELEGRAPHY.

At the commencement of the year there were six coast stations for communication with ships and twelve inland stations together with three stations in the Bay of Bengal, maintained by the Department of Posts and Telegraphs. In the latter part of 1921 and beginning of 1922 the question of bringing the inland stations up to date was re-considered. These stations were built some years ago and are entirely unsuitable to modern telegraphic requirements. It was, therefore, decided that they should be modernised so as to form a high-speed network to supplement the existing land lines. This was termed the "Inland" system. It was further decided that local governments should be permitted to erect groups of small stations to feed and distribute from the Inland system. These are called "Feeder" stations. In addition it was decided to allow private individuals to erect and work sets for business or private purposes under license. Owing to the necessity for curtailing all unproductive expenditure, the end of 1922 saw the definite postponement of the development of the Inland scheme and consequently it is unlikely that any Feeder stations will be erected in the near future.

Progress Delayed:—The Department of Posts and Telegraphs now keeps only the Coast stations fully open. The Inland stations have been placed on a basis which enables their valuable plant to be kept in working order but they perform no services. This together with the closing and dismantling of two or three small or entirely unproductive stations will result in considerable saving, a portion of which it is proposed to use annually to bring the stations up to date. Therefore no improvement in the general radio service will be apparent for some time. In the meanwhile the high-speed service between Rangoon and Madras is nearing completion which should considerably improve the telegraph facilities between these places and prove remunerative. The improvement of existing stations referred to consists in putting in modern radio plant and providing that the stations are operated from the local telegraph offices. If a pair of stations can be so treated each year the main links of the Inland service should be complete in about five years.

Long Distance:—A great deal of valuable experimental work has been carried out and considerable improvement in working, especially as regards long distance reception and the reduction of atmospheric effects has resulted. An experimental service from England was given a good trial during the year and this has now developed into a regular service for a short period each day at 75% of the existing cable rates. From this we should obtain experience which will be most valuable when the Imperial station is being designed.

Very little progress has been made as regards the Indian station for the Imperial scheme, but signs are not wanting that a long delayed decision will shortly be arrived at. The position of India in respect to other radio stations in

the world demands the most efficient station if all the traffic which will be on offer is to be accepted and dealt with on a commercial basis.

Broadcasting:—Proposals to permit Broadcasting by private enterprise have been worked out and are now only awaiting the settlement of some minor details before being formally presented to Government. There is no question that India will offer very great possibilities to a properly organised broadcasting service not only for entertainment and educational purposes but also for business purposes, *i.e.*, broadcasting quotations, business news, etc.

It was intended to proceed with the erection of a Government radio school at Karachi to take the place of the existing temporary and inadequate establishment and to include therein suitable workshops and an experimental establishment. This has been postponed in view of the financial situation and the instruction of Government and private students must perforce be continued in the temporary premises. During the year the school has been fairly well occupied with training students for the Department, Army and also a few from Indian States.

The question of the organisation of State-owned radio sets in the States in India has been considered and will probably be settled this year. In the meanwhile some of the States are purchasing small sets, mostly for telephony.

Private Agency:—A large number of licenses have been granted to private persons in British India for the erection of sets and this form of radio work should steadily develop more especially as the manufacture and scale of apparatus in India by private enterprise is in contemplation. There is no doubt that the majority of parts for small radio sets could be more cheaply manufactured in this country than they can be imported and further such an industry would find the right kind of skilled labour already in India.

Prospects:—Finally, the development of radio by Government has been almost entirely restricted for the reasons given above, but the development by private enterprise has been encouraged and it is to this source that India must look in the immediate future for internal radio communication. There are three most promising lines of development, *viz.*:—

(*a*) Erection of small sets either for speech or morse in districts where no land lines exist, and to link such districts with the existing landlines. In this connection it may be remarked that modern small radio sets are capable of using either morse or speech at will and if used for speech can be operated by the ordinary desk telephone instrument in daily use all over India.

(*b*) Broadcasting.

(*c*) The use of radio as a substitue for landline to form the trunk telephone route between two cities which already have telephone facilities.

All of these will open up a new industry which if properly fostered would very soon extend its sales outsides the limits of India.

In the meanwhile a great deal of work has been done both as regards legislature and general organisation to clear the ground, with the result that Government is in the position to exercise the completest control over radio development while at the same time being able, because of its powers, to foster private enterprise to the fullest possible extent.

Who's Who in India.

ABBOTT, EVELYN ROBINS, C.I.E.(1921), I.C.S. Punjab Commn. *b.* 9 May 1873. *Educ.*: Bath Coll. and Balliol Coll. *m.* Lillian, *d.* of Sir W. O. Clark, Kt. (I.C.S. retd.), Acting Financial Commissioner (Development), Punjab. *Address:* Lahore or Simla.

ABDUL HAMID, KHAN BAHADUR DIWAN, Bar-at-Law. Received Delhi Coronation Durbar Medal (1911), O.B.E. (1918), C.I.E. (1923); Chief Minister (1920), Kapurthala State. *b.* 15 October 1881. *m.* a daughter of Khan Sahib Sheikh Amir-ud-Din, retired Extra Asstt. Commissioner in the Punjab. *Educ.*: Government College, Lahore. A.D.C. to H. H. and Revenue Registrar, 1902; State Magistrate, 1908; Judge, 1909; Supdt. of Census Operations, 1911; Secretary, Tika Sahib's marriage committee; head of the Executive and Revenue Depts. as Mashir Mal.; Fellow of the Punjab University and Member, Punjab Legislative Council; Chief Secretary, March 1915. *Address*: Kapurthala.

ACHARIYAR, P., SIR RAJAGOPALA, K.C.S.I. (1920), C.I.E., President, Madras Legislative Council, 1921. *Educ.*: Madras University. Entered I.C.S., 1888. Diwan of Cochin, 1896-1902; Diwan of Travancore, 1907-14; Secretary to Government of Madras, 1914; Member of Madras Executive Council, 1917. *Address:* Madras.

ADAM, COLIN GURDON, B.A. (Cantab.), C.S.I. (1924), I.C.S., Private Secretary to H. E. the Governor of Bombay. *b.* 1889. *m.* Hon. Irene Lawley, only child of 3rd Baron Wenlock. *Educ.*: Eton. Joined Indian Civil Service, 1912, served in Great War, 1915-18 (Palestine and Mesopotamia). *Address*: Government House, Bombay.

ADVANI, MOTIRAM SHOWKIRAM, Kaiser-i-Hind Gold Medal (1919); District Judge, Nasik. *b.* 12 October 1868. *m.* Margaret Annesley, *d.* of the late Rev. Charles Voysey. *Educ.*: The Albert School and Presidency College, Calcutta. Barrister (Inner Temple), 1892; Practised in Karachi, 1892-1904; Assistant Judge, Hyderabad, 1904; Acted as District Judge, Hyderabad, 1905, Permanent District Judge, 1911. Served in Thana and Surat. District Judge, Broach, 1917-1922. *Address:* Nasik.

AFSUR-UL-MULK, AFSUR-UD-DOWLA, AFSUR JUNG, MIRZA MAHOMED ALI BEG, NAWAB, Lieut.-Col.; K.C.I.E. (1908); C.I.E., (1897); M. V. O. (1906); A.D.C. to Nizam of Hyderabad; Chief Commander, H.E.H. the Nizam's Regular Force, 1916; *b.* Aurangabad (Deccan); *o. s.* of late Mirza Vilayet Ali Beg. *Educ.*: Aurangabad. Rissaldar, Hyderabad Contingent; Commander, Golconda Brigade, since 1885; Hyderabad Imperial Service Troops, since 1893 (both of these he raised); Commander, Regular Troops, since 1897, Chief Commander since 1916, served in the Afghan War, 1879-1880; Black Mountain Expedition, 1888; China Expedition, 1900; received title of Afsur Jung, 1884; and of Afsur Dowla, 1895; raised to Afsur-ul-Mulk, 1903; Hon. Col., 20th Royal Deccan Horse; on Staff, Imperial Service Cavalry Brigade, Indian Expeditionary Force, Egypt, 1915; on Staff, Indian Cavalry Corps and A.D.C. to Sir John French, France, 1915-16. *Address*: Rahut Munzil, Hyderabad (Deccan).

AGA KHAN, AGA SULTAN MAHOMED SHAH, G.C.I.E. (1902); G.C.S.I. (1911); G.C.V.O. (1923); K.C.I.E. (1898); LL.D., Hon. Camb; *b.* 1875; Brilliant Star of Zanzibar, 1900, 1st Class; has many religious followers in East Africa, Central Asia and India; head of Ismaili Mahomedans; granted rank and status of first class chief with salute of 11 guns in recognition of loyal services during European War. *Publication*: India in Transition. *Address*: Aga Hall, Bombay.

AGARWALA, LALA GIRDHARILAL, B.A., Vakil, High Court, Allahabad, and Member, Legis. Assembly. *b.* 1877. *Educ.*: Agra College. Was Director, Moradabad Spinning and Weaving Mills for 10 yrs. and of Barala Cotton Gin and Press Co., Ltd., for 6 years; original member, U.P. Chamber of Commerce; Secry., U.P. Hindu Sabha. *Address:* 33, George Town, Allahabad.

AHMAD, DR. ZIA UDDIN, C.I.E., Principal, M.A.O. Coll., Aligarh. *b.* 1878. *Educ.*: Aligarh, Trin. Coll., Cambridge. (Sir Isaac Newton Scholar) Gottingen (Ph. D.) and Allahabad (D.Sc.), Member of Calcutta University Comnn. Pro-Vice-Chancellor. *Address:* Muslim University, Aligarh.

AHMED, KABEER-UD-IN, M.L.A., Bar-at-Law and Advocate, Calcutta High Court and Landholder. *b.* 1886. *Educ.*: at the Malda Govt. High English School and at Magdalene College, Cambridge. Called to the Bar in 1910; Founder of Bengal Jotedars and Raiyots' Association and its Hon. Secretary: takes great interest in agriculture; was elected Presdt., Bengal Agricultural Confce. in 1917; Director, Darjeeling Himalayan Tea Co., Ltd., Calcutta; Organiser, Founder and President, Indian Seamen's Union, Calcutta; elected member, Bengal Council in 1920; elected member, Legislative Assembly, 1921; Member, Central National Mahomedan Assocn., Calcutta; Member, Governing Body of Indian Nationalistic Society, Calcutta; Member, Democratic Party in Indian Legislature; Vice-Presdt., Anjumani Woizini Bengala. *Publications*: Handbook of Equity, Roman Law, etc. *Address*: 7, Old Post Office Street, Calcutta; Biswanathpur, Kausat P.O. Malda (Bengal).

AIKMAN, DAVID WANN, C.I.E. (1912), Consulting Engineer to the Cawnpore Improvement Trust. *b.* 8 December 1863. *Educ.*: Cooper's hill. *m.* Marion Drummond Stewart. Joined P. W. D., 1885. Retd., 1918. *Publication*: Roorkee treatise on water supply. *Address*: The Shrubbery, Simla, and Civil Lines, Cawnpore.

AINSCOUGH, THOMAS MARTLAND, O.B.E. (1918), M. Com., F.R.G.S. His Majesty's Senior Trade Commissioner in India and Ceylon. *b.* 1886. *m.* Mabel, *d.* of W. Lincolne

of Ely, Cambs. *Educ.*: Manchester Gr. School; Switzerland and Manchester University. In business in China, 1907-12; Spl. Commissioner to the Board of Trade in China, 1914; Sec. Board of Trade Textile Committee, 1916. Sec.; Empire Cotton Growing Committee, 1917, Expert Assist.to Persian Tariff Revision Commission, 1920. *Publication*: "Notes from a Frontier." *Address*: 11, Clive Street, Calcutta.

AIYAR, CHETPAT P. RAMASWAMI, B.A., B.L., C.I.E. (1923); Law Member, Madras Executive Council. *b.* 12 Nov., 1879. *m.* Sitalakshmi, *d.* of C. V. Sundram Shastri and sister of Justice Kumaraswami Sastri. *Educ.*: Wesley College, Presidency College and Law College, Madras. English and Sanskrit University Prizeman, Enrolled as Vakil, 1903 and as Advocate, 1923. For many years member of the Madras Corporation and Standing Committee. Fellow and Syndic of Madras University; Trustee of various educational institutions. Secretary to Congress, 1917-18; connected with the National Congress until 1918. Gave evidence before Joint Parliamentary Committee on Reforms, 1919, also before Meston and Southborough Committees. Member of Committee to draft Regulations for Madras under the Reform Act. Represented Madras Presidency at War Conference, Delhi. Returned to Legislative Council by University of Madras, 1918, and by City of Madras, 1920. Advocate-General, 1920-1923. Member, Executive Council, 1923. *Publications*: various pamphlets and articles on Financial and Literary topics. *Address*: The Grove, Cathedral, Madras and DeLisle, Ootacamund.

AIYAR, T. V. SESHAGIRI, B.A., B.L., Member, Legis. Assembly, retd. High Court Judge, Madras. *b.* 23rd Sept. 1860. *m.* Kalyaniammal. *Educ.*: Trichinopoly and Madras. *Address:* Govardhan, Kilpauk, Madras.

ALI, KHAN BAHADUR MIR ASAD, Merchant, Jagirdar and Member, Legis. Assembly. *b.* August 1879. *m.* to Leakut-Anisa Begum, *d.* of Nawab Ali Yaver Jung, Bahadur of Hyderabad (Deccan). *Educ.*: Nizam Coll., Hyderabad. Hon. Magte., Madras, 1912. Member, Imperial Legis. Council, 1913-20; President Elect., Dist. Political Confce. of Cuddapah, 1916; Presdt. Elect., Dist. Political Confce., Malabar, 1918; Presdt., Provincial Educational Confce., Poona, 1919; Presdt., Madras Presidency Muslim League, 1917-20; Presdt.-elect of All-India Unani Confce., Delhi, 1917; President, Unani-Ayurvedic Confce., Hyderabad, 1922. *Publications:* "Maasharat," Urdu translation of the *Use of Life* by Lord Avebury. *Address*: Cosmopolitan Club, Mount Road, Madras.

ALI, MOHAMED. *b.* December 1878. *Educ.*: Rampur State School; Bareilly High School. M. A. O. Coll., Aligarh; and Lincoln Coll., Oxford. Chief Educational Officer, Rampur (State), (1902-03); H. H. the Gaekwar's Civil Service (1904-1910); Editor and Proprietor of the *Comrade*, weekly English newspaper (Calcutta 1911-12, Delhi 1912-1914) and of the *Hamdard*, Urdu daily newspaper (Delhi 1913-1915); Interned under the Defence of India Act at Mehrauli, Lansdowne, and Chhindwara (1915-19); Confined in Betul (C. P.) Jail (June to December 1919) under Regulation III of 1818; Sentenced to two years' rigorous imprisonment, Nov. 1921; Head of the Indian Khilafat Delegation to Europe (Feb. to Oct. 1920); Founded the All-India Muslim League in 1906; Khuddam-i-Kaaba Society in 1913 and the National Muslim University, Aligarh, 1920. *Publication:* "Thoughts on the Present Discontent" (1908).

ALI, SHAUKAT. *Educ.*: M.A.O. Coll., Aligarh (Capt. Cricket XI). In Govt. Opium Dept. for 15 years. Sec. and Organiser, Aligarh Old Boys' Assoc. Trustee, M.A.O. Coll. Organised collection of funds for Aligarh University. Interned during the war. Prominent leader of the Khilafat movement, 1919-20, and of Non-co-operation movement. Sec., Central Khilafat Committee. Founder and Secretary of Khuddam-i-Kaaba Society; sentenced to two years' rigorous imprisonment, Nov. 1921.

ALLEN, BASIL COPLESTON, B.A. (Oxon.); I.C.S. C.S.I. (1922); Commissioner, Assam. *b.* 12 July 1870. *m.* Mabel, *d.* of Sir William Erskine Ward, K.C.S.I. *Educ.*: Haileybury Coll., and C.C.C. Oxford. Astt. Commr., Assam, 1893, Census Superintendent, 1900; Collr. of Dacca, 1905-1907. Secry. to E.B. and Assam Govt., 1909; Chief Secry., Assam, 1914; Commissioner, 1920. *Publications:* Report on the Census of Assam, 1901: Assam District Gazetteers. *Address:* Gauhati, Assam.

ALWAR, COLONEL H. H. RAJ RAJESHWAR SRI SEWAI MAHARAJ SIR JEY SINGH VEERENDRA SHIROMANI DEV, G.C.I.E. (1919); K.C.I.E. (1911); K.C.S.I. (1909); Maharaj of; Lt.-Col. in British Army, 1915; Col. in 1918. *b.* 1882; *s.* father, 1892. Represented India at the League of Nations, 1923. *Address:* The Palace, Alwar, Rajputana.

ANDERSON, SIR GEORGE, KT. (1924), C.I.E. (1920), M.A. (Oxon.), Director of Public Instruction, Punjab, since 1920. *b.* 15 May 1876; *m.* to Gladys Alice Morony. *Educ.*: Winchester College, University College, Oxford. Transvaal Educational Department, 1902-1910; Indian Educational Service; Professor of History, Elphinstone College, Bombay; Assist. Secretary, Department of Education, Government of India; Secretary, Calcutta University Commission, 1918-19. *Publications:* The Expansion of British India; British Administration in India; Short History of the British Empire. *Address:* Grant Lodge, Simla.

ANDREWS, CHARLES FREER, Professor in the International University of Rabindranath Tagore at Santiniketan, Bengal. *b.* 12 February 1871. *Educ.*: King Edward's School, Birmingham and Pembroke College, Cambridge. Fellow and Lecturer of Pembroke College, Cambridge, 1899. Professor in St. Stephen's College, Delhi, and member of Cambridge University Brotherhood. Fellow and some time member of Syndicate, Punjab University from 1904 to 1913; since that date at Santiniketan, Bengal. *Publications:* "The Renaissance in India"; "Christ and Labour," "The Indian Problem," "Indians in South Africa," "To the Students,"; "The

Drink and Drug Evil." *Address*: Santiniketan, Bolpur, Bengal.

ANKLIKER, Lt.-Col. Amir-ul-Umra Sardar Sir Appajirao Sahib Sitole Deshmukh, Sena Hardoo, Sah-Shri, K. B. E. (1919); C.I.E. (1913); Member of the Gwalior Government in Department of Revenue and Agriculture since 1918. *b.* 1874. *Educ.*: Belgaon. Pte. Secretary to the Maharajah of Gwalior, 1897. *m.* the youngest daughter of the late Maharajah Jijajirao Sahib Scindia of Gwalior. *Address*: Gwalior.

ANNANDALE, (Thomas) Nelson, C.I.E., B.A. (Oxon.), D.Sc. (Edin.), F.L.S.; F.A.S.B., F.R.S.E., corresponding member of the Zoological Society of London, Director of the Zoological Survey of India, 1916; and Honorary Secretary to the Trustees, 1906-16; President, Asiatic Society of Bengal; *e. s.* of late Prof. Thomas Annandale. *Educ.*: Rugby; Edinburgh University; Balliol College, Oxford. *Address*: Indian Museum, Calcutta.

ARCOT, Prince of, Sir Ghulam Mahomed Ali Khan Bahadur, G.C.I.E. (1917); K.C.I.E. (1909). *b.* 22 Feb. 1882; *s.* father, 1903. Premier Mahomedan nobleman of Southern India, being descended from the former Mussulman dynasty of the Nawabs of the Karnatic. *Educ.*: Newington Court of Wards Institution, Madras. Member of Madras Legislative Council, 1901-6; Member of the Imperial Legislative Council (Mahomedan Electorate) of the Madras Presidency 1910-13; Member of the Madras Legislative Council by nomination, 1916; President, All-India Muslim Association, Lahore; President, South India Islamiah League, Madras. *Address*: Amir Mahal, Madras.

ASSAM, Bishop of, since 1915, Rt. Rev. Herbert Pakenham Pakenham-Walsh, D.D. (Dub.); *b.* Dublin, 22 March 1871; 3rd son of late Rt. Rev. William Pakenham Walsh, Bishop of Ossory, and Clara Jane Ridley; *m.* 1916, Clara Ridley, *y. d.* of Rev. Canon F. C. Hayes. *Educ.*: Chard Grammar School; Birkenhead School; Trinity College, Dublin; Deacon, 1896; worked as a member of the Dublin University Brotherhood, Chhota Nagpore, India, 1896-1903; Principal, S. P. C. College, Trichinopoly, 1904-07; Head of the S. P. G. Brotherhood, Trichinopoly, Warden, Bishop Cotton School, Bangalore, 1907-14. *Publications*: St. Francis of Assisi and other poems, Nisbet, Altar and Table (S.P.C.K.) Evolution and Christianity (C.L.S.), Commentary on St. John's Ep. (S.P.C.K.), Daily Services for Schools and Colleges, (Longman's), and Divine Healing (S.P.C.K.). *Address*: Shillong, Assam.

ASTON, Arthur Henry Southcote, M.A. (Oxon.); Acting Additional Judicial Commissioner in Sind. *b.* 4 July 1874; *m.* to Lilian, *d.* of the late Col. A. R. Savile. *Educ*: Harrow School, Balliol College, Oxford. Joined Lincoln's Inn; called to the Bar; read in Chambers with H. Tindal Atkinson; practised as a Barrister, Bombay High Court, 1902; Public Prosecutor in Sind, 1906; Chief Presidency Magistrate, Bombay, 1906; Acting Additional Judicial Commissioner in Sind, 1920-21

Publications: Joint Editor, Starling's Indian Criminal Law (8th Edition); Editor (9th Edition). *Address*: Judicial Commissioner's Bungalow, Karachi.

AYYAR, Tiruchandaran Vaidyanatha Seshagiri, B.A., B.L., Member, Legislative Assembly. *b.* September 1860. *Educ*: at Trichinopoly and Madras. Vakil, High Court, Law Professor, Mem. of Senate for 20 years, Judge, High Court (retired 1920). President of numerous institutions in Madras connected with Social Service; represented Madras Univ. on the local Legislative Council for 5 years before 1913. *Address*: Goverdhan, Kilpauk, Madras.

BABER, Shum Sherr Jang Bahadoor Rana, General of the Nepalese Army, G.B.E.; (Hon. Mil.) *cr.* 1920; K.C.S.I. (Hon.) *cr.* 1919; K.C.I.E. (Hon.) *cr.* 1916; *b.* 27 January 1888; 2nd *s.* of Maharaja Sir Chandra of Nepal; *m.* 1903, Deva Vakta Lakshmi Devi; 2 *s.* 2 *d.* Director-General, Police Forces, Katmandu, since 1903; was present at the Delhi Coronation Durbar, 1903; visited Europe, 1908; was in charge of shooting arrangements during King George's shoot in Nepal Teral, 1911; attached to the Army Headquarters, India (March 1915 to February 1919) as Inspector-General of Nepalese Contingents in India during the Great War (Despatches, specially; thanks of Commanders-in-Chief in India; K.C.S.I., K.C.I.E., for Meritorious Service; received the 1st class Order of the Star of Nepal with the title of Supradipta Manyabara, 1918; the thanks of the Nepalese Government and a Sword of Honour); Waziristan Field Force, 1917 (Despatches; special mention by Commander-in-Chief in India; the Nepalese Military Decoration for bravery; the British War and Victory Medals, at Army Headquarters, India; as Inspector-General of Nepalese Contingent during Afghan War, 1919; (Despatches; G. B. E.; India General Service Medal with Clasp). In memory of his son Bala Shum Shere supplied (1921) Pokhara, a hill-station in Nepal, with pipe drinking water at a cost of over Rs. 1,00,000. *Address*: Singha Durbar and Baber Mahal, Katmandu, Nepal, *via* India.

BAGCHI, Satischandra, B.A., LL.D., Bar-at-Law; Principal, University Law College, Calcutta; *b.* Jan. 1882; *Educ.*: Santipur Municipal School, Calcutta; St. John's College, Cambridge, B.A., Calcutta University, 1901; B.A., LL.B., Cambridge and Dublin; LL.D., Trinity College, Dublin, 1907; Fellow, Calcutta University, 1909; Tagore Professor of Law, 1915: called to Bar, Gray's Inn, 1907. *Address*: Principal's Quarters, Darbhanga Buildings, University Law College, Calcutta.

BAIG, Sir Abbas Ali, K.C.I.E., (1917) C.S.I., B.A., LL.D. *m.* 1st Ayesha, *d.* of Shaikh Mira of Wai (*died*); 2nd 1901, Allia, *d.* of Shaikh Ali Abdulla. *Educ*: Wilson College, Joined Statutory C.S. 1882 as Dy. Educational Inspector, Hindustani Schools, Bombay Presidency; Dewan, Janjira State, March 1886 to March 1890; admitted to the Statutory Civil Service, 1890; Asstt. Coll. and Magte., 1890-92; on special duty in the Junagadh

State, January to April 1893; offd. as 4th Presidency Magte., April 1893; appointed Oriental Translator to Government, June 1893; Reporter on the Native Press; Registrar of Indian Publications; Secretary, Civil and Mil. Examination Boards, 1894-1906; appointed Dewan of Junagadh State, July 1906 to 1910; Talukdari Settlement Officer, July 1906; Member of Council of State for India, June 1910-17; LL.D., Glasgow, 1912; Commissioner of Income-tax, 1915-17; Represented Bombay Univ. at the Congress of Universities of Empire, 1912; on Special Political duty in Egypt in connection with the war, 1914-15; Vice-President, Council of India, 1916-17.

BAJPAI, PANDIT SANKATA PRASADA, Raj Bahadur, B.A., Zemindar and Banker, *b.* Nov. 18, 1887. *m.* Shrimati Sumitra Devi. *Educ.* Canning College, Lucknow, Ewing Christian College, Allahabad and University School of Law, Allahabad. Elected Member Benares Hindu University in 1917; Elected Hon. Secy., Kheri Dist. Board, 1918; Appointed Hon. Magistrate, 1918; Elected Chairman, Lakhimpur Municipality, 1919, and Member of the Imperial Legislative Assembly 1920. *Address:* Lakhimpore, Kheri (Oudh).

BAKER, CHARLES MAURICE, B.A. (Oxon.), I.C.S., Member, Council of State (1920); *b.* 3 March 1872. *m.* Mabel *d.* of Maj.-Genl. Edmeades of Newstead Court, Kent. *Educ.:* Tonbridge School, Trinty Coll., Oxford. *Address:* The Secretariat, Bombay.

BALRAMPUR, MAHARAJA PATESHWARI PRASAD SINGH SAHEB, minor under guardianship of the Court of Wards, United Provinces. *Address:* Balrampur.

BANATVALA, COL. SIR HORMASJEE EDULJEE, C.S.I., 1917; I.M.S. (retd.) *b.* 20 Oct. 1859 First Commission, 1884; military duty until 1893; served Burma, 1886-89; Lushai Expedition, 1891-92. *Address:* Mount Villas, Bandra, Bombay.

BANERJEE, SIR SURENDRANATH, KT. (1921); *b.* 10 November 1848; *m.* 1867. *Educ.:* Doveton College, Calcutta; University College, London. Entered I. C. S, 1871; left the service 1874; Professor of English Literature, Metropolitan Institution of Calcutta, 1875; founded Indian Association, 1876; founded Ripon College, Calcutta, 1882; was twice President of the Indian National Congress; Presdt. of the first Moderate Confce. held in Bombay, 1919; for eight successive years a Member of the Bengal Legislative Council; again elected 1913; Member of the Imperial Legislative Council, 1913. For many years Editor of the "Bengalee" Minister (for Local Self-Government) in the Govt. of Bengal, 1921-23. *Address:* The Secretariat, Calcutta.

BANERJEE, MAHENDRANATH, C.I.E. (1921) B.A. (Cal.), M.R.C.S. (England), L.S.A. (London), Princ. Carmichael Medical Coll., Calcutta, since 1916, *b.* Sept. 1856, *Educ.:* Presy. Coll., St. Xavier's Coll. and Medical Coll., Calcutta Edinburgh Univ., and King's Coll. London Resident Medical Officer, R. Free Hospital, London, 1883-85; Lecturer of Medicine, Calcutta Med. Sch., 1890-1915; Additional member, Imp. Leg. Council, 1916; Senior Physician, Albert Victor Hospital, 1900-19; Consulting Physician since 1919. Member of the State Med., Faculty of Bengal; Fellow and Member of Senate of Calcutta Univ.; Member of Sanitary Conference, Simla, 1919; President, Ayurvedic Committee lately appointed by Government of Bengal. *Address:* 32, Theatre Road, Calcutta.

BANERJI, ALBION RAJKUMAR, I.C.S., C.S.I., (1921), C.I.E., 1912, Dewan of Mysore (1922) *b.* Bristol, 10 Oct. 1871. *m.* 1898. *d.* of Sir Krishna Gupta. *Educ.:* Calcutta University, Balliol College, Oxford; M.A., 1892. Entered I.C.S., 1895; served as district officer in the Madras Presidency; Diwan to H. H. the Maharaja of Cochin, 1907-14; reverted to British service, 1915; Collector and District Magistrate, Cuddapah; services placed at the disposal of Government of India, Foreign Department, for employment as Member of the Executive Council of H.H. the Maharaja of Mysore, March 1916. Officiating Dewan of Mysore, 1919. *Address:* "Ballabrooie," High Ground, Bangalore.

BAPTISTA, JOSEPH, BAR-AT-LAW; *b.* 17 March, 1864. *Educ.:* St. Mary's School, Bombay; Coll. of Science, Poona: Cambridge University. L.C.E. (Bom.), B.A. and LL.B. (Cantab.): has taken a prominent part in the Indian labour movement. *Publication:* Lectures on Roman Law, Government Law School, Bombay. *Address:* Matharpacady, Bombay.

BARIA, CAPTAIN (HON.) HIS HIGHNESS MAHARWAL SHRI SIR RANGITSINHJI, RAJA OF; K.C.S.I. (1922); *b.* 10 July 1886; two *s.* one *d. Educ.*: Rajkumar College, Rajkot; Imperial Cadet Corps, Dehra Dun, and in England. Served in European War, 1914-15 and in the Afghan War, 1919. Boy Scouts Commissioner for Northern Division, Bombay Presidency: *Address:* Devgad Baria, *via* Piplod (B. B. & C. I. Ry.), Bombay.

BARNARDO, LT.-COL. FREDERICK ADOLPHUS FLEMING, M.A., B.Sc., M.B., 1899; F.R.C.S., M.R.C.P. (Edin.); C.B.E. (1919); C.I.E., Civil Surgeon, Simla. *b.* June 4, 1874; *m.* to Violet Kathleen Ann, 2nd daughter of the late Henry Teviot-Kerr, seventh son of the late Rev. Lord Henry Frances Teviot-Kerr; *Educ.:* Edinburgh University. Served with the Fife and Forfar Light Horse Imperial Yeomanry in South Africa, 1899-1902; entered Indian Medical Service, 1902: Somaliland Campaign, 1903-04: Asst. Director of Medical Services, Embarkation Staff, Bombay, during the Great War. *Publications:* Many contributions to Medical publications, and the following monographs:—Surgical Shock Intestinal Stasta. The causation of the Onset of Labour, etc. *Address:* Simla.

BARNES, HERBERT CHARLES, C.I.E. (1919) Indian Civil Service. *b.* 30 May 1870. *Educ.:* Westminster School, Christ Church, Oxford, M.A. *Address:* Gauhati, Assam.

BARODA, H.H. MAHARAJA GAEKWAR SIR SAYAJI RAO III., G.C.S.I. (1881); G.C.I.E. (1919); *b.* 10 March, 1863; *m.* 1st., 1881, Chimna-

bai Maharani: 2nd, 1885, Chimnabai Maharani II., C.I.; two *s.* one *d. Educ.:* Maharaja's School, Baroda. Succeeded, 1875. Invested with powers, 1881, *Publications.* "Famine Notes" and "From Caesar to Sultan." *Address:* Baroda.

BARRON, CLAUD ALEXANDER, C.S.I. (1921); C.I.E. (1911); C.V.O. (1922); F.R.G.S., Chief Commissioner, Delhi, since 1918; *b.* 22 December, 1871; *s.* of Col. W. Barron, B.S.C.; *m.* 1912, Ida Mary, *e. d.* of Major-General Sir R. H. Ewart, K.C.M.G., C.B., one *s. Educ.:* Grammar School and University, Aberdeen; Clare College, Cambridge. Entered I.C.S., 1890; Chief Secretary, Punjab Government, 1912-16. *Address* Delhi.

BARROW, Lieut-General Sir George de Symons, K.C.B., cr. 1919; K.C.M.G., cr. 1918; C.B., 1915, A.G. in India (1922). *b.* 25 October 1864. *m.* 1902, Sybilla, *d.* of late Colonel G. Way, C.B. Entered Army, Connaught Rangers, 1884; Indian Staff Corps, 1886; D.A.Q.M.G., India, 1903; D.A.A.G., Staff College, 1908; General Staff Officer, 1914; served Waziristan, 1894-5; China, 1900 (medal with clasp); European War, 1914-18 (despatches C. B., promoted Maj.-General), including capture of Jerusalem (K.C.M.G., K.C.B.); Commander Legion of Honour 1917. Order of the Nile, 1918. Afghan War 1919. G.O.C., Peshawar Dist. until 1922. *Address:* Army Headquarters, Simla.

BARTHE, RT. REV. JEAN MARIE; Bishop of Paralais since 1914; *b.* Lesignan, Tarbes, 1849. *Educ.:* St. Pe. Seminary. Bishop of Trichinopoly, 1890-1914. *Address:* Shembaganur, Madras Presidency.

BARUA, RAI BAHADUR DEVICHARAN, B.A., B.L., M.L.A., Tea Planter. *b.* 1864. *Educ.:* City College, Presidency College and the General Assembly's Institution, Calcutta. Joined the Bar in 1888 and taking to tea plantation and having acquired 3 tea gardens at Jorhat retired from the Bar in 1917; Secretary, Jorhat Sarvajanik Sabha for nearly 17 years since 1890; Elected member of the Indian Legislative Assembly, 1921; Hon. Magistrate, Jorhat Bench. *Address:* Jorhat, Assam.

BEACHCROFT, HON. MR. JUSTICE CHARLES PORTEN; Puisne Judge, High Court, Calcutta, since 1915; *b.* 13 March 1871; 4th son of late Francis Porten Beachcroft, Bengal Civil Service; *m.* Elizabeth, *d.* of late A. E. Ryles. *Educ.:* Rugby; Clare College, Cambridge. Passed Indian Civil Service, 1890; Assistant Magistrate and Collector, Bengal, 1892; Officiating District and Sessions Judge, 1900; District and Sessions Judge, 1906; Officiating Judge, High Court, Calcutta, 1912. *Address:* 4, Little Russell Street, Calcutta.

BEADON, LT.-COL. HENRY CECIL, C.I.E. (1919), Chief Commissioner, Andaman and Nicobar Islands. *b.* 28 November 1869; *m.* 1st Marion A. 2nd Dorothy A. *d.* of H.E. Brown of Barton Hall, S. Devon. *Educ:* Cheltenham, Military employ, 1890-95, since when in Civil employ. *Address:* Port Blair, Andamans.

BEDI RAJA SIR BABA GURBUKSH SINGH, KT., *cr.* 1916; K.B.E. (1920); C.I.E., 1911; Hon. Extra Asst. Commissioner in the Punjab. *b* 1861; A Fellow of the Punjab and Hindu Universities; was a delegate to the Indo-Afghan Peace Conference in 1919. *Address:* Kallar, Punjab.

BEER BIKRAM SINGH, RAJKUMAR, HON LT.-COL., C.I.E.; A. D. C. to the Viceroy, 1906; Officer Commanding Sirmour Imperial Service Sappers and Miners; also attached to 1st P.W.O. Sappers and Miners. Served in the Tirah Expedition, 1897-98. *Address:* Sirmour State, Punjab.

BELL, SIR NICHOLAS DODD BEATSON, K.C.S.I. (1921); K.C.I.E. (1919); C.I.E. (1915); *b.* 19 June 1867. *Educ.:* Edinburgh Academy and Balliol College, Oxford. *m.* Jeannie Arbuthnott, daughter of John Campbell Arbuthnott, C.I.E. (I.C.S., Assam). Entered the I.C.S. and served in Bengal, E. Bengal and Assam, and Assam. *Address:* Shillong.

BELL, ROBERT DUNCAN, C.I.E. (1919); Director of Industries, Bombay Presidency; *b.* 8 May 1878. *Educ.:* Heriot's School, Edinburgh, and Edinburgh University, *m.* Jessie, *d.* of D. Spence, Esq. Appointed I.C.S., Bombay, 1902. Secretary, Indian Industrial Commission, 1916-17, Controller, Industrial Intelligence, 1917-18; Controller, Oils and Paints, 1918-19. *Address:* C/o. Grindlay & Co., Bombay.

BENARES, H. H. SIR PRABHU NARAYAN SINGH, MAHARAJA BAHADUR OF, LT.-COL.; G.C.I.E. (1898), G.C.S.I. (1921); *b.* 26 November 1855. *S.* uncle 1889. *Address:* Ramnagar, Benares State.

BENJAMIN, Ven. T. Kuruvilla, B.A., Archdeacon of Kottayam since 1922. Formerly Incumbent of Pro-Cathedral, Kottayam, 1895-1922; Acting Principal, C.M.I., Kottayam, 1912-13. Surrogate, 1922. *Publications:* (in Malayalam) Notes on the Epistles to the Hebrews; Notes on the Epistles to the Thessalonians; Devotional Study of the Bible. Editor of Treasury of Knowledge Family Friend. *Address:* Kottayam.

BENZIGER, RT. REV. ALOYSIUS MARY, O.C.D., Bishop of Quilon since 1905; *b.* Einsoedeln, Switzerland, 1864. *Educ.:* Frankfort; Brussels; Downside. Came to India, 1890; Bishop of Tabar, 1900; *Address:* Bishop's House, Quilon, Travancore.

BESANT, ANNIE; President, Theosophical Society and of National Home Rule League, author and lecturer on religious, philosophical, political, and scientific subjects; *b.* 1 October 1847; *d.* of William Page Wood and Emily, *d.* of James Morris; *m.* 1867, Rev. Frank Besant (*d.* 1917), Vicar of Sibsey, Lincolnshire; legally separated from him, 1873; one *s.* one *d. Educ.:* privately in England, Germany, France; Joined the National Secular Society, 1874; worked in the Free Thought and Radical Movements led by Charles Bradlaugh, M.P.; was co-editor with him of the National Reformer, Member of the Fabian Society, Member of the London School Board, 1887-90; Joined the Theosophical Society in 1889; became a pupil of Mme. Blavatsky; elected its President in 1907, 1914 and 1921. Founded 1898 the Central Hindu College at

Benares; 1904, the Central Hindu Girls' School Benares; is on Court Council and Senate of Benares Hindu Univ., and on Council and Senate of the National University; given Hon. D. L., Benares Hindu University, 1921. in recognition of unique services; Elected President of the Indian National Congress, 1917-18: Editor of *The Theosophist*, monthly; *The Adyar Bulletin*, monthly and Editor of *New India*, daily and weekly. *Address:* Adyar, Madras.

BHABHA, HORMASJI JEHANGIR, M.A., J.P., and Hon. Pres. Magte., Director of Tata Hydro-Electric Power Supply Co. and Tata Publicity Company; Member of Council of the Indian Institute of Science, Bangalore. Member of Committee of David Sassoon Reformatory Institution, Fellow of the Bombay, Madras and Mysore Universities. *b.* 27 June 1852. *Educ.:* Elphinstone College and in England, Senr. Fellow, Elphinstone College, 1874-76; Vice-Principal and Professor of Logic and Ethics, Central College, Bangalore, 1876; Principal, Maharaja's College, Mysore, 1884; Education Secretary to Government, Mysore, 1890; Inspector-General, Education, Mysore, 1895-1909, Munir-ul-Talim (Mysore) 1909. *Publications:* Special Report on Manual Training in Schools of General Education; Panchayat Committee's report on the education of Parsi boys, 1920. *Address:* 31, Pedder Road, Bombay.

BHAGWATI PRASAD SINGH, MAHARAJA Sir, OF BALARAMPUR, K.C.I.E., Cr. 1906; S. 1896. *Address:* Gonda, Oudh, India.

BHANDARI, SIR GOPAL DAS, KT., RAI BAHADUR (1907); Kaiser-i-Hind Gold Medal (1915); M.B.E. (1919); C.I.E. (1921); Advocate, High Court; *b.* June 1859. *Educ.:* Government College, Lahore; Elected Member, Amritsar Municipal Committee, 1889-1902. Nominated member, 1902, to the present date. Chairman, Finance Committee, four years. First non-official President, Municipal Com., elected March 1921; elected second time June 1922. Member, Sanitary Board, Punjab, 11 years; Member, All-India Sanitary Conferences, Punjab, Madras, and Lucknow. Special Commr. twice; Lahore Conspiracy cases, 1916-17. Member, Imperial Police Selection Board, October 1922. President, Hindu Sabha, Amritsar; His Majesty's Guest Delhi Durbar, 1911; Member, Executive Committee, D.A.V. College, Lahore; Chairman Board of Directors, Punjab, National Bank; Member and Punjab representative, Imperial Malaria Conference, September 1908. *Publications:* Malaria, booklet, 1908; Town-planning; Milk; Sanitary Conditions in boys' and girls' schools in India, etc., *Address:* President, Municipal Committee, Amritsar.

BHANDARKAR, SIR RAMKRISHNA GOPAL, K.C.I.E. (1911); C.I.E. (1889); M.A., Hon. LL.D., Bombay and Edinburgh; Hon. Ph. D., Calcutta; Professor of Oriental Languages, Deccan College, Poona, 1882-93; *b.* 1837; *m.* two *s.* one *d. Educ.:* Ratnagiri Government English School; Elphinstone College, Bombay, 1847-58. Headmaster of High Schools, 1864-68; Professor of Sanskrit, Elphinstone College, Bombay, 1869-1881; Fellow, and for two years Vice-Chancellor of Bombay University; Fellow of Calcutta University. Nominated to membership of Viceroy's Legislative Council in connection with Lord Curzon's Educational Reforms, 1903; Member of Bombay Legislative Council, 1904-08; a leader of Hindu social and religious reform movements; Dakshina Fellow, 1859-64. *Publications:* First and Second Books of Sanskrit; Early History of the Deccan Sanskrit and the Derived Languages; article on Vaishnavism, Saivism and minor religious systems, in the Encyclopaedia of Indo-Aryan Research; edited Bhavabhuti's Malati-Madhava and has written six reports on Sanskrit MSS., philological and antiquarian articles and essays in the transactions of learned societies. *Address:* Poona.

BHARATPUR, MAHARAJA OF, Lt.Col. H.H. SRI MAHARAJA BRIJENDRA SAWAI KISHEN SINGH BAHADUR, BAHADUR JUNG, *b.* 4 October 1899. *s.* of Maharaja Ram Singh; *m.* sis. of H. H. the Raja of Faridkot. *Educ.:* Mayo College, Ajmer and Wellington. *Address:* Bharatpur, Rajputana.

BHARGAVA, RAI BAHADUR PANDIT JAWAHAR LAL, B.A., LL.B., Vakil, High Court, Lahore, and Member, Legis. Assembly. *b.* 1st Oct. 1870. *m. d.* of L. Madan Lal Bhargava of Rewari. *Educ.:* Sirsa M. B. School, Rewari M. B. School, Lahore Mission Coll., Lahore. Government Coll. and Law School. Vice-Predt., Hissari Municipal Committee; got Durbar Medal and War Loan Sanad; acted as Secretary, India War Relief Fund, The Aeroplane Fleet Fund, King Edward Memorial Fund; was elected member, Punjab Legislative Council, 1916-20; Life member, St. John Ambulance Association and Chairman, District Centre at Hissar. *Address:* Hissar (Punjab).

BHAVNAGAR, H. H. MAHARAJA KRISHNA KUMAR SINHJI, MAHARAJA OF; *b.* 19th May 1912, *s.* father Lt.-Col. H. H. Maharaja Sir Bhavsinhji Takhtasinhji, K.C.S.I., July 1919. *Educ.:* Rajkumar College, Rajkot. *Address:* Bhavnagar, Kathiawar.

BHOPAL, H.H. NAWAB SULTAN JEHAN BEGUM, BEGUM OF C.I., *cr.* 1911; G.C.S.I., *cr.* 1910, G.C.I.E., *cr.* 1904, G.B.E., *cr.* 1918, *b.* 9 July 1858; *s.* mother, H. H. Nawab Shah Jehan Begum, G.C.S.I., C.I., 1901; *m.* 1874, Ahmed Ali Khan, three *s.* Eighth in lineal descent from the famous Dost Mahomed Khan, founder of the dynasty. *Address:* Bhopal, Central India.

BHURGRI, THE HON. MR. GHULAM MAHOMED KHAN, ex-Member of the Council of State. *b.* 1881. *Educ.:* M.A.O. Coll., Aligarh. Bar-at-law, Lincoln's Inn. Zemindar. President, 15th Session, All-India Muslim League at Lucknow, 31st March 1923. *Address:* Hyderabad, Sind.

BIKANER, MAHARAJAH OF, MAJOR-GENERAL H. H. MAHARAJAH DHIRAJ RAJ RAJESHWAR NARENDRA SHIROMANI SRI SIR GANGA SINGHJI BAHADUR, G.C.S.I., *cr.* 1911; G.C.I.E., *cr.* 1907; K.C.S.I., *cr.* 1904; K.C.I.E., *cr.* 1901; G.C.V.O., *cr.* 1919, G.B.E. (Military Division), 1921; K.C.B., *cr* 1918; A.-D.-C.; Grand Cordon

of the Order of the Nile, *cr.* 1918; Hon. LL.D., Cambridge and Edinburgh; Donat of the Order of St. John of Jerusalem in England; son of Maharaj Sri Lall Singhji Bahadur and adopted son of his own elder brother His late Highness Maharajah Sri Dungar Singhji Bahadur born 3 October 1880; educated at the Mayo College, Ajmer, *m.* 1897; is one of the Ruling Princes of India (succeeded 31st August 1887) and is entitled to a salute of 19 guns. Two sons. One daughter. Invested with full ruling powers, 1898, granted Hon. Commission of Major in the British Army, 1900, and attached to 2nd Bengal Lancers; promoted Lt.-Col., 1909; Col., 1910; Major-General, 1917; served with British Army in China in command of Bikaner Camel Corps, 1901, (medal, despatches, K.C.I.E.); served European War, 1914-15 in France and in Egypt (despatches France and Egypt, K.C.B.), Major-General, 1914 Bronze Star Grand Cordon of the Order of the Nile G.B.E. (Military Division). Awarded gold medal (1st Class) of Kaiser-i-Hind for public service in India during Great Famine of 1899-1900; attended the Coronation of King Edward VII, 1902, and of King George V, 1911; Hon. A.-D.-C. to H. R. H. the Prince of Wales, 1902; A.-D.-C. to H. I. M. the King Emperor since 1910. Was selected as one of the three Representatives of India at the Imperial War Cabinet and Conference, 1917. Received the Freedom of the Cities of London, Edinburgh, Manchester and Bristol. Was selected again as one of the two Representatives of India at the Imperial War Cabinet and the Peace Conference, 1919. Elected Chancellor of the Chamber of Princes, 1921, and re-elected in 1922. Is a Patron of the Benares Hindu University and Sri Bharat Dharm Mahamandal, Benares, a Vice-President of the East India Association, London; the Royal Colonial Institute, London, the Indian Gymkhana Club, London; the Indian Army Temperance Association, Simla; a member of the General Council of the Mayo College, Ajmer, and of the Managing Committee, Mayo College; General Council, Daly Coll., Indore; the first Member of the Indian Red Cross Society; the Benares Hindu University Court. Is a Freemason, Past Master of Lodge "Rajputana," Abu; a past Dy. Dist. Grand Master of the Dist. Grand Lodge, Bombay; Founder and Scribe E of the Royal Arch Chapter "Sir Ganga Singh," Abu; holds the rank of the Past District Grand Scribe Nehemiah in the Dist. Grand Chapter of Bombay; Mem. of Royal Arch Chapter, Ajmer and the Phulkian Lodge, Patiala. *Heir-Apparent:* Captain Maharaj Kumar Sri Sadul Singhji Bahadur, C.V.O., *b.* 7 September 1902, second son Maharaj Sri Bijey Singhji Bahadur, *b.* 29 March 1909. *Address:* Bikaner, Rajputana.

BILGRAMI, SYED HOSSAIN, NAWAB, IMADUL MULK, BAHADUR, C.S.I., 1908; *b.* Gya, 18 October 1842; *s.* of Syed Zainuddin Hossain Khan Bahadur of the Uncovenanted Civil Service, Bengal; *m.* 1st, 1864, wife died 1897; *m.* 2nd, Edith Boardman, I.S.A. (Lond.), M.D.; four *s.* one *d. Educ.:* Presidency College, Calcutta. Professor of Arabic, Canning College, Lucknow, 1866-73; Private Secretary to H. E. Sir Salar Jung till his death; Private Secretary to H. H. the Nizam; Director of Public Instruction of H. H. the Nizam's Dominions; Member of the Legislative Council, Member of the Universities Commission, 1901-2; retired 1907; Member of Council of Secretary of State for India, 1907-09; *Publications:* Life of Sir Salar Jung; Lectures and addresses; (in collaboration) Historical and Descriptive Sketch of His Highness the Nizam's Dominions, 2 vols. *Address:* "Rocklands," Saifabad, Hyderabad Deccan.

BILIMORIA, ARDASHIR JAMSETJEE, B.A., J.P., *b.* 18 September 1864. *Educ.:* Chandanwady High School and Elphinstone College, Bombay. Joined Messrs. Tata, in 1884. *Address:* Tata Ltd., London.

BINNING, SIR ARTHUR WILLIAM, KT. (1916), Merchant in Rangoon; *b.* 5 August 1861; *s.* of Robert Binning, Glasgow; unmarried. *Educ:* Glasgow Academy. *Address:* Rangoon, Burma.

BIRDWOOD, GENERAL SIR WILLIAM RIDDELL, G.C.B., 1923; 1st Bt., *cr.* 1919; G.C.M.G., *cr.* 1919; K.C.B., *cr.* 1917; K.C.S.I., *cr.* 1915; K.C.M.G., *cr.* 1914; C.B., 1911; A.D.C. General; C.I.E., 1908; D.S.O., 1908, General Officer Commanding in Chief, Northern Command, since November 1920, *b.* 13 Sept. 1865; *e.* surv. *s.* of late H. M. Birdwood, C.S.I., M.A., LL.D. (Cantab), late Judge of High Court and Member of Council, Bombay; I.C.S.; *m.* 1894, Jeannette Hope Gonville, *e.d.* of Col. Sir B. P. Bromhead, C.B., 4th Bart., of Thurlby Hall, Lincoln. *Educ.:* Clifton College; R.M.C. Sandhurst. Lieut., 4th Batt. Royal Scots Fusiliers, 1883; 12th Lancers, 1885; 11th Bengal Lancers, 1886; Gen., 1917; Adjutant, Viceroy's Bodyguard, 1893; Brig. Major, S. Africa, 1899; D.A.A.G., S. Africa, 1900; Military Secretary to Com.-in-Chief, S. Africa (Lord Kitchener), 1902; A.M.S. and Interpreter to Com.-in-Chief, India, 1902; A.A.G. Headquarters, India, 1904; Military Secretary to Com.-in-Chief, India, 1905; Brigade Commander, 1909; Quarter-Master-General in India, 1912; Secry. to Govt. of India, Army Deptt. and Member of Governor General's Legislative Council, 1912-14; G.O.C. Australian Imperial Force, 1915-20; A.D.C. to the King, 1906-11; A.D.C. General to the King, 1917; served Hazara, 1891 (medal with clasp); Isazai, 1892; N.-W. Frontier, India, 1897-98 (medal, two clasps); Tirah, 1897-98 (despatches, clasp); S. Africa, 1899-1902 (severely wounded), despatches 5 times, brevets of Major and Lieut.-Col., Queen's Medal, 6 clasps, King's medal, two clasps; Chief Staff Officer, Mohmand Expedition, 1908 (despatches, medal and clasp, D. S. O.); served in command of detached landing of Australian and New Zealand Army Corps above Gaba, Tepe, European War, 1914-18 (wounded, despatches, Commander-in-Chief, Mediterranean Expeditionary Force and Commander, Dardanelles Army, 1915-16; Commandant, Australian and New Zealand Army Corps and Australian Forces, France, 1916-18; G.C.M.G.; Grand Officer of the Legion of Honour, Croix de Guerre; Grand

Officer of the Crown, Belgium; Croix de Guerre, Belgium); commanded 5th Army, France, 1918-19; Colonel, 12th Lancers, 1920; General, Commonwealth of Australia Military Forces, 1920; LL.D., Cambridge, 1919; LL.D., Melbourne (Victoria) and Sydney (N.S.W.), 1920; Fellow, Royal Colonial Institute, *Heir:* Captain Christopher Bromhead Birdwood, 11th P. W. O. Lancers. *Address:* Rawalpindi.

BIRLEY, LEONARD, C.I.E., 1914; Magistrate and Collector, Chittagong, 1922; *b.* 30 May 1875; *s.* of late Arthur Birley; *m.* 1908, Jessie Craig, *d.* of late Maxwell Smith, Hursingpur, Tirhoot, India; one *s.* one *d. Educ.:* Uppingham; New College, Oxford. Entered I.C.S., 1897; Joint Magistrate and Deputy Collector, 1907; Revenue Secretary to Govt. of Bengal from 1915-1918. Magistrate and Collector, 1911. *Club:* United Service, Calcutta.

BLACKETT, SIR BASIL PHILLOTT, K.C.B., *cr.* 1921; C.B., 1915; Finance Member, Government of India, Nov. 1922. *b.* 1882; *s.* of late Rev. William Russell Blackett, M.A., Vicar of Holy Trinity Church, Nottingham, 1885-91; *m.* 1920, Beatrice, *d.* of late Edward H. Bonner, New York. *Educ.:* Marlborough; University College, Oxford. M.A., 1st Class Litt. Hum., 1904; entered Treasury, 1904; Secretary to Indian Finance and Currency Commission, 1913-14, and to Capital Issues Committee, 1915; went on special mission to U.S.A. Government, October 1914, in connection with exchange problems arising out of the war; Member of Anglo-French Financial Mission to U.S.A. which raised the Anglo-French Loan of 500,000,000 dollars, October 1915; Member of National War Savings Committee, 1916; Representative of British Treasury, in U.S.A., 1917-19; Controller of Finance Treasury, 1919-1922. Commander of the Order of the Crown of Italy, Officer of the Legion of Honour. *Address:* Delhi and Simla.

BLAIR, ANDREW JAMES FRASER, "Statesman" Editorial staff, Calcutta; Founded the Eastern Bureau, Limited, Calcutta, 1912; late Editor and Managing Director, The Empire, Commerce, The Empire Gazette, (daily and weekly newspapers published in Calcutta); *b.* Dingwall, Ross-shire, 30 September, 1872; *y. s.* of late Andrew Blair, Rector, Dingwall Burgh School, and Mary Ann Campbell, *d.* of late Thomas Duff, Glasgow; *m.* 1900, Constance, *e. d.* of Thomas Ibbotson; one *s.* one *d. Educ.:* Glasgow High School. Engaged in journalism, since 1890. *Address:* Bengal Club, Calcutta.

BLAKEWAY, THE HON. LT., COLONEL SIR DENY BROOKE, KT. (1924), C.I.E., 1908; Agent to the Governor General in Central India; *b.* 29th May 1870; *m.* 1910 Evelyn, O. B. E., 1915, 2nd *d.* of Rev. Alfred Henry Glennie, Rector of Levant, Chichester, Joined King's Liverpool Regt., 1888; I.S.C., 1890; Captain, Indian Army, 1899; Major, 1906; Lieut.-Col., 1914; Joined Punjab Commission, 1894; Foreign Department, 1906; served Isazai Expedition, 1892; on political duty Samana Operations, 1897; with Tirah expedition including operations against Khani Khel Chamkhannis and Bazaar Valley Operations, 1897-98; Chief Political Officer, Mohamand Expedition, 1908; N.-W. Frontier Operations, 1915; held appointments of Deputy Commissioner at Kohat, Bannu and Peshawar; Secretary to Local Administration 1912; Revenue Commissioner, N.-W. F. Province, 1915; Resident at Baroda, 1920. *Address:* The Residency, Indore, Central India.

BLENKINSOP, EDWARD ROBERT KAYE, C.I.E. (1911); Settlement Commissioner. Jaipur, 1923, *b.* 15 May 1871; *s.* of Col. Blenkinsop; *m.* Florence Edith, *d.* of late Sir Stanley Ismay, K.C.S.I., three *s. Educ.:* St. Paul's School; Christ's College, Cambridge. Entered I.C.S., 1890; Settlement Officer, 1897; Deputy Commissioner, 1902; Kaiser-i-Hind Medal, 1903; Commissioner of Excise, 1906; Chief Secretary to Chief Commissioner, 1912-13. Commissioner, 1916. *Address:* Jaipur, Rajputana.

BLOWERS, ARTHUR R. (Holloway, London; 1886) Commissioner Territorial Commander in the Salvation Army, Southern India. Was a Field Officer in Great Britain, and in India has held Secretarial and Divisional appointments. Has also been Chief Secretary in two Territories and Territorial Commander of three others. His last appointment was that of Secretary for India and Ceylon. *m.* Staff Captain Tomlinson, 1896. *Address:* Broadway, George Town, Madras.

BOMBAY, BISHOP OF, since 1908; RT. REV. EDWIN JAMES PALMER: *o. s.* of late Archdeacon Palmer of Oxford, and *nephew* of 1st Lord Selborne; *m.* 1912, Hazel, *y. d.* of Col. E. H. Hanning-Lee, Bighton Manor, Alresford. *Educ.:* Winchester and Balliol Coll., Oxford. Ordained, 1896; Fellow, Balliol College, 1891; Tutor, 1893; Chaplain, 1896; Examining Chaplain to Bishop of Southwell, 1899-1904; to Bishop of Rochester, 1904-05; to Bishop of Southwark, 1905-08. *Publication:* The Great Church Awakes (Longmans, Green & Co.). *Address:* Bishop's Lodge, Malabar Hill, Bombay.

BOSE, SIR BIPIN KRISHNA, K.C.I.E. (1920); Kt. *cr.* 1907; C.I.E., 1898; M. A.; Advocate in the Central Provinces, Vice-Chancellor, Nagpur University. *b.* 1851. *Address:* Nagpur, C. P.

BOSE, SIR JAGADIS CHANDRA, Kt. *cr.* 1917; C.I.E., 1903; C.S.I., 1911; M.A. (Cantab.), D. Sc. (Lond.); LL.D., F.R.S., Professor Emeritus of the Presidency College, Calcutta; Founder Director of Bose Research Institute, *b.* 30 Nov. 1858; *Educ.:* Calcutta; Christ's College, Cambridge; Delegate to International Scientific Congress, Paris, 1900; scientific member of deputation to Europe and America, 1907, 1914 and 1919. Published series of papers on Electric waves and other electric phenomena. (Proc. Roy. Society.) *Publications:* Response in the Living and Non-living; Plant Response, Electro-physiology of Plants, Irritability of Plants; Life Movements of Plants, Vols. I and II. *Address:* Bose Institute, Calcutta.

BOSE, SIR KAILAS CHUNDER, RAI BAHADUR, KT., *cr.* 1916, C.I.E., 1910; Kaiser-i-Hind, 1909; O.B.E. *b.* Decr. 26, 1850. *Educ.* Cal-

cutta Training Academy, Calcutta Univer sity and Medical College. Fellow, Calcutta University; Vice-President, Indian Medical Congress; Fellow, R. Institute of Public Health; Member, British Medical Association; Member of the Corporation of Calcutta and Hon. Presidency Magistrate; connected with many literary and scientific Societies of India and England and most of his contributions to the Medical Journals have been reproduced in the English and American Press. 2nd *s.* of late Babu Madhusan Basu *Address*: 1, Sukea Street, Calcutta.

BRADLEY-BIRT, FRANCIS BRADLEY, B.A. (Oxon), I.C.S., Collector of Calcutta; and Member, Legislative Assembly. *b.* 25 June 1874. *m.* to Lady Norah Spencer Churchill *d.* of 8th Duke of Marlborough. *Educ.* Brasenose Coll., Oxford. Entered I.C.S. 1898; Inner Temple, 1895: Magte. and Collr. Hooghly, Midnapore, Khulna and Calcutta. Asst. Director, Local Resources, Mesopotamia with rank of Lt.-Col., 1918; attached to British Legation, Teheran, 1918-19; mentioned in Despatches 1919. *Publications*: "Chota Nagpore", "The Story of an Indian Upland," "The Romance of an Eastern Capital," "Sylhet Thackeray," "Through Persia," "Twelve Men of Bengal," "Bengal Fairy Tales". *Address:* United Service Club Calcutta.

BRAY, DENYS DE SAUMAREZ, C.S.I. (1922) C.B.E., 1919; C.I.E., 1917; I.C.S.; B.A. Gold Kaisar-i-Hind Medal, 1912; Foreign Secretary (1920). *b.* 28 Nov. 1875, *m.* Celestina *d.* of Lt.-Col. H. P. P. Leigh, C.I.E. *Educ.* Blundell's School, Tiverton; Balliol College Real Gymnasium, Stuttgart. Taylorian Scholar, Oxford, 1898. Entered I.C.S. 1898; served in the Punjab, N.-W. F.-Province Baluchistan, and with the Govt. of India Census Superintendent, Baluchistan, 1910 Dy. Secy., Foreign and Political Dept., 1916 Joint Foreign Secy., 1919. *Publication*. Brahui Language, 1909, Life History of a Brahui, 1913, etc. *Address:* The Secretariat Simla or Delhi.

BRAY, SIR EDWARD HUGH. Kt., *cr.* 1917; Senior Partner, Gillanders, Arbuthnot & Co. President, Bengal Chamber of Commerce Member of Imperial Legislative Council Controller of Contracts, Army Headquarters. *b.* 15 Apr. 1874; *m.* 1912, Constance, *d.* of Sir John Graham, 1st Bt. *Educ.:* Charterhouse; Trinity College, Cambridge. *Address*. Gillander House, Calcutta.

BRAYNE, ALBERT FREDERIC LUCAS, M.A (Glas.), B.A. (Oxon.), C.I.E. 1923, Indian Civil Service, Financial Adviser, Posts and Telegraphs. *b.* 1 April 1884, *m.* 1909 Mary, *e.d.* of James Thomson, M.D. Irvine, Ayrshire. *Educ.*: Irvine, Royal Academy, Glasgow University, Oxford (Trinity College). Appointed I.C.S., Bombay, 1908; Assistant Collector Satara 1908-1913; Superintendent, Land Records, 1913-1916; Under Secretary and Deputy Secretary to Bombay Government, Revenue and Financial Departments 1916-20. Subsequently Deputy Secretary, Finance Department, Government of India and in 1922-23 attached to the Inchcape Committee on Retrenchment. *Address:* Finance Department, Government of India.

BROWN, PERCY, A.R.C.A. 1898; Indian Educational Service, 1899; Principal, Government School of Art, Calcutta, since 1909; *b.* Birmingham, 1872; *m.* 1908, *d.* of Lt.-Col. Sir Adelbert Talbot, K.C.I.E.; *Educ.:* Edward VI Grammar School and School of Art, Birmingham; Principal, Mayo School of Art and Curator, Museum, Lahore, 1899-1909; on deputation, Assistant Director, Art Exhibition, Delhi Durbar, 1902-03; Officer-in-charge, Art Section and Trustee, Indian Museum, 1910. *Publications:* Picturesque Nepal, 1912; Indian Painting, 1917; Tours in Sikkim 1917 (2nd Edition, 1922). *Address:* 28, Chowringhee, Calcutta

BUCHANAN, SIR GEORGE CUNNINGHAM, K.C.I.E. (1917); Kt. Bachelor (1914); C.I.E. (1911); Consulting Engineer to the Bombay Development Department. Partner in firm of C. S. Meik and Buchanan, 16, Victoria St., Westminster; *b.* 20 April 1865; *m.* Elizabeth Isabella Mead. Trained for the profession of a Civil Engineer on the works of the River Tyne Improvement Commissioners and other Port and River Works as a pupil of the Chief Engineers. Subsequently employed on Public Works in England, Venezuela, Spain, Canada Argentine, West Indies; Chief Engineer, Dundee Harbour Trust (1896-1901); Chairman, Rangoon Port Trust (1901-1915); Director, Port and River Works, Mesopotamia Expeditionary Force (1915-17); Member, Indian Munitions Board, 1917-1918. *Publications:* Professional papers read before the Institution of Civil Engineers and the Royal Society of Arts. *Address:* The Secretariat, Bombay.

BUCK, EDWARD JOHN, O.B.E. (1918); C.B.E. (1918); Reuter's Agent with Government of India and Director, Associated Press of India; late Vice-Chairman, Alliance Bank of Simla; Director, Associated Hotels of India and Borooah Timber Co. *b.* 1862; *m.* Annie Margaret, *d.* of late General Sir R. M. Jennings, K. C. B. *Educ.:* St. John's College, Hurstpierpoint. Was in business in Australia. Assistant and Joint Secretary, Countess of Dufferin's Fund for 28 years. Honorary Secretary, Executive Committee, "Our day" in India, 1917-18. *Publication:* "Simla, past and present." *Address:* Northbank, Simla.

BUCKLAND, THE HON. MR. JUSTICE PHILIP LINDSAY, Judge, High Court, Calcutta, since 1919. *Educ.:* Eton and New College, Oxford. *m.* Mary, *d.* of Livingstone Barday. Called to the Bar Inner Temple, 1896. Practised in High Court, Calcutta. *Publication.*: Text Book on the Indian Companies Act, 1913. *Address:* Bengal Club, Calcutta.

BUNDI, H. H. MAHARAO RAJA, SIR RAGHUBIR SINGHJI BAHADUR, G.C.S.I., 1919; K.C.S.I., *cr.* 1897, G.C.I.E. *cr.* 1900, G.C.V.O. *cr.* 1911; *b.* 26 Sept. 1869, *S.* 1889. *Address:* Bundi, Rajputana.

BURDON, ERNEST, B.A., (OXON.) C.I.E., (1921): Secretary to Government of India, Army Dept, 1922; Member, Legislative Assembly,

one son. *b.* 27 Jan. 1881. *Educ.:* Edinburgh Academy, Univ. Coll., Oxford, Entered I.C.S. 1905, Financial Under Sec., Punjab Govt., 1911 Financial Under Sec. to Govt. of India, 1914, Deputy Financial Adviser, Military Finance, 1916; Financial Adviser to G.O.C.in Chief, Mesopotamia Expedit. Force, 1918; Financial Adviser, Military Finance, 1919. *Address* "Alderton," Simla.

BURDWAN, HON. SIR BIJAY CHAND MAHTAB MAHARAJADHIRAJA BAHADUR OF, G.C.I.E. (1924); K.C.S.I., *cr.* 1911; K.C.I.E., *cr.* 1909; I.O.M., *cr.* 1909, F.R.G.S., F.R.S.A., F.R.C.I., F.N.B.A., M.R.A.S.; *b.* 19 Oct. 1881; a Member of 3rd class in Civil Division of Indian Order of Merit for conspicuous courage displayed by him in the Overtoun Hall, Calcutta, 7 Nov. 1908; adopted by late Maharajadhiraja and succeeded, 1887, being installed in independent charge of zamindari, 1903; *m.* 1897, Radharani (Lady Mahtab) of Lahore; a Member of Imperial Legislative Council, 1909-12; Bengal Legislative Council, 1907-1918; Member, Beng. Executive Council, since Jan. 1919; Trustee of The Indian Museum, 1908; President, Agri-Horticultural Society of India, Calcutta, 1911-12; President of the British Indian Association, Calcutta, 1911-18; Trustee of the Victoria Memorial, Calcutta, since 1914. *Heir*: Maharajadhiraja Kumar Uday Chand Mahtab, *b.* 14 July 1905. *Address*: The Palace, Burdwan; Bijay Manzil, Alipore, Calcutta; Tejvilash Palace, Kalna; The Retreat, Kurseong; Rose Bank, Darjeeling Mosapher Manzil, Agra, U. P.

BURFOOT, HENRY FRANCIS, (Dayasagar) *b.* March 1st, 1867 (Hastings). Became a Salvation Army Officer in 1885. Secretary for the Salvation Army's Publicity and Literary work in the Western India Territory. Arrived in Bombay from England in January 1887. Has held various appointments in N. India, Punjab, Rajputana, Gujarat and Telegu country. Has edited the Gujarathi Salvation Army periodicals for the past 15 years. *Address.:* The Salvation Army Hd.-qrs., Morland Rd., Byculla, Bombay.

BURN, RICHARD, C.S.I., 1917; Board of Revenue, United Provinces, 1922; *b.* Liverpool, 1 Feb. 1871; *m.* 1899, Grace Irene Cargill (*d.* 1918). *Educ:* Liverpool Institute Christ Church; Oxford. Entered Indian Civil Service, U. P., 1891; Superintendent, Census, and subsequently Gazetteer, 1900; Editor, Imperial Gazetteer of India, 1905; Secy. to Govt., U. P., 1910; Chief Secy., 1912; Commissioner, 1918. *Publications:* Census Report, U.P., 1902; Provincial Gazetteer, 1906 Various papers on Numismatics in journals, Asiatic Society, Bengal, Royal Asiatic Society and Numismatic Chronicle. *Address:* Allahabad.

BUTLER, SIR (SPENCER) HARCOURT, G.C.I.E. (1923) K.C.S.I., *cr.* 1911; C.S.I., 1909; C.I.E. 1901; I.C.S., Governor of Burma, 1923. *b.* 1 Aug. 1869; *m.* 1894, Florence, *d.* of F. Nelson Wright; *Educ.:* Harrow; Balliol College, Oxford; Served as Secretary to Famine Commissioner; Financial Secretary to Government; Director of Agriculture; Judicial Secretary to Government; Deputy Commissioner, Lucknow; Foreign Secretary to the Government of India; Member of the Executive Council of the Governor-General; Lieut-Governor of Burma, 1915-17; Lieut.-Governor and Governor of the U.P., 1918-1922; Governor of Burma, 1922. *Address:* Rangoon.

CADELL, PATRICK ROBERT, C.S.I., 1919; C.I.E., 1913; V.D., Indian Civil Service; Chairman, Bombay Port Trust (1922). *b.* 6 May 1871; *m.* in 1920, Agnes, *d.* of John Kemp, Bar.-at-Law, London. *Educ.:* Edinburgh Academy; Haileybury; Balliol College, Oxford. Member of Oxford University Football XV., 1890-91; selected to play for South of England; service in India since 1891; served in Bombay Presidency and in Calcutta; Lieut.-Col. commanding 15th Bombay Battalion, Indian Defence Force; Chief Secretary, Govt. of Bombay. Commissioner in Sind, 1919-20. Commissioner, Southern Division, Bombay, 1920-1922. Hon. Colonel; Hon. A.D.C. to Viceroy. *Address;* North End, Cumballa Hill, Bombay.

CALCUTTA, BISHOP OF, RT. REV. FOSS WESTCOTT, D. D. *b.* 23 October 1863, *s.* of the Rt. Rev. B. F. Westcott (late Bishop of Durham). *Educ.:* Cheltenham and Peterhouse, Cambridge. Joined the S. P. G. Mission, Cawnpore, 1889. Bishop of Chota Nagpore, 1905. Bishop of Calcutta and Metropolitan in India, 1919. *Address:* Calcutta.

CAMPBELL, MAJOR-GENERAL SIR DAVID GRAHAM MUSCHET, K.C.B., *cr.* 1919; C.B., 1916, G.O.C. Baluchistan District. *b.* 28 Jan. 1869; *m.* Janet Mary, *d.* of Sir Robert Aikman; one *s.* two *d.* *Educ.:* Clifton. Joined 9th Lancers, 1889; served through S. A. Campaign, 1899-1902 (despatches, Bt.-Major, Queen's medal, 7 clasps, King's Medal 2 clasps); European War, 1914-18, first in command of 9th Lancers, then of a cavalry brigade, 21st Div. from 1916 despatches six, Bt.-Col., C.B. prom. Maj.-Gen., Legion d' Honneur (Croix de Commandeur); rode winner of following races; Liverpool Grand National, 1896 (the Soarer), Grand Military, 1896 (Nelly Grey) and 1897 (Parapluie), Irish Grand Military 1895 (Balbrigan), Irish National Hunt Cup, 1895 (Dakota) and 1896 (Lord Arravale). *Address:* Flagstaff House, Quetta.

CASSELS, MAJ.-GENERAL ROBERT ARCHIBALD, C.B., 1918, C.S.I., D.S.O., Major-General, Cavalry, A. H. Q., India. *b.* 15 March 1876 Served in the European war, including Egypt and Mesopotamia. *Address:* Army Headquarters, India.

CASSON, THE HON. HERBERT ALEXANDER, B.A. (Oxon)., C.S.I., I.C.S., President, Punjab Legislative Council. *b.* 1867; *m* Gertrude Russell, *d.* of late Capt., A. Hamilton Russell, of Heath House, Petersfield. *Educ.:* Marlsborough and Hertford College, Oxford. *Address:* 4, Egerton Road, Lahore.

CAUMONT, RT. REV. MGR. FORTUNATUS HENRY, D.D., O.S.F.C.; 1st R.C. Bishop of Ajmer, since 1913; *b.* Tours, 10 Dec. 1871. *Educ.:* Tours. Took his vows, 1890; priest, 1895; joined Mission of Rajputana, 1897 Military Chaplain of Neemuch, 1900, and o

Mhow, 1901; Prefect Apostolic of the same Mission, 1903. *Address*: Bishop's House, Ajmer.

CHAMNEY, LT.-COL. HENRY, C.M.G. 1900, Principal, Police Training College, Surdah; *b.* Shillelagh, co. Wicklow; *m.* 1st, 1907, Hon. Cecilia Mary Barnewall (*d.* 1908); *sister* of 18th Lord Trimleston; 2nd, 1913, Alice, *d.* of Col. W. E. Bellingham of Castle Bellingham, co. London. *Educ.*: Monaghan Diocesan School. Served South Africa, 1900, first as Major Commanding Lumsden's Horse, and later with South African Constabulary; joined Indian Police, 1909; accompanied the relief column to Manipur in 1891. *Address*: Police Training College, Surdah, Rajshahi, Bengal.

CHARANJIT SINGH, SIRDAR; Chief of the Punjab; Fellow R. G. S.; Member, Royal Society of Arts, member of Kapurthala ruling family; *b.* 1883; *s.* of Kanawa Sochet Singh; *Educ.*: Jullunder, Chief College, Government College, Lahore. *Address*: Charanjit Castle, Jullunder City; Chadwick, Simla W.

CHARKHARI STATE, H. H. MAHARAJA-DHIRAJ SIPHAHDAR-UL-MULK ARMAROAN SINGH JU DEO BAHADUR; *b.* Jan 1903, S. 1920, *m.* 1923, *d.* of T. S. of Virpur, Kathiawar. *Educ*: Mayo Coll. and privately. Minor *Address*: Charkhari State, Bundelkhand.

CHARLES, MAJOR-GENERAL JAMES RONALD EDMONDSTON, C.B., 1918, C.M.G. 1919; D.S.O., 1900; R.E., G.O.C., Waziristan Command May 1923, *b.* 26 June 1875; *s.* of late T. Edmondston Charles, M.D Hon., Physician to H. M. Entered army, 1894; served S. Africa, 1899-1900 (despatches twice, Queen's medal, four clasps, D.S.O.); Bazar Valley Field Force, 1908 (despatches); Mohmand Field Force, 1908 (despatches bt. of Maj., medal and clasp); European War, 1914-18; Commanded 25th Div., Aug. 1918 March 1919 (despatches five times) (Bt. Lieut.-Col., Br., Col., C.B., C.M.G.) Director of Staff Duties, A.H.Q., India, 1921-1923; Officer, Legion of Honour.

CHATFIELD, GEORGE ERNLE, B.A. (Ox.) 1898; Chief Secretary, Government of Bombay, *b.* March 26, 1875. *Educ.*: Winchester Coll. Oxford (New College). Entered I.C.S., 1899. *Address*: Secretariat, Bombay.

CHATTERJEE, ATUL CHANDRA; C.B.E. Member of the Viceroy's Executive Council in Charge of Industries and Labour. *b.* 24 Nov. 1874. *Educ.*: Hare School and Presidency Coll. Calcutta, and King's Coll. Cambridge; *m.* Vina Mookerjee (deceased), Entered I.C.S., 1897. Served in U. P. Special inquiry into industries in U. P. 1907-08, Registrar Co-operative Societies, U.P. 1912-16; Revenue Sec., U. P. Govt,. 1917-18; Ch. Sec., U. P. Govt., 1919; Govt. of India delegate to International Labour Confce., Washington, 1919 and Geneva, 1921; Member, Munitions and Industries Board, 1920; Secretary to the Government of India, Department of Industries 1921. Member of the Legislative Assembly. *Publication*: Note on the Industries of the United Provinces (1909). *Address*: Imperial Secretariat, Delhi.

CHATTERTON, SIR ALFRED, K-I-H. (1900) C.I.E., 1912; KT. 1919, B. Sc., F.C.G.I., A.M. I.C.E., M.I.M.E., etc.; Industrial Adviser and Director of Sandal Oil Factories, Govt. of Mysore, since 1918; *b.* 10 Oct. 1866; *m.* 2nd 1901, Alice Gertrude, *d.* of W. H. Wilson: two *s.* one *d.* *Educ.*: Finsbury Technical College; Central Institution, South Kensington. Indian Educational Service, 1888. Director of Industries, Madras, 1908; Director of Industries, Mysore, 1912; Mem. of Indian Industrial Commission, 1916-18. *Publications*: Industrial and Agricultural Problems in India, Lift Irrigation, and Industrial Evolution in India. *Address*: Bangalore and The Coppice, Beckenham Kent.

CHAUBAL, SIR MAHADEV BHASKAR, K.C.I.E., *cr.* 1917; C.S.I., 1911; B. A., LL.B.; *b.* 1. Sept. 1857; *m.* Anandibai, only d. of Parashram S. Gupte, 1870. *Educ.*: Government High School, Poona; Deccan College, Poona Assistant Master, Elphinstone High School, Bombay, 1879-83; Vakil, High Court, Bombay, 1883; Acting Puisne Judge, High Court, Bombay, 1908; Member of the Executive Council of the Governor of Bombay, 1910-12 and 1915-17; Member of the Public Services Commn., 1913-15. Chancellor, Indian Women's University, 1920. *Address*: 6, Finance Office Road, Poona.

CHAUDHARI, JOGESH CHANDRA, B.A.(Oxon), M.A. (Cal.), Bar.-at-Law. *b.* 28 June *1864*; *m.* Sarasibala Devi, 3rd d. of Sir Surendranath Banerjea. *Educ.*: Krishnaghar Collegiate School, Presidency College, Calcutta, St. Xavier's College, Calcutta and New College, Oxford. For some time Lecturer of Physics and Chemistry at Vidyasagar College, Calcutta; Editor, Calcutta Weekly Notes since 1896, Organising Secry., Indian Industrial Exhibitions in Calcutta in 1901-1902 and 1906-7; Member, Bengal Council 1904-7, Member, Legislative Assembly 1921-1923. *Publications*: Calcutta Weekly Notes. *Address*: 3, Hastings Street, and "Devadwar," 34, Baligunge, Circular Road, Calcutta.

CHAUDHRI LAL CHAND, THE HON. RAO BAHADUR, B.A., LL.B., O.B.E., Minister, Punjab Government, Lahore. *b.* 1882. *m.* Shrimati Sushila Devi, belonging to a Sikh Jat Family of Ferozepur Dist. *Educ.*: St Stephen's College, Delhi, Joined Rev. Dept., 1904; practised as lawyer at Rohtak; elected Vice-Chairman, District Board, 1914-1923 elected, Punjab Council, 1916, nominated Council of State, 1922; Presdt., All India Jat Maha Sabha, 1918 (elected); Manager of High School for Sons of Soldiers; hon. recruiting officer during war. *Address*: Punjab Secretariat, Lahore.

CHAUDHRI, SHAHAB-UD-DIN, B.A., LL.B., High Court Vakil, Editor and Proprietor, "Indian Cases;" Member, Legislative Assembly, and President, Munpl. Comttee, Lahore. *Educ.*: Government Coll. and Law Coll., Lahore. Started Criminal Law Journal of India in 1904 and Indian Cases in 1909. Was first elected member, Lahore Municipal Committee in 1913; President of the Corporation in 1922: *Publications*: The Criminal Law Journal of India; Indian Cases and two Punjabi poems. *Address*: "Al-Mumtaz", 3, Durand Road, Lahore.

CHAUDHURI, SIR ASUTOSH, Kt., *cr.* 1917. B.A. (Cantab.), M.A. (Calcutta University), Barrister-at-Law; *b.* Bengali Brahmin, 1860; *m.* Prativa Devi, of the Tagore family of Calcutta. *Educ.:* St. John's College, Cambridge; Presidency College, Calcutta. After graduating in Calcutta went to Cambridge; admitted as an Advocate of the Calcutta High Court, 1886; President of the Bengal National Conference; founded the Bengal Land-holders Association in Calcutta; one of the founders of the Calcutta National College; has always taken prominent part in reform movement in Bengal; first Hindu of the Calcutta Bar appointed Judge of the High Court, Elected member of the Bengal Council from his Native district of Pabna-Bogra. *Address:* Ballygunge, Calcutta.

CHETTIAR, THE HON. DEWAN BAHADUR, S. R.M., Sir ANNAMALAI CHETTY, Member of the Council of State, *b.* 1881. Has been a member of Madras Legislative Council; Governor of the Imperial Bank of India; Manager and founder of the Sri Meenakshi Coll. Chidambaram; Is a member of the Nattukkottai Chetty Community. *Address:* Natana Vilas, 38, Police Commr.'s Rd., Vepery, Madras.

CHINTAMANI, CHIRRAVOORI YAJNESWARA, Journalist, *b.* 10 April 1880; *m.* Srimati Krishnavenemma, *Educ.:* Maharaja's College, Vizianagaram, Editor of *The Leader*, Allahabad, 1909-20, Member, U.P. Legislative Council, 1916-1923; Delegate of the Liberal Party to England, 1919; General Secretary, National Liberal Federation of India, 1918-20; President, ibid, 1920; Minister of Education and Industries, U.P., 1921-23. *Publications:* Indian Social Reform, 1901; Speeches and Writings of Sir Pherozeshah Mehta, 1905. *Address:* Ganesh Bagh; Benares City.

CHITNAVIS, SIR GANGADHAR MADHAV, K.C.I.E., C.I.E.; *b.* 1863; President, Central Provinces Legis. Council; President, Nagpur Municipality, 1896-1918; selected to represent Central Provinces on Impl. Legislative Council, 1893-1895, 1898-99; President of C. P. and Berar Provincial Conference, 1906; additional member of Viceroy's Legislative Council, 1907; elected representative of landholders in the C. P. reformed Council, 1910-1916. Nominated Member of Imp. Legis. Council from 1918; landholder in C. P. *Address*: Nagpur, Central Provinces.

CHITNAVIS, THE HON. MR. SHANKAR MADHAV, B.A., Kaiser-i-Hind Gold Medal (1901); Imperial Service Order (1913); Landholder and Minister, C.P. Government, *b.* Dec. 3, 1863; *m.* Parvatibai. *Educ.:* Free Church Mission School, Nagpur and then at Elphinstone College, Bombay. Appointed Probationer for Civil Service under the Statutory rules, 13 July 1885; confirmed as Assistant Commissioner, 5th Oct. 1887; appointed Deputy Commissioner, December 1896; a member of the Indian Factory Labour Commission, 1907-08; officiated as Divisional Commissioner 1909-10; retired from Service 1st March 1916. *Address*: Near Lunatic Asylum, Nagpur, C.P.

CHOKSY, DR. NUSSERWANJEE HORMASJEE, C.I.E., 1922; Khan Bahadur (1897); Chevalier of the Crown of Italy (1899); Medalliste des Epidemies; Republique Francise (1906); M.D. (Hon. Causa). Freiburg; F.C.P.S. (Bombay). L.M. & S., (Bombay 1884); Member, Bombay Medical Council, 1912. *b.* 7 Oct. 1861; *m.* Serenbai Maneckjee Jhaveri. *Educ.:* Elphinstone High School and Grant Medical College. Medical Superintendent, Acworth Leper Asylum. 1890-97; Medical Superintendent of Arthur Road Plague and Infectious Diseases Hospital (1888-1921) and Maratha Plague Hospital (1902-1921). *Publications*: Numerous publications on Plague, Cholera, Relapsing Fever, Leprosy, Special reports connected with these subjects, etc. *Address:* Sheridan House, Gowalia Tank Road, Bombay.

CHRISTOPHERS, LIEUT.-COL. SAMUEL RICKARD, M.B., C.I.E.,; I.M.S.; Director, Central Research Institute, Kasauli, Member, Malaria Commission, Royal Society and Colonial Office. 1898-1902. *Address*: Central Research Institute, Kasauli.

CLARKE, GEOFFREY ROTHE, C.S.I., 1921; O.B.E. (1917) Serbian Order of the Sveti Sava, 1923. Director-General, Posts and Telegraphs, since 1918, *b.* July 1871, *m.* Hilda Geraldine Seymour. *Educ.:* Corrig School, Kingstown and T. C. Dublin. Entered I.C.S., 1895. Officiated as P. M. G., Punjab, and N.-W.F., 1903. Confirmed as P. M. G., Madras, 1906. On special duty with Ministry of Munitions in London, 1916, and sent on duty to America and Canada. Delegate for Government of India at International Postal Congress, Madrid, 1920. *Publications*: "The Outcastes," "The Post Office of India and Its Story." *Address:* The Rookery, Simla.

CLARKE, SIR REGINALD, Kt. (1922), C.I.E. (1919), Commissioner of Police, Calcutta. *b.* 16 March 1876; *m.* Edith, daughter of Andrew Johns, J. P., Shortlands, Kent. Joined Indian Police, 1900. *Address:* 2, Kyd St., Calcutta.

CLAYTON, HUGH BYARD, C.I.E. (1924); I.C.S. Municipal Commr., Bombay. *b.* 24 Dec. 1877; *m.* Annie Blanch Nepean. *Educ.*: St. Paul's School, Wadham College, Oxford. 1st Class Hon. Mods. 1st Class Lt. Hum. Came to India 1901; served in Bombay Presidency employed in Military Intelligence Branch of War Office, 1914-19. *Address:* Mount Pleasant Road, Malabar Hill, Bombay.

CLUTTERBUCK, PETER HENRY, C.I.E., 1918; C.B.E., 1919; V. D. 1912; F.R.G.S., F.Z.S., F.E.S.; Inspector-General of Forests to the Government of India since 1921. *b.* 1868; *s.* of late Alexander Clutterbuck of Red Hall, Watford; *m.* 1896, Rose Winifred *d.* of Alfred Barrow Wilson Marriott, formerly District Superintendent of Police, Central Provinces, India; two *s. Educ.*: Clifton College; Bloxham; Coopers Hill College, Indian Forest Service, Central Provinces, 1889; transferred to the United Provinces, 1896; Deputy Conservator of Forests, 1897, Conservator of Forests, Eastern Circle; U.P., 1918; Chief Conservator of Forests; U. P., 1915; Kaisar-i-Hind Medal (silver), 1911; served in Volunteer forces, 1887-1918

was Lt.-Col. in command of the 8th (Northern) U.P. Horse of the India Defence Force, 1917-18; was Member of U. P. Legislative Council, 1919-20. *Address*; Simla, India

COBDEN-RAMSAY, LOUIS EVELEIGH BAWTREE, J.P., C.I.E., I.C.S Political Agent, Orissa Feudatory States, since 1905; *b.* 29 Oct. 1873, *m.* Dorothy Forster Grieve, *d.* of C. J. Grieve, J. P. Brauxholm Park. *Educ.*: Dulwich College, Sidney; Sussex College, Cambridge. Arrived in India, 1897; Under-Secretary to Govt. of Bengal in Revenue and General Dept., 1900-2; Registrar, Co-operative Credit Societies, 1905. *Publication*: Gazetteer, Orissa Feudatory States. *Address*: Sambalpur, B. N. Railway.

COLE, LIEUT.-COLONEL HENRY WALTER GEORGE, C.S.I.; Deputy Commissioner, Assam Commission; Political Agent in Manipur, 1914. *Educ.*: Wellington College; R.M.C., Sandhurst. Joined 5th Fusiliers, 1885; 2nd Gurkhas, 1887; Asst. Commissioner, Assam 1891; Dy. Commissioner, 1901; Supdt., Lushai Hills, 1906-11; Director, Temporary Works, Delhi, 1912-13; served Hazara, 1888; Lushai, 1888-1889; Chin Lushai, 1889-92; N. E. Frontier, 1891. *Address*: The Residency, Manipur.

COLVIN, GEORGE LETHBRIDGE, C. B. (1914); C.M.G. (1918); D.S.O. (1917); Commendatore of the Order of St. Maurice and St. Lazarus (Italy) 1920; Agent, East Indian Railway. *b.* 27 March 1878. *m.* Katherine Mylne, *d.* of James Mylne of Edinburgh. *Educ.*: Westminster. Joined E. I. Railway, 1898; served in Army (France and Italy) during war 1914-1919; Hon. Brigadier-General in Army; Director of Development Ministry of Transport, London, from 1919 to 1921; Rejoined E. I. Rly. in 1921 as Agent. *Address*: Bengal Club, Calcutta.

COOK, ARTHUR WILLSTEED, C.I.E., I.C.S., B.A.; Offg. Commissioner, Burdwan Division (1923) *Educ.*: Portsmouth Grammar School; Pembroke College, Oxford Entered I.C.S. 1896, Magte. and Collector, Midnapur, Bengal, 1919-23. *Address*: Chinsura, E.I.R.

COOKE, Major-GENERAL HERBERT FOTHERGILL, C.B. (1919); C.S.I. (1921), D.S.O., (1917), I.A.; Military Secretary, Army Head-quarters; *b.* 13 Nov., 1871; *m.* 1923, Harriet Mary Hornby. *Educ.*: All Hallows School, Honiton; R.M.C.; Sandhurst. First Commission, 1892; joined Indian Army, 1893; Captain, 1901; Major, 1910; Brevet Lt.-Col., 1912; Substantive Lt.-Colonel, 1916; Bt.-Col., 1917; Substantive Colonel, 1917; Temporary Major-General (1918); Substantive Major-General (1921), served Chitral, 1895 (medal and 1 clasp); Tirah, 1897 (2 clasps); Waziristan, 1902 (clasp); Tibet Expedition and March to Lhassa, 1904 (medal and clasp); European War, from Jan. 1915 to October 1917 (despatches 6 times, C.B., D.S.O., Bt.-Col.); several years on Staff Appointments in India including 4 years as Dy. Adjutant-General in India and officiating Adjutant-General from March to Sept. 1920. *Address*: Army Headquarters, Simla.

COPPEL, RT. REV. FRANCIS STEPHEN, R. C. Bishop of Nagpur, since 1907; *b.* Les Gets, Savoy, 5 Jan. 1867. *Educ.*: College of Evian, University of France, Lyons, B.A., B. Sc. Entered Congregation of Missionaries of St. Francis de Sales, Annecy; Priest, 1890; sent to India for mission of Nagpur, 1892; for fifteen years attached to St. Francis de Sales College, Nagpur, as professor and principal. *Address*: Nagpur.

COTELINGAM, JOHN PRACASA RAO, M.A., F. M. U., M. L. A. (1920), Retired Principal of the Wardlaw College, Bellary, 1891-1918, *b.* 9th Dec. 1860. *m.* Miss Padmanji, *d.* of the Rev. Baba Padmanji of Bombay. *Educ.*: Madras Christian Coll.; Asstt., Master, London Mission High School, Madras; Headmaster, Wesley Coll.; Principal Hindu Coll., Cuddalore, 1889-1891; Member, Bellary Dist. Board and Taluk Board since 1895; Vice-Presdt., Dist. Board, 1901-4; Member, Bellary Municipal Council since 1893; Presdt., District Educational Council, Bellary. Represents Indian Christian Community and Madras Presidency on the Legis. Assembly. *Address*: Rock Cottage, Bellary.

COTTERELL, CECIL BERNARD, C.I.E., I.C.S., Commissioner, Agency Division, 1921. *Educ.*: St. Peter's School, York; Balliol College, Oxford. Entered I.C.S., 1898; has served in the Madras Presidency, since 1899; Deputy Commissioner, Salt and Abkari Dept., 1905; Private Sec. to Governor of Madras, 1912-15. *Address*: Madras.

COTTON, CHARLES WILLIAM EGERTON, C.I.E. (1920), Resident in Travancore and Cochin 1923. *b.* 1874. *Educ.*: Eton and Univ. Col., Oxford; I.C.S., 1897. District work in Madras until 1907 when appointed Asstt. Director of Statistics, Calcutta; Offg. Dir.-Genl., Commercial Intelligence, 1908-10; Offg. Dir. of Industries, Madras, 1909-10; Dy. Secy. to the Govt. of Madras, 1911-12; Dy. Secy., Govt. of India, 1912-15; Collector of Customs, Calcutta, 1916-21; Director of Industries, Madras, 1921. *Publications*: Review of the Trade of India, 1908 and 1910; Calcutta Chatterbox, 1918; Handbook of Commercial Information, 1919. *Address*: The Residency, Trivandrum, Travancore.

COTTON, THE HON. MR. HARRY EVAN AUGUSTE, C.I.E. (1921), President, Bengal Legislative Council. *b.* 27 May 1868, eld. *s.* of the late Sir Henry Cotton, K.C.S.I.; *m.* Nora, *d.* of the late W. H. Grimley, I.C.S., Member, Board of Revenue, Bengal. *Educ.* Mont Lban, School, Pau: Sherborne; Jesus Coll., Oxford, (open scholar, second class (honours), Classical Moderations, modern history, jurisprudence). Secretary and Treasurer, Oxford Union Socty.; called to Bar at Lincoln's Inn, 1893; Advocate, High Court at Fort William in Bengal, 1893-1906; Member, Calcutta Corporation, 1900-1906; Member, London County Council, 1910-1922 (Deputy Chairman, 1914-15, County Alderman, 1919-1922); M.P. for East Finsbury, July-Novr. 1918; Editor of "India," 1906-17; Hon. Secry., Indian Reforms Committee, 1919-1922. *Publications*: "Calcutta, Old and New," "The Century in India, 1800-1900"; Annotated Edition of

"Hartly House, a novel of the time of Warren Hastings." *Address*: Town Hall, Calcutta.

COUBROUGH, ANTHONY CATHCART, C, B. E. (1918); M.A., B Sc., C.E., M.I.E.E., M.I MECH.E., M.I.E. (Ind.); General Manager for India, Messrs. Mather and Platt, Ltd. *b.* 10th Feb. 1877; *Educ.* Glasgow University. Joined Mather and Platt, Ltd., in 1898 as apprentice, subsequently became General Manager, Electrical Department and in that capacity travelled widely on the Continent went to India and South Africa and eventually returned to India to establish Mather and Platt's own office in Calcutta, Bombay and other centres for the control of their business from Mesopotamia to the Straits has travelled in China, Japan, United States of America, Australia and Egypt. During war services were lent to Govt. of India under Munitions Board was Controller o Priority and latterly Controller of Munitions Manufacture: *Publications*: Pamphlets on Technical and Economic subjects. *Address* 7, Hare Street, Calcutta.

COUSINS, MRS. MARGARET E., Bachelor of Music (Royal University of Ireland, 1902). Honorary Secretary, Women's Indian Association and Hon. Magistrate, Madras. *b.* 7 Nov. 1878. *m.* Dr. J. H. Cousins. *Educ.*: Dublin and Londonderry. Solo pianist before marriage; afterwards became interested in reform movements in addition to music; Secretary Irish Vegetarian Society; Hon. Treasurer and foundation member of Irish Women's Franchise League, a militant suffrage society in which she worked for seven years and suffered imprisonment twice in the cause. Left Ireland 1913; spent two years in Liverpool, came to India in Oct. 1915. *Publications*: articles in many newspapers and magazines; author of "The Awakening of Asian Womanhood." *Address*: Leadbeater Chambers, Adyar, Madras.

COUTTS, THE HON. MR. JUSTICE WILLIAM STRACHAN, C.I.E., I.C.S., Barrister; Puisne Judge, Patna High Court, 1918; Registrar of Patna High Court, 1916; District and Sessions Judge, Bihar and Orissa 1912. *Educ.*: Dollar; Trinity College, Cambridge. Entered I.C.S., 1895; Joint Magistrate, 1905. *Address*: High Court, Patna.

COVENTRY, BERNARD, C.I.E., 1912; Agricultural Adviser to Native States in Central India, since 1916; formerly Agricultural Adviser to Govt. of India, Director of Agricultural Research Institute, and Principal of Agricultural College, Pusa, Behar; *b.* 10 Dec. 1859. *Educ.*: Beaumont Coll. Came to India, 1881, and joined Indigo industry; started agricultural research station on modern lines, 1899; on foundation of Pusa Agricultural Research Institute and College, 1904, was made first Director and Principal; acted as Insp. Gen. of Agriculture and became first Agricultural Adviser to Govt. of India; retired 1916. *Address*: Indore, C.I.

COWIE, WILLIAM PATRICK, B.A., C.I.E. (1920), Indian Civil Service. *b.* 31 January 1884. *Educ.* Malvern; C.C.C., Oxford; *m.* Miss Margaret Burne, 1920. Revenue Dept., 1908-1913; Political, 1913-1918; Army, 1918; Private Secretary to H. E. the Governor of Bombay, 1918-20. *Address:* Grindlay & Co., Bombay.

COX, VEN. LIONEL EDGAR, M.A., Senior Chaplain, St. George's Cathedral, Madras and Archdeacon of Madras; *b.* 28 March 1868. *Educ.*: Somerset College; Bath; Dorchester Theological College; Durham University. Deacon, 1891; Priest, 1894; joined Madras Ecclesiastical Establishment, 1898; Archdeacon of Madras and Bishop's Commissary, 1910. *Address*: Cathedral, Madras.

COX, STEPHEN, C.I.E. (1921), M.B.E., Ch. Conservator of Forests, Madras; *b.* 23 Dec. 1870. *m.* Nora, *d.* of Sir Alfred Bourne, F.R.S., K.C.I.E. *Educ.*: Harrow and Cooper's Hill. *Address*: Madras.

CRERAR, JAMES, C.S.I. (1922); C.I.E. (1917); Secretary to the Government of India, Home Department, since December, 1922. *b.* 1877; *m.* to Evelyn, *d.* of the late Hon. Charles Brand. Educated at George Watson's College; Edinburgh, Edinburgh University and Balliol College (Oxon). Assistant Collector, Sind; Manager of Encumbered Estates, Sind; Assistant Commissioner in Sind; Deputy Municipal Commissioner, Bombay; Municipal Commissioner, Bombay; Private Secretary to H. E. the Governor of Bombay; Sec. to Govt. of Bombay, Home Dept. *Address*: The Secretariat, Delhi or Simla.

CRIPPS, COL. ARTHUR WILLIAM, C.B.; *b.* 16 Jan. 1862. Entered Army 1882; Capt., I.S.C., 1893; Major, I.A., 1901; Lt.-Col., 1908; Col., 1913; served 1st Miranzai Expedition, 1891; Tirah, 1897-98; China, 1900; European War. 1914-16. *Address*: Army Headquarters.

CROSTHWAITE, REV. CANON ARTHUR, Exhibitioner of Pembroke College, Cambridge, B.A. (Sen. Opt.), 1892, Delhi Durbar Medal, 1911, Kaisar-i-Hind Medal, 1st Class, 1923, Missionary, S.P.G.; *b.* 2 Nov. 1870, *m.* to Kate Louisa Barlow. *Educ.*: at S. Peter's School, York and Pembroke College, Cambridge. Missionary, S. P. G. and Vice-Principal, Christ Church College, Cawnpore, 1893-1909, Principal, 1910-1912; Fellow of Allahabad Univ. 1905; Hon. Fellow 1913; Chaplain of Moradabad and Head of S. P. G. Mission, 1909-10 and 1912 to present date, Canon of All Saints' Cathedral, Allahabad, 1921. *Publications*: "The Lessons of the Rig Veda for Modern India," "Patriotism," "Theosophy," Commentary on II Corinthian in The Indian Church Commentary Series. "Taswiran par sawal o jawab." "Du'a ki kitab par sawal or jawab," "Asha-i-Rabbam ki tartib par sawal o jawab." *Address*: S. P. G. Mission, Moradabad, U.P.

CRUM, SIR WALTER ERSKINE, O.B.E. (1918). Partner in Messrs. Graham & Co. *b.* 2 September 1874. *m.* Violet Mary Forbes. *Educ.*: Eton. New College, Oxford. President, O.U.B.C., 1895-97. President, Bengal Ch. of Commerce, 1919. Member, Bengal Legislative Council, 1918-19. Major, 3rd Calcutta Light Horse. *Address*: C/o. Messrs. Graham & Co., Clive Street, Calcutta.

CRUMP, LESLIE MAURICE, C.I.E. (1921). Resident at Baroda, 1921; *b.* 12 September 1875. *m.* Jean Dunlop McKerrow, *d.* of Dr George McKerrow of Ayr, Scotland, 1 *s.* 1 *d*

Educ.: Merchant Taylors School, Merto Coll., Oxford; Rugby football blue, 1896-9; Entered I.C.S., Bengal, 1898. Pol. Dept. Govt. of India, 1900. Served in Hyderabad, N. W. Frontier, Central India, Phulkian States. *Publications*: The Marriage of Nausicaa and other poems. *Address*: The Agenc Sehore, Bhopal State, C.I.

CUBITT, MAJOR-GENERAL THOMAS ASTLEY, C.B 1919; C. M. G., 1916; D.S.O., 1903; R.A G.O.C., Bengal Presidency and Assam Dis trict; *b.* 9 April 1871. *m.* 29 April 192 Olive widow of Col. B. S. Grissell, Norfol Regt. and *d.* of the late Col. H. Wood, C. B Rifle Brigade. *Educ.*: at Haileybury, R. M Academy and Staff College. Entered Arm 1891, Deputy Commissioner, Somaliland Protectorate, 1914; served West Africa, 186 (medal with clasp); expedition again Munshis, 1900 (despatches, clasp); We Africa, 1901, as Staff Officer (despatche brevet major, medal with clasp; West Africa 1902, (despatches clasp); West Africa 190 Kano-Sokoto Campaign (despatches, clasp, D.S O.); European war in command of troops Somaliland, 1914-15 (despatches, C.M.G.) European War in France, 1915-18; C. B. Bt. Col., Major General, 3 June 1919. *Addres*. United Service Club, Calcutta.

CUTTRISS, C.A., M.R.E., F.R.G.S. F.R.S.A Sec., Burma Chamber of Commerce, Commer cial Member of the Burma Boiler Commissio and Hon. Magistrate, Rangoon; *b.* Launceston 28 Nov. 1868, *m.* Janet, *d.* of Dr. Hayte M.D.; was Hon. Sec., Burma "Our Day" Fund, Burma War Fund, Rangoon Rivercra Committee and Rangoon Impressment o Shipping Committee during the war. *Publications*: "Memories of Old Rangoon;" "Hints to Arbitrators;" and Essays on Commercia Subjects. *Address:* P.O. Box 324, Rangoon.

DADABHOY, SIR MANECKJI BYRAMJEE, KT (1921); C.I.E. *b.* Bombay, 30 July 1865; *m.* 1884, Bai Jerbanoo, O. B. E., *d.* of Khan Bahadur Dadabhoy Pallonji of the Commissariat Dept. *Educ.*: Proprietary High School and St. Xavier's College, Bombay. Joined Middle Temple, 1884; called to Bar, 1887; Advocate of Bombay High Court, 1887; Government Advocate, Central Provinces, 1891, President, Prov. Industrial Conference, Raipur, 1907; President, All India Industrial Conference, Calcutta, 1911; Member of Viceroy's Legislative Council, 1908-12 and 1914-17, a Governor of the Imperial Bank of India (1920). Elected to the Council of State, 1921; Member, Fiscal Commission appointed by Govt. of India, Septr. 1921. Managing Director, Nagpur Electric Light and Power Co., Ltd. Berar Manufacturing Co., Ltd., and the Model Mills, Nagpur, Limited. Proprietor: Ballarpur, Sasti, Ghugus and Pisgaon-Rajur Collieries; numerous Manganese Mines in the Central Provinces and Berar and Behar and Orissa; Several Gin and Press Factories in all parts of India. *Publications*: Commentary on the Land Laws of the Central Provinces, and Commentary on the Central Provinces Tenancy Act. *Address*: Nagpur, C. P.

DALAL, SARDAR BOMANJI ARDESHIR, First Class Sirdar, Zamindar, and Merchant; Member of the Legislative Assembly since January 1921; *b.* 18 April 1854. *Educ.*: Broach and Bombay, *m.* Bai Navazbai Bomanji Dalal. Owns 3,000 acres of land colonizing six thriving villages in and out of the way place in Panch Mahals. *Address*: Baroda Residency.

DALAL, SIR DADIBA MERWANJEE, Kt. (1924) C.I.E. (1921); High Commissioner for India, in the United Kingdom; *b.* 12 Dec., 1870. *m.* 1890; one *s.* three *d.* *Educ.*: in Bombay. Gave evidence before the Chamberlain Currency Commission (1913); Member of the Committee on Indian Exchange and Currency (1919) and wrote minority report; Chairman, Government Securities Rehabilitation Committee, Bombay (1921); Member of Council of the Secretary of State for India, 1921; Delegate for India at International Economic Confce., Genoa, and representative for India at the Hague (1922); Member of the Inchcape Committee, 1922-23. *Address*: 42, Grosvenor Gardens, S.W. 1.

DALLAS, LT.-COL. CHARLES MOWBRAY, C.S.I.; Commissioner, Punjab, 1911-16; *b.* 30 Aug. 1861; Entered Army, 1881; Major I.A., 1901. Lt.-Col., 1907; served Miranzai Expedition, 1891; Asst. Commissioner, 1887; Deputy Commissioner, 1897; Political Agent, Phulkian States and Bahawalpur, 1905; Commissioner, Delhi, 1910.

DAMLE, RAO BAHADUR KESHAV GOVIND, C.I.E. (1922): High Court Vakil, Akola (Berar). *b.* 25 June, 1868. *Educ.* Akola, Deccan Coll., Poona. Law Class, Bombay. Practised law at Akola since 1895. Member, C. P. Legis. Council, 1914-16. Chairman, Co-op. Central Bank, Ltd., Akola. Member of Committee appointed by C. P. Govt. to draw up a scheme of village panchayats. Member of Committee onCo-operative Societies in C.P. appointed by Govt. in 1921; First President of Joint Board of Berar Dist. Boards, 1922; Vice-President, Akola District Board since 1902, and President, Bar Assocn., Akola, for many years. *Address*: Akola.

DARLEY, BERNARD D'OLIER, C.I.E. (1919): Superintending Engineer, P.W.D., United Provinces; *b.* 24 August 1880. *Educ.*: T. C. Dublin and Cooper's Hill, A.M.I.C.E. Irrigation work in P. W. D. since 1903. *Address*: Bareilly, U.P.

DAS, BRAJA SUNDAR, B.A., Member, Legis-Assembly; Zamindar and Proprietor of a press and cultivation. *b.* July 1880. *m.* to Umasundari, 4th *d.* of Rai Sudam Charn Naik Bahadur. *Educ.*: Ravenshaw Coll. and Presidency Coll., Calcutta. Took part in Utkal Union Conference since its beginning in 1904 and Secry. for two years; Vice-President, Utkalsahitya Samaj; President, Oriya Peoples' Association; Vice-President, Orissa Assocn, and Ramkrishna Sevak Samaj; Was President Central Youngmen's Association; Member, Sakhigopa Temple Committee; Was Member of Cuttack Municipality and District Board; Member, Bihar and Orissa Council, 1916-1920; Fellow of Patna University and member of the Syndicate. *Publications*: Editor of the Oriya Monthly Mukur and of the only English Weekly in Orissa "The Oriya." *Address*: Cuttack.

DAS, MAJOR-GENERAL RAI BAHADUR DEWAN BISHAN, C.I.E., C.S.I., Chief Minister to H. H. the Maharaja of Jammu and Kashmir; *b.* Jan. 1865. *Educ.* at Punjab Government College, Lahore; Private Secretary to Raja Sir Ramsingh, K.C.B., 1886-1898; Mily. Secy. to the Com.-in-Chief, Jammu and Kashmir, 1898-1909; Mily Secry. to H. H. the Maharaja, 1909-14; Home Minister to H. H. the Maharaja, 1914-18, Rev. Minister, 1918-1921 and Chief Minister, March 1921. *Address:* Jammu and Kashmir.

DAS, MADHU SUDAN, C.I.E., Minister (Local Self-Government) Bihar and Orissa, since Jan. 1921, *b.* 28 April 1848. *Educ.*: Calcutta University, M.A., B.L., M.R.A.S., F.N.B.A. Represented Orissa in Bengal Legislative Council four times; Fellow of Calcutta University; elected by Legislative Council of Bihar and Orissa to Imperial Council, 1913; nominated to Legislative Council of Bihar and Orissa. *Address*: Patna.

DAS, THE HON. MR. JUSTICE PROFULLA RANJAN, Judge, High Court, Patna, 1919. *b.* 28 April, 1881. *Educ.*: St. Xavier's College, Calcutta. *m.* Dorothy Mary Evans, 1904. *Address:* Ali Manzil, Patna.

DAS, SATISH RANJAN, Member, Bengal Legislative Council. Advocate-General, Bengal. *b.* 29 February 1872. *Educ.*: Manchester Grammar School. *m.* Bonolata, *d.* of the late B. L. Gupta, I.C.S.; called to the Bar (Middle Temple), 1894. Advocate, Calcutta High Court, 1894. *Address*: 7, Hungerford St., Calcutta.

DAVID, SIR SASSOON (Jacob), K.C.S.I. (1922), 1st Baronet, *s.* of Jacob David, of Bombay; *b.* 11 Dec. 1849. *Educ.*: Bombay; Cotton Yarn Merchant and Mill Owner, and J.P. Sheriff, 1905. For several years Member of Bombay Improvement Trust Board, of Municipal Corporation (President, 1921-22) and of its Standing Committee; Promoter and Chairman of Bank of India, and Chairman and Director of several Cos.; was Chairman of Bombay Millowners' Association, 1904-05; Member of Council of Governor-General of India 1910 Kt., 1905; *m.* 1876, Hannah (*d.* 1921) *d.* of late Elias David Sassoon. *Address*: 143, Esplanade Road, Bombay.

DAVIES, THE REV. CANON ARTHUR WHITCLIFFE (Kaiser-i-Hind Gold Medal 1921); Principal, St. John's College, Agra, *b.* 1878; *m.* Lilian Mabel Birney. *Educ.*: Uppingham School, Univ. College, Oxford; Church Missionary Society, Lahore, 1906; Ordained Ripon Diocese, 1908; Joined St. John's College, Agra, 1909; Principal, 1913; Canon of Lucknow, 1917; Fellow of Allahabad University. *Address*: St. John's College, Agra.

DE, KIRAN CHANDRA, A.B., C.I.E., I.C.S.; Commissioner of Chittagong since 1916. *b.* Calcutta, 19 January 1871. *Educ.*: Presidency College, Calcutta; St. John's College, Cambridge. Registrar of Co-operative Societies, also Fishery Officer, 1905; Magistrate-Collector, Rangpur, 1911; Member of Bengal District Administration Committee, 1913; Press Censor, Bengal, 1914. Secretary to Govt. of Bengal, Genl. Dept., 1915; Member of the Legislative Council of the Governor-General of India, 1920. *Address*: 1, Dumdum Road, Cossipore, Calcutta; Brookeside, Shillong.

DEHLAVI, The Hon. Ali Mohamed Khan, Bar.-at-Law (1896); Minister, Forest and Excise, Bombay; *b.* 1874. Educ: Bombay and London. Practised in Gujarat and Sind. Dewan at Mangrol (Kathiawar) and Palanpur; acted as Judge of the Small Causes Court, Bombay, *Publications*: History and Origin of Polo; Mendicancy in India. *Address*: Secretariat, Bombay.

DELAMAIN, LIEUT.-GEN. SIR WALTER SINCLAIR, K.C.B., 1922, K.C.M.G., *cr.* 1918; D. S. O., 1904; Indian Army; Adjutant General, since 1920; *b.* 18 February 1862; *m.* 1897 Gladys Frances, *d.* of Thomas Russell, J.P.; joined Royal Berks Regiment, 1881; Capt. 1892; Major 1901. Served Egypt 1882, (medal, bronze star); Burmah, 1885-88, (medal with two clasps); Zaila Field Force, 1890; China 1900 (despatches, medal); Waziristan, 1901-2 (medal with clasp); Aden Boundary Commission, 1904 (D.S.O.), served (Mesopotamia) European War, 1916-18 (despatches twice). Promoted Major-General, Awarded, K.C.M.G. *Address:* Army Headquarters, India.

DE MONTMORENCY, SIR GEOFFREY FITZHERVEY, K.C.V.O., C.I.E., C.B.E., I.C.S., Private Secretary to the Viceroy, *b.* 23 Aug. 1876. *Educ.*: Malvern; Pembroke College, Cambridge. Entered I.C.S., 1899; Deputy Commissioner, Lyalpur, 1907; Settlement Officer, Chenab, 1907; Junior Secry. to Financial Commissioner, 1911; on special duty in connection with transfer of capital to Delhi, 1912; Personal Assistant and Dy. Commr. till 1918; Dy. Secretary, Foreign and Political Deptt., Govt. of India, 1920-21. Secretary to H.R.H. the Prince of Wales during the Royal Tour in India, Chief Secretary to Punjab Government. *Address*: Viceregal Lodge, Simla and Delhi.

DESIKACHARI, SIR TURIMALAI, DIWAN BAHADUR, KT. (1922), B.A., B.L., recipient Kaisar-i-Hind Medal. High Court Vakil. *b.* Sep. 1868, *m.* Cousin, *d.* of Diwan Bahadur T. M. Rangachari. *Educ.*: Pachaiyappa's and Presidency Colleges. Member, Madras Legis. Council, 1919; President, District Board, Trichinopoly; M.L.C., 1921. *Address*: "Venkata Park," Reynolds Road, Cantonment, Trichinopoly.

DESIKACHARRY, SIR VEMBAKKAM C., Kt., B.A., B.L., F.M.U.; Judge of the Court of Small Causes, Madras, since 1908; *b.* 29 Dec. 1861. *Educ.*: Presidency College, Madras. Additional Member, Madras Legislative Council, 1904-8; Fellow, Madras University, since 1903; sometime Vice-President, National Indian Association, Madras. *Address:* Padma Vilas, Luz, Mylapore, Madras.

DEVADHAR, GOPAL KRISHNA (Kaisar-i-Hind Gold Medal in 1920), Vice-President, Servants of India Society. *b.* 1871. *m.* Dwarkabai Sohani of Poona. *Educ.*: New English School, Poona, and Wilson College, Bombay. M. A., Bombay University, 1904. Served as Principal of the Aryan Education

Society's High School in Bombay, was Examiner of the Bombay University for Matriculation and M. A. examinations in Marathi for more than five years. Joined the late G. K. Gokhale in his public work. 1904, and was first member to join Servants of India Society, 1905, awarded Kaisar-i-Hind Silver medal in 1914. Head of Bombay Branch. Toured in England and on the Continent in 1918 as member of Indian Press Delegation. One of the founders and Hon. Organiser and General Secretary of the Poona Seva Sadan Society started in 1909 and Joint Asstt. General Secretary of the National Social Conference. Organiser of the Malabar Relief Fund, 1921, Vice-President of the Bombay Central Co-operative Institute in 1921 and 1922; Director, Bombay Central Co-operative Bank. Has published several pamphlets on co-operation, Female Education and Social Reform. *Address*: Girgaum, Bombay.

DHRANGADHRA, H. H. MAHARANA SHRE SIR GHANSHYAMSINHJI, G.C.I.E., K.C.S.I. MAHARAJA SAHEB; *b.* 1889; *Suc.* father 1911. *Educ.*: in England with private tutors under guardianship of Sir Charles Ollivant. *Address*: Dhrangadhra, Kathiawar.

DICK, GEORGE PARIS, C.I.E., 1916 Bar-at-Law; Member of C. P. Legislative Council, 1921, and of each preceding Council; Govt. Advocate, C.P.; *b.* 1866, *m.* Effie Geraldine Newman. *Educ.*: Dulwich College; called to Bar, Middle Temple, 1889; Advocate of Calcutta High Court, 1893; of the Judicial Commissioner Court, Nagpur, 1891; Lecturer in Law to the Morris College, Nagpur. President, New English High School and President, Nagpur Civil Station Municipal Council. *Publication*: Filch and His Fortunes. *Address*: The Kothi, Nagpur.

DINAJPUR, MAHARAJA JAGADISH NATH RAY BAHADUR; *b.* 1894. *s.* by adoption to Maharaja Sir Girija Nath Ray Bahadur, K.C.I.E.; *m.* 1916. *Educ.*: Presidency College, Calcutta. President, Dinajpur Landholders' Association; Municipal Commissioner; Chairman, Dinajpur Municipality Member, Dis. Board, Dinajpur and Member, British India Association Bengal Landholders' Assocn., Asiatic Society of Bengal, East India Assocn., London, Calcutta Literary Society, North Bengal Zamindars' Assocn., Bangiya Sahitya Parishat *Address*: Dinajpur Rajbati, Dinajpur.

DONALD, DOUGLAS, C.S.I., (1921); C.I.E.; Commandant, B.M. Police and Samana Rifles. *b.* 1865; *Educ.*: Bishop Cotton School, Simla. Joined the Punjab Police Force at Amballa, 1888; transferred to Peshawar, 1889; appointed C.B.M. Police, Kohat, 1890; served Miranzai Expeditions, 1891, on Samana posts and Tirah, re-transferred to Kohat, 1899; on special duty to raise Samana Rifles. *Address*: Military Police, Kohat.

DORNAKAL, BISHOP OF, since 1912; RT. REV. VEDANAYAKAM SAMUEL AZARIAH (1st Indian bishop, Hon. LL.D. (Cantab.); *b.* 17 Aug. 1874; *Educ.*: C. M. S. High School, Meugnanapuram; C. M. S. College, Tinnevelly; Madras Christian College. One of founders of Indian Missionary Society of Tinnevelly, 1903; Hon Secre. tary, 1903-9; Hon. Gen. Secretary of National Missionary Society of India, 1906-9; visited Japan as Delegate of World Student Christian Federation, 1907, and its Vice-President, 1909-11; visited England as Delegate to World's Missionary Conference, 1910; Head of Dornakal Mission, 1909-12. *Publications*: Holy Baptism, Confirmation, First Corinthians, etc. *Address*: Dornakal Singareni Collieries, Deccan.

DUNDAS, ROBERT THOMAS, C.I.E.; Inspector-General of Police, Bihar and Orissa, since 1914; additional Member of Lieut.-Governor's Council. *b.* 1868, *e. s.* of the late Donald William Dundas. *Address*: Bihar.

EBRAHIM, SIR CURRIMBHOY, 1st Baronet; *s.* of late Ebrahimbhoy Pabaney, Shipowner; *b.* Oct. 25, 1839; sometime a Trustee of Port of Bombay, and Pres. of the Anjuman-i-Islam and of Mahomedan Educational Conference in Bombay; leading member of the Khoja community; J.P. of Bombay; Vice-Pres. of All India Moslem League; Merchant and Millowner; interested in many charitable institutions; Kt., 1905; *m.* 1st, 1854, Foolbai, *d.* 1875, *d.* of Assobhai Ganji of Bombay; 2ndly, 1876, Foolbai, *d.* of Vishram Sajan of Bombay. *Address*: Pabaney Villa, Warden Road, Bombay.

EESTERMANS, DR. FABIAN ANTHONY, O.C., Catholic Bishop of Lahore, since 1905; *b.* Belgium, 1858. *Educ.*: Episcopal Seminary; Hoogstraten; studied Philosophy at Mechlin; joined the Capuchin Order at Enghien, 1878; ordained Priest, 1883; Professor in Apostolic Seraphic School at Bruges, 1885-9; came to India, 1889. *Address*: Lawrence Road, Lahore.

ELIOTT, LT.-COL. FRANCIS HARDING, C.S.I., I.A.; Commissioner, Irrawaddy Division, Burma, since 1911; *b.* 1862. *Educ.*: Harrow. Entered army, 1881; joined Indian Army, 1885; Burma Commission, 1888; Lt.-Col., 1907; served Burma, 1888-9. *Address*: Irrawaddy Division, Burma.

EVERSHED, JOHN, C.I.E., F.R.S., F.R.A.S.; late Director, Kodaikanal and Madras Observatories; *b.* 1864. Assistant Director, Kodaikanal and Madras Observatories, 1906. discovered radial movement in sunspots, 1909; visited New Zealand to select site for Cawthron Observatory, 1914; undertook astronomical expedition to Kashmir, 1915. *Address*: Highbroom, Ewhurst, Surrey.

EWBANK, ROBERT BENSON, B.A. (Oxon.), C.I.E. (1924), I.C.S.; Deputy Secretary to Government of India, Dept. of Education, Health and Lands, *b.* 22 Oct. 1883. *m* Frances Helen, *d.* of Rev. W. F. Simpson of Caldbeck, Cumberland. *Educ*: Queen's Coll., Oxford. Asst. Coll. and Asst. Pol. Agent, 1907; Registrar of Co operative Societies, Bombay, 1912-20; Secretary to Imperial Committee on Co-operation, 1914; Deputy Secretary to Gov. of India successively in Commerce, Rev. and Agric., P.W.D. and Education, Health and Land Departments. *Publications*: Bombay Co-operative Manual and Indian Co-operative Studies. *Address*: U.S. Club, Simla.

EWENS, STANLEY R. (Adopted Indian name, **Jaya Veera**) Colonel, Salvation Army. Chief Secretary for Western India Territory, which includes all the Army's work in Bombay Presidency. *b.* 15th Feb. 1867. Became an officer of the S.A. in 1884 (out of Notting Hill, London). Has previously done S.A. service in South America, Ceylon and Great Britain and as under Foreign Secretary at the Army's International Headquarters and held important positions at the S.A. National Headquarters, London.

FAIRBROTHER, COL. WILLIAM TOMES, C.B., F.R.G.S.; I.A.; *b.* 1856. *m.* 1901, Marie B. Lamb *s. d.* of Rev. W. Lamb, Rector, Desertserges, Co. Cork. Entered Army, 1875; Lt.-Col., I.A., 1901; Brevet-Col. 1904; served Afghan War, 1878-80; Sikkim Expn., 1888; N.E. Frontier, Assam, 1894; Chitral 1895; Waziristan, 1901-2; was Commandant, 13th Rajputs, 1898-1905. *Address:* Bareilly, Srinagar, Kashmir.

FANE, MAJ.-GEN. SIR VERE BONAMY, K.C.B. (1921), K.C.I.E. 1918), C.B., C.I.E., F.R.G.S., I.A., G.O.C. Burma Independent District. *b.* 1863, *m.* 1891, Kathleen Emily, *d.* of late J. Barratt. *Educ.:* Privately Woolwich. Entered army from Militia, 1884; joined I.A 1888; served Waziristan, 1894-95; Tochi F.F. 1897-98; D.A.A.G. 1st Brigade, China, 1900; D.A.Q. M.G. Cavalry Brigade, China, 1901-02; Chief of Police, N.W.F., 1908; Mohmand, commanded troops from Bannu and N. W. Militia at decisive action near Dirdoni, Tochi, 26th March 1915. Commanded 7th Meerut Division in Mesopotamia, Palestine and Syria and was first British General to enter Baghdad, 11th March, 1917. Six times mentioned in despatches, promoted Maj.-Gen. for distinguished conduct in the field, received Croix de Guerre and Order of the Nile (2nd class). Knight of Grace of the Order of St. John of Jerusalem. *Address:* Maymyo.

FARIDKOT, H H. FARZAND-I-SAADAT NISHAN HAZRAT-KAISAR-I- HIND, BRAR BANS, RAJA HAR INDAR SINGH BAHADUR OF, *b.* 1915, *s.* in 1919 rules one of the Sikh States of the Punjab. *Address:* Faridkot, Punjab.

FARIDOONJI JAMSHEDJI, NAWAB SIR FARIDOON JUNG FARIDOON DAULA, FARIDOON MULK BAHADUR, K.C.I.E., C.S.I., C.B.E.; Member Extraordinary, and Acting President, H. E. H. the Nizam's Executive Council. *b.* 1849. *Address:* Saifabad, Hyderabad, Deccan.

FATEH ALI-KHAN, HON. HAJER, NAWAB KIZILBASH, C.I.E.; *b.* 1862. *S.* to headship of Kizilbashes, 1896. Placed himself and his great clan at disposal of Government for Chitral campaign, and induced many of tribes across border to adopt attitude of pacific non-intervention. For this service, received 3,000 acres of land in Chenab Canal Colony for settlement of his followers; has served on Punjab Legislative Council; representative of Punjab at Famine Conference, 1897; Life President of Anjumani-Islamia, Lahore, and Imamia Association of Punjab; a Counsellor of Aitchison Chiefs' College, Lahore; Fellow of Punjab University Trustee of Aligarh College; *Heir: s.* Nisor Ali Khan. *Address:* Aitchison Chiefs' Coll., Lahore.

FAWCETT, THE HON. MR. JUSTICE CHARLES GORDON HILL, Judge, High Court, Bombay, since April 1920. *b.* 28 June 1869. *Educ.:* Harrow; Pembroke Coll., Cambridge. Entered I.C.S., 1888. Under Sec. to Govt. of Bombay, 1898. Acting Remembrancer of Legal Affairs, 1899. Remembrancer and Sec. to Govt., 1904. Additional Judicial Commr. Sind, 1914. Judicial Commr., Sind, 1918. *Address:* The Ridge, Malabar Hill, Bombay.

FAZL-I-HUSAIN, THE HON. MR. B.A. (Punjab), M.A. (Cantab.), Bar-at-Law (Gray's Inn); Minister for Education, Punjab Government. *b.* 14 June 1977. *m.* eldest *d.* of Mian Nurahmad Khan. *Educ.:* Abbottabad, Govt. College, Lahore, Christ's College, Cambridge. Practised in Sialkot 1901-5; in the Punjab High Court, Lahore 1905-20, Presdt. High Court Bar Association, 1919-20, Professor and Principal Islamia College, 1907-8, Secretary Islamia College, 1906-18; Fellow, Punjab University 1909; Syndic. Punjab University 1912; represented Punjab University on Legislative Council 1917-20; President, Urdu Educational Confee. 1922; started Muslim League 1906; President, Punjab Prov. Council 1916; elected to Punjab Legislative Council, 1920. *Address:* Lytton Road, Lahore; Brockhurst No. 1. Simla E.

FAZL-I-HUSAIN, THE HON. KHAN BAHADUR MIAN, B.A. (Punjab), M.A. (Cambridge), Bar-at-Law; Minister for Education, Punjab. *b.* 15 June 1877. *Educ.:* at Govt. Coll., Lahore, and Christ Coll., Cambridge. President, High Court Bar Assen., Secretary, Islamia Coll Committee; Member of the pre-Reform Punjab Legis. Council, Fellow of the Punjab University for last 12 years and Mem. of the Syndicate for 7 years; Secretary, Punjab Prov. Muslim League, Presdt., Special Prov. Congress, Presdt., All-India Mahomedan Educl. Confee. *Publications:* a series of lectures. *Address:* 2, Lytton Road, Lahore.

FRENCH-MULLEN, MAJOR JOHN LAWRENCE WILLIAM, C.I.E.; Commandant, Myitkyina Gurkha Rifle Battalion, Burma Military Police; 13th Duke of Connaught's Lancers (Watson's Horse), I.A.; *b.* 1868; *Educ.:* The Oratory School, Edgbaston. Joined army, 1887; I.A., 1889; served Kachin Hills, 1893; commanded Military Police Escort to the Burma China Boundary Commission, 1898, 1900; commanded Military Police Column which entered Pienma N.E.F., 1910. *Address:* Myitkyina, Upper Burma.

FILOSE, LT.-COL. CLEMENT, M.V.O.; Military Sec. to Maharaja of Gwalior, since 1901; *b.* 1853. *Educ.:* Carmelite Monastery, Clondalkin; Carlow College. Entered Gwalior State service, 1872; Lt.-Col., 1903; Assistant Inspector-Gen., Gwalior Police and General Inspecting Officer, 1893-97; A.D. C. to the Maharaja Scindia, 1899-1901. *Address:* Gwalior.

FIRMINGER, VEN. WALTER K., F.R.G.S.; Archdeacon of Calcutta, since 1914; Editor of the Indian Churchman, 1900-05; Chaplain on Indian Establishment; *b.* 1870; *Educ.:*

Lancing and Bury St. Edmunds; Merton Coll., Oxford., D.D., L.B.; Honour School of Modern History. Ordained Deacon at Hereford, 1893; Priest in Mombasa, 1895; Sub-dean of Zanzibar, 1896; present at bombardment. Government of India Historical Records Commission; Editor of Bengal Past and Present, 1907-19; Editor, Bengal District Records. *Address:* St. John's House, Calcutta.

FOSSE, SIR CLAUDE FRASER DE LA, M.A., C.I.E., D. Litt., Vice-Chancellor, Allahabad University. *b.* 10 Feb. 1868. *m.* Minnie Caroline Briscoe. *Educ.:* Bath Coll. and Trinity Coll., Oxford. Member of India Education Service, Director of Public Instruction from 1909-1922. *Publication:* History of India. *Address:* Allahabad.

FOULQUIER, RT. REV. EUGENE CHARLES, Vicar Apostolic of Northern Burma and Titular Bishop of Corydallus, since 1906; *b.* 1866. *Address:* Mandalay.

FREELAND, MAJOR-GEN. SIR HENRY FRANCIS EDWARD, K. C. I. E. (1920); C. B. (1917); M.V.O. (1911); D.S.O. (1916), Officer of the Legion of Honour. Agent, B. B. and C. I. Railway. *b.* 29 December 1870. *m.* Ethel Louise, *d.* of Col. T. Malcolm Walker, R. A. Entered R. E. 1891. Served in Chitral, with China Expeditionary Force and in European War. *Address:* Bombay.

FREMANTLE, SELWYN HOWE, C.I.E. (1915), C.S.I. (1920); I.C.S., Senior Member, Board of Revenue, U.P. *b.* 11 Aug. 1869. *m.* to Vera *d.* of H. Marsh, C.I.E. *Educ:* Eton and Magdalen College, Oxford. Entered I.C.S. 1890; Settlement Officer, Bareilly, 1898; Registrar, Co-operative Societies, 1907; Magte. and Collr., Allahabad, 1913; Commissioner, Bareilly, 1918; Controller of Passages, 1919; Commissioner, Meerut, 1920. *Publications:* Rai Bareli Settlement Report, 1896; Bareilly Settlement Report, 1902; Report on Supply of Labour to factories 1905; A Policy of Rural Education 1915. *Address:* Lucknow, U.P.

FRENCH, LEWIS, C.I.E., C.B.E., 1919; Financial Secretary (1920); *b.* 26 October 1873; *Educ.:* Merchant Taylor's School; St. John's College, Oxford. Assistant Commissioner, Punjab, 1897; Colonisation Officer, Chenab Colony, 1904-06; Director, Land Records, 1906, Director, Agriculture, 1907; Deputy Commissioner, Shahpur, 1908; Chief Minister, Kapurthala State, 1910-15; Special Commissioner, Defence of India Act, 1915; Director, Land Records, 1915; Additional Secretary, Punjab Govt., 1916-18; Ch. Secretary, 1918-19; Addl. Secretary, 1919; and Chief Secretary, 1919-1920; Member, Punjab Leg. Council. *Address:* Lahore.

FROOM, SIR ARTHUR HENRY, Kt. Bach. (1922); entered service P. & O. S. N. Co., 1890; Superintendent, P. & O. S. N. Co., Bombay, 1912; Partner in firm of Mackinnon Mackenzie & Co., Bombay, from 1916; Trustee, Port of Bombay from 1912; Chairman, Bombay Chamber of Commerce, 1920; Member of Imperial Legislative Council, Govt. of India, 1920; Member of Council of State, India, from 1921; Member, Central Advisory Council, Railways, India; J. P., Bombay; *b.* 15 January 1873; son of late Henry Froom; *Educ.* St. Paul's School; *m.* 22nd Feb. 1905, Effie, youngest *d.* of late Thomas Bryant, F.R.C.S. *Address:* Pedder Road, Cumballa Hill, Bombay.

FYSON, PHILIP FULLEY, M.A. (Cantab), F.L.S.; Ag. Inspector of Schools, Ganjam and Vizagapatam Districts. *b.* 1877, *m.* Diana Ruth Wilson, 1914. *Educ.:* Loretto School; Sidney, Sussex College, Cambridge; Science Master, Aldenham Grammar School, 1901-2; Assistant to Professor of Botany, Univ. Coll., Aberystwyth, 1902-3; Assistant at Aynsom Agricultural Station, 1913-14. Professor of Botany, Presidency College, Madras, 1914-1921. *Publications:* "Flora of the Nilgiri and Pulney Hill-tops, Vol. I and II (1915), Vol. III 1920; "Botany for India"; *Editor:*—Journal of Indian Botany. *Address:* Presidency College, Madras.

GAGE, ANDREW THOMAS, C.I.E., M.A., B.Sc., M.B., F.L.S.; Lt.-Col., I.M.S.; Director, Botanical Survey of India; Supdt. Royal Botanic Gardens, Calcutta, since 1906; *b.* 1871; *Educ.:* Grammar School, Old Aberdeen; University of Aberdeen; Assistant to Professor of Botany, University of Aberdeen, 1894-96; entered I.M.S., 1897; Curator of Herbarium, Calcutta Botanic Gardens, 1898. *Address:* Royal Botanic Gardens, Calcutta.

GAME, AIR VICE-MARSHAL PHILIP WOOLCOTT, C. B. (1919); D. S. O. (1915); R.A.F., Commanding the Royal Air Force in India since January 1923. *b.* 30 March 1876; *s.* of George Beale Game, Barn House, Broadway, Worcestershire; *m.* 1908, Gwendolen Margaret, *a.* of the late Francis Hughes-Gibb of Gunville, Manor House, Blandford, Dorset; two *s.* one *d.* *Educ.:* Charterhouse. Entered R. A., 1895; Captain, 1901; Adjutant, 1902-5; Major, 1912; General Staff Officer 3rd and 2nd Grade War Office, 1910-14; Director of Training and Organisation, Air Ministry, 1919-22; won Gold Medal, United Service Inst., 1911; served S. Africa, 1901-2 (despatches, Queen's medal, 5 clasps); European War, 1914-18 (despatches 6 times, C.B., D.S.O., Bt. Lt.-Col. and Col., Order Crown of Italy, Officer Legion of Honour. *Address:* Headquarters R.A.F., Delhi and Simla.

GANDHI, MOHANDAS KARAMCHAND, Bar.-at-law (Inner Temple). *b.* 2nd October 1869. *Educ.* at Rajkote, Bhavnagar, and London. Practised law in Bombay, Kathiawar, and South Africa. Was in charge of an Indian ambulance corps during the Boer War and the Zulu revolt in Natal. During the great war raised an ambulance corps and conducted a recruiting campaign in Kaira district. Started and led the Satyagraha movement (1918-19) and the non-cooperation campaign (1920) in addition to associating himself with the Khilafat agitation (1919-21). Has championed the cause of Indians abroad, notably those in South and East Africa. *Publication:* "Indian Home Rule," "Universal Dawn." Sentenced to six years' simple imprisonment in March 1922.

GANGA RAM, SIR, KT., (1922), C.I.E., M.V.O., Rai Bahadur, M.I.M.E., M.I.C.E.; *b.* 1851, *Educ.:* Thomson College. Entered P. W. D.

1873; Executive Engineer, 1883; Supdt., Coronation Durbar Works, Delhi, 1903; retired, 1903; Supdtg. Engineer, Patiala State; retired, 1911; Consulting Engineer, Delhi Durbar, 1911. *Address:* Lahore.

GEBBIE, FREDERICK ST. JOHN, C.I.E., (1920), Consulting Engineer to the Government of India, 1923. *b.* 7 Aug. 1871. *Educ.:* Edinburgh Collegiate School, Edinburgh Univ. and R.I.E. College, Joined P.W.D. as Assist. Engr., 1893; Exec. Engr., 1899; Suptg. Engr., 1912; Chief Engr. in Sind and Sec., Indus River Commsn., 1915; Chief Engr. and acting Sec. to Govt. of Bombay, 1916; Sec. to Govt. of Bombay 1916; Chairman, Nile Projects Commission, 1920. Inspector-General of Irrigation, 1921-23. *Address:* Simla.

GENNINGS, JOHN FREDERICK, Bar-at-Law (Middle Temple, 1911); Director of Information, Bombay, since December 1920. *b.* 21 Sept., 1885. *m.* Edith, *d.* of T. J. Wallis, Esq., of Croydon, Surrey and Aldeburgh, Suffolk. *Educ:* Aske's Hatcham and Dulwich. Entered journalism in 1902 and served on the Editorial staffs of the Morning Leader, Star, Daily Mail and Daily Telegraph. Army (2/5th Buffs. and R. G. A.), 1915-1919; War Office. M. I. 7 b, Propaganda Section, from Aug. 1916 to Feb. 1917. *Address:* Secretariat, Bombay.

GEOGHEGAN, LT.-COL. FRANCIS EDWARD, C.I.E. Director of Supplies, G. H. Q., India. *b.* 14 August, 1869. *Educ.:* St. Charles College and R. M. C. Sandhurst; *m.* Miss L. L. Munn; 2nd Lt., Gloucestershire Regiment, 1889, Indian Army, 1891. Served in N. W. Frontier Campaign, 1897; China, 1900; European War, 1914-18 (despatches). *Address:* C/o. Messrs. King, King & Co., Bombay.

GEORGE, EDWARD CLAUDIUS SCOTNEY, C.I.E., Dy. Commissioner, Ruby Mines, Burma *b.* 1865. *Educ.:* Dulwich College. Asst. Commissioner, 1887-90; Officiating Dy. Commissioner, Bhamo, 1890-97; Sub-Commissioner, Burmo-China Boundary Commission, 1897-99. *Address:* Ruby Mines, Burma.

GHOSAL, MRS. (SRIMATI SVARNA KUMARI DEVI); *d.* of Maharshi Debendra Nath Tagore, and sister *of* Sir Rabindranath Tagore; *b.* 1857; *m.* late J. Ghosal, Zemindar. Before twenty published a novel anonymously; soon after became editor of Bharti (first woman editor in India), a Bengali magazine which she still conducts. *Address:* Old Ballygunge Road, Calcutta.

GHOSE, THE HON. MR. JUSTICE CHARU CHUNDER, Judge, Calcutta High Court, since July, 1919. *b.* 4 February 1874. *Educ.:* Presidency College, Calcutta; *m.* Nirmal Nolini, *d.* of the late Protap Chunder Bose Vakil, Calcutta, 1898. Called to the Bar in England, 1907. *Address:* High Court, Calcutta.

GHOSE, BABU SATIS CHUNDER, B.A., B.L., Vakil, High Court and Zamindar. Member, Legislative Assembly, *b.* 1865. *m. d.* of the late Babu Bamacharan Bose, Zemindar of Malkhannagar. *Educ.:* Hindu School and Presidency College, Calcutta. Practised as Vakil in Calcutta High Court until 1921; Member, British Indian Association, Calcutta. *Address:* 27-1, Harish Mukherjee Road, Bhowanipore, Calcutta.

GIBBONS, THOMAS CLARKE PILLING, K.C.; 1913, Advocate-General, Bengal, since 1917. *b.* 1868. Admitted a Solicitor, 1891; called to Bar; Inner Temple, 1897. *Address:* High Court, Calcutta.

GIDHOUR, MAHARAJ KUMAR CHANDRA MOULESSHUR PRASAD SING; *S. & H.* of Maharaja Sir Ravneswar Prasad Sing Bahadur of Gidhour. *b.* 1890. *m.* 1913. Member, District Board; Vice-Chairman, Local Board. *Address:* Gidhour, Monghyr, Behar.

GIDHOUR, MAHARAJAH SIR RAVNESWAR PRASAD SINGH, BAHADUR OF, K.C.I.E.; premier nobleman in Bihar and Orissa. *b.* 1860. *m.* 1886. Member of Bengal Leg. Council, 1893-95 and 1895-97. 3rd time, 1901-03; 4th time, 1903. Life Vice-President. B.L. Association; title of Maharajah Bahadur made hereditary, 1877. Hon. Member of Leg. Council of new Province, 1913. *Address:* Gidhour, Monghyr, Behar.

GIDHOUR, MAHARAJ KUMAR CHANDRAMOULESWAR PRASAD SINGH, M.L.C. *b.* 1890. Member, Legislative Council, Bihar and Orissa, of Dist. Board, Monghyr, Hon. Magte., Gidhour Independent Bench. Installed on the *gadi*. Managing Proprietor of the Raj. *Address* Gidhour, Monghyr, Behar.

GIDNEY, HENRY ALBERT JOHN, LT.-COL. I.M.S. (retired); F.R.C.S.; F.R.S.; D.O. (Oxon.); F.R.S.A. (London); D.P.H. (Cantab), J.P.; M.L.A. Ophthalmic Surgeon, *b.* 9 June 1873; *Educ.:* at Calcutta, Edinburgh R. College, University College Hospital, London, Cambridge and Oxford. Entered I.M.S., 1898. Served in China Expedition, 1900-01 N. E. Frontier, 1913. N. W. Frontier, 1914-15 (wounded). *Publications*; numerous works on Ophthalmic Surgery. President-in-Chief, Anglo-Indian and Domiciled European Association, India; Municipal Councillor, Bombay Corporation; Member of Legislative Assembly. *Address:* Simla and Delhi.

GILLES, SIR ROBERT SIDNEY, KT. (1922), M.A. (Oxon.); Bar.-at-Law. *Educ.:* Clifton Coll. and Magdalen Coll., Oxford. Called to Bar by Middle Temple 1890; practised in Rangoon since, 1894. Vice-Chancellor, Univ. of Rangoon (1921). *Address:* 5, Fraser Road, Rangoon.

GILLUM, SIDNEY JULIUS, J.P., Managing Director, The Bombay Company, Ltd., *b.* 1 July 1870; *m.* Dorothea, *d.* of C. S. Smith, some time H. M. Consul-General at Barcelona. *Educ.:* Winchester and King's Coll., Cambridge; 2nd Class Classical Tripos. Dy. Chrmn., Bombay Chamber of Commerce and additional member, Bombay Leg. Council, 1918-19. Presdt. Bank of Bombay, July-Decr. 1920. Sheriff of Bombay, 1921; Member, Leg. Council, Bombay, 1921-22. *Address:* C/o. The Bombay Company, Ltd., Bombay.

GILMORE, THE REV. DAVID CHANDLER, M.A., D.D., Professor of English, Judson College, Rangoon, *b.* 29 August 1866. *Educ.:* Rochester University, U.S.A. *m.* Gertrude Price Clinton. Prof. in Judson College, 1890-96; Mis-

sionary at Tavoy and Henzada, 1897-1905; Prof. in Judson College, 1908-22; Principal, Judson College, 1917-1920, Lecturer in English Literature in Judson College, 1921-23. President of the American Association in Burma, 1923. *Publications:* Elementary Grammar of Sgaw Karen; Harmony of the Gospel in Sgaw Karen; The End of the Law. *Address:* Rangoon.

GLANCY, REGINALD ISIDORE ROBERT, C.S.I., (1921), C.I.E., President, Cabinet, Jaipur, 1923. *b.* 1874; *m.* Helen Adelaide, *d.* of Edward Miles, Bowen House. *Educ.:* Clifton College; Christ Church, Oxford. Entered I.C.S., 1896; Settlement Officer Bannu, 1903; Political Agent, 1907; First Asst. Resident, Hyderabad, 1909; Finance Member of Council, H. E. H. the Nizam's Government 1911-1921; Resident in Baroda, 1922. *Address:* Jaipur.

GODFREY, SIR GEORGE COCHRANE, B. A., (Cambridge), A.M.I.C.E., KT., 1919, V. D. Agent, Bengal, Nagpur Railway, *b.* 27 Sep. 1871; *m.* Ethel Kingsford in 1900. *Educ.:* Harrow and Trinity College, Cambridge. Came out to India in 1895 as Asst. Engr. B. N. Railway. Worked on the construction of East Coast Railway for 5 years when transferred to Head Office at Calcutta and appointed Deputy Manager. Acted as Agent and confirmed in that appointment in 1910; during war appointed to the Railway Board and later made Coal Controller for India. *Address:* Bengal-Nagpur Railway Offices, Calcutta.

GOLDIE, MAJ. KENNETH OSWALD, C.I.E., M.V.O., O.B.E., Mily. Secretary to the Governor of Madras since 1919; *b.* 10 September 1882. *Educ.:* Wellington and R.M.C. Sandhurst. Commissioned 1901. Joined 10th Lancers, 1902. Extra A.D.C. to the Viceroy, 1908; A.D.C. to the Governor of Bombay, 1913-16. Served in Mesopotamia, 1916-19. *Address:* Government House, Madras.

GOLDSMITH, REV. MALCOLM GEORGE, Missionary of C.M.S. in Madras and Hyderabad, Deccan; *b.* 1849. *Educ.:* Kensington Proprietary Grammar School; St. Catherine's College, Cambridge. Ordained, 1872; C.M.S. Missionary, Madras, 1872-73; Calcutta, 1874-75; Principal, Harris School, Madras, 1883-91; Hyderabad, 1891-99; Hon. Canon, St. George's Cathedral, Madras, 1905. *Address:* Royapet House, Royapettah, Madras.

GONDAL, His HIGHNESS THAKORE SAHEB BHAGWAT SINHJEE OF, G.C.I.E., K.C.I.E.; *b.* 1865; *s.* of late Thakore Saheb Sagramji of Gondal; *m.* 1881, Nandkuverba, C. I., *d.* of H. H. Maharana of Dharampore. *Educ.:* Rajkumar Coll., Rajkot; Edin. Univ. Hon. LL. D. (Edin.) 1887; M. B. and C. M. (Edin.) 1892; M.R.C.P. (Edin.) 1892; D. C.L. (Oxon.) 1892; M. D. (Edin.) 1895; F.R.C.P. (Edin.) 1895; F.C.P. and S. B. 1913; Fellow of University of Bombay, 1885: F.R.S.E., 1909; M.R.A.S., M.R.I. (Great Britain and Ireland). *Publications:* Journal of a Visit to England; A Short History of Aryan Medical Science. *Address:* Gondal, Kathiawar.

GOODIER, THE MOST REV. ALBAN, R. C. ARCHBISHOP OF BOMBAY since 1919, *b.* at Preston, 14 April 1869. *Educ.:* Stonyhurst. Entered the Society of Jesus, 1887. Joined the staff of St. Xavier's College, Bombay, 1914. Rector and Principal of that College, 1916-1919. *Address:* Bombay.

GOSCHEN, His EXCELLENCY LORD GEORGE JOACHIM OF HAWKHURST, C.B.O. (1918); Governor of Madras. *b.* 1866, *e. s.* of 1st Viscount Goschen and Lucy, *d.* of John Dailley; *S.* father 1907. *m.* 1893, Lady Evelyn Gathorne-Hardy, 5th *d.* of 1st Earl of Cranbrook; two *d. Educ:* Rugby; Balliol Coll., Oxford. Was Private Secretary to Governor of N. S. Wales, and (unpaid) to his father at Admiralty; Joint Parliamentary Secretary, Board of Agriculture, 1918; M. P. (C.) E. Grinstead, Sussex, 1895-1906; A. D. C. to Lord Roberts, Commander-in-Chief; Lt.-Col. 2-5th Buffs East Kent Regt. Heir: *b.* Hon. W. H. Goschen. *Address:* Government House, Madras.

GOUR, HARY SINGH, M.A., D. Litt., D.C.L., LL.D., Member of the Legislative Assembly, Barister-at-law. *b.* 26 Nov. 1870. *Educ.:* Govt. High School, Saugor; Hislop Coll., Nagpur; Downing Coll., Cambridge Presdt., Municipal Committee, Nagpur. 1918-22. First Vice-Chancellor, and Hon. D. Litt. Delhi University. *Publications:* Law of transfer in British India, 3 vols. (4th Edition). Penal Law of British India, 2 vols. (2nd Edition). Hindu Code. (2nd Edition.) *Address:* Nagpur, C. P.

GRACEY, HUGH KIRKWOOD, C.B.E. (1919), I.C.S.; *b.* 23 November 1868. *Educ.:* City of London School; St. Katharine's College, Cambridge. *m.* Mabel Alice, *d.* of the late G. F. Barrill. Commissioner of Gorakhpur since 1916. *Publication:* Settlement Report of Cawnpore. *Address:* Gorakhpur, U. P.

GRAHAM, REV. JOHN ANDERSON, M.A. (Edin.), D.D. (Edin.), K.I.H. Gold Medal, C.I.E.; Missionary of Church of Scotland, at Kalimpong, Bengal, since 1889; Founder and Hon. Supdt. of St. Andrew's Colonial Homes; *b.* 1861. *Educ.:* Cardross Parish School; Glasgow, High School; Edinburgh University. *m.* Kate McConachie (K.I.H. gold medal) who died 1919. Was in Home C.S. in Edinburgh, 1877-82; graduated, 1885; ordained, 1889. *Publications:* "On the threshold of three closed lands" and "The missionary expansion of the Reformed Churches." *Address:* Kalimpong, Bengal.

GRAHAM, LANCELOT, B.A. (Oxon.); C.I.E. (1924); I. C. S., Joint Secretary, Legislative Dept., Govt. of India (1921). *b.* 18 April 1880, *m.* Olive Bertha Maurice. *Educ:* St. Paul's School, London and Balliol Coll., Oxford. Entered Indian Civil Service, 1904; Asstt. Collector, 1904; Asstt. Judge, 1908; Asstt. Legal Remembrancer, Bombay, 1911; Judicial Asstt., Kathiawar, 1913. *Address:* Grindlay & Co., Bombay.

GRAHAM, ROBERT ARTHUR, C.S.I. (1921); Chief Secretary, Govt. of Madras. *Educ.:* Winchester and Brasenose College, Oxford. *m.* daughter of Sir James Thomson, K.C.S.I. Entered I.C.S., 1891; served in various

executive, judicial and administrative capacities in the Madras Presidency. *Address:* Secretariat, Madras.

GREAVES Hon. Sir William Ewart; Kt. (1924); Judge of Calcutta High Court, since 1914; *b.* 1869; *Educ.:* Harrow; Keble College, Oxford. Asst. Master at Evelyns, nr. Uxbridge, 1894-99; called to Bar, Lincoln's Inn, 1900. *Address:* 2, Short Street, Calcutta; 33, Marlborough Place, N. W.

GREGSON, Lieut. Colonel, Edward Geison, C.M.G., 1917; C.I.E., Supdt. of Police, N.-W. F. Prov.; *b.* 1877. *Educ.:* Portsmouth Grammar School, Asst. Blockade Officer, Waziristan, 1900, Poll. Officer, Mohamand Border, 1908; Commdt., Border Military Police, Peshawar, 1902-07; Per. Asst. to Inspr.-Gen. of Pol., N. W. F., 1907-9; on special duty Persian Gulf, 1909-12; Commissioner of Police, Mesopotamia. *Address:* Rake, Liss, Hants.

GRIFFITH, Francis Charles, C.S I. (1923), O.B.E. (1919), M.L.C., King's Police Medal (1916); Insp.-Gen. of Police, Bombay Presy., 1921. *b.* 9 November 1878; *m.* Ivy Morna, daughter of George Jacob, I.C.S., *Educ.:* Blundell's School, Tiverton. Joined Indian Police, 1898; Commr. of Police, Bombay, 1919-21. *Address:* Poona.

GULAMJILANI, Bijlikhan, Sardar Nawab of Wai, Member, Legislative Assembly and First Class Sardar of the Deccan. *b.* 28 July 1888. *m.* sister of H.H. The Nawab Saheb Bahadur of Jaora. *Educ.:* Rajkumar College, Rajkot. Served in the Imperial Cadet Corps for two years, 1906-08; Was Additional Member, Bombay Legis. Council; was Elected Vice-President, Bombay Presidency Muslim-League and is permanent President of Satara District, Anjuman Islam. *Address:* The Palace, Wai, Dist. Satara.

GUPTA, Sir Krishna Govinda, K.C.S.I., C.S.I.; Bar.-at-Law, Middle Temple, 1873; late I.C.S.; *b.* 1851. *Educ.:* Mymensing Govt. School; Dacca Coll.; London University Coll. Joined I.C.S., 1873; passed through all grades in Bengal; Secy., Board of Rev. 1887; Commsr. of Excise, 1893; Divl. Commsr. 1901; Member to Board of Rev., 1904, being first Indian to hold that appointment; Member, Indian Excise Committee, 1905; on special duty in connection with Fisheries of Bengal, 1906; deputed to Europe and America in 1907 to carry on fishery investigation; nominated to Indian Council, 1907; being one of two Indians who were for first time raised to that position; retired from India Office on completion of term, March 1915.

GWALIOR, H. H. Maharajah Scindia of, G.C.V.O., G.C.S.I., G.B.E., Hon. LL.D., Camb.; D.C.L. Oxon; Hon. and Extra A.D.C. to King; Hon. Col., 1st D. & O. Lancers, 1906. *b.* 20 Oct. 1876; *s.* 1886; made Hon. Col., British Army, 1898; Maj.-Genl.; Lt.-General; went to China as Orderly Officer to General Gaselee, 1901; provided expedition with hospital ship; salute of 21 guns. Was chiefly responsible for the purchase and upkeep of the hospital ship Loyalty, 1914-18. *Address:* "Madho Bilas," Shivapuri, Gwalior, C. I.

HABIB-UL-LAH SAHIB, Bahadur The Hon. Khan Bahadur Sir Muhammad, Kt. (1922), C.I.E. (1920) Member at Council of the Governor of Madras (1920). *b.* Sept., 22, 1869, *m.* Sadathun Nisa Begum. *Educ.:* Zilla High School, Saidapet. Joined the Bar in 1888; in 1897 was presented Certificate of Honour on the occasion of Golden Jubilee of the late Imperial Majesty Queen Victoria; From 1901 devoted whole time to local self-government and held the position of Chairman of Municipal Council, Pres., Taluk Board and Pres., Dist., Board; Khan Bahadur, 1905; Member, Legislative Council, 1909-12, appointed Temporary Member, Madras Executive Council, 1919; was Commissioner of Madras Corporation, 1920. Gave evidence before Royal Commn. on Decentralisation and also before Public Services Commn., served as a co-opted member on Reforms Committee, *Address:* Secretariat, Madras.

HADOW, Frederick Austen, C.V.O. (1922). Agent, North-Western Railway. *b.* 5 Sep. 1873. m. Kate Louisa Margary. *Educ.:* Branksome House, Golalming, 1883-1887; Charterhouse, 1887-1892; R. I. E. College, Coopers Hill, 1892-95. Associate Coopers Hill, 1895; Appointed Asstt. Engineer, State Rlys. 1895; employed as Asstt. Engineer on construction of new railways in Bengal, 1896-1902; Asstt. Manager, E. B. Rly., 1902-1904; Asstt. Secretary, Railway Board, 1905-1909; Manager and Engineer-in-Chief, B. G. I. P. Rly., Kathiawar, 1909-1911; Deputy Agent, N. W. Rly., Lahore, 1911-1916; Secretary, Railway Board, 1916-1919. *Address:* 2, Mayo Gardens, Lahore, Punjab.

HAIDER KARRAR JAFRI, Syed., Member, Legis. Assembly and Astt. Manager, Court of Wards, Balarampur Raj. *b.* 8 Dec. 1879. Married. *Educ.:* Collegiate School, Balrampur, M.A.O. Coll., Aligarh, Agra College and Mistri's Accountancy Institution, Bombay; Member, Gonda Dist. Board for six years; Member, Municipal Board, Balrampur for 17 years; Hon. Magte., Balrampur for 12 years; Vice-Chairman, Balrampur Central Co-operative Bank; Member, Standing Committee, All-India Shia Conference Trustee, Shia Coll., Lucknow; President and Trustee of the Berhampur Girls' School Member, Legislative Assembly. *Address:* Balrampur, Dist. Gonda (U.P.).

HAILEY, Hammet Reginald Clode, C.I.E.; Director of Land Records and Agriculture, U.P. since 1912; Member of Lieut.-Governor's Council. *Educ.:* Merchant Taylor's School; St. John's College, Oxford. Entered I.C.S., 1892; Jt. Mag., 1899; Dy. Commsr., 1905; Jt. Sec., Board of Revenue, 1906. *Address:* Oudh.

HAILEY, Hon. Sir William Malcolm, K.C.S.I., C.I.E., I.C.S.; Home Member, Government of India, 1922; Knight of Grace of Order of St. John of Jerusalem. *b.* 1872; *m.* 1896, Andreina, *d.* of Count Hannibale Balzani, Italy. Lady of Grace of Order of St. John of Jerusalem; F.R.G.S. *Educ.:* Merchant Taylor's School; Corpus Christi College, Oxford (Scholar). Colonisation Officer, Jhelum Canal Colony, 1902; Sec., Punjab Govt., 1907; Dy. Sec., Govt. of India, 1908

Member, Durbar Committee, 1911; Ch. Commr., Delhi, 1912-19; Chairman, Indian Soldiers' Board, 1921. Finance Member, Government of India, 1919-22. *Address:* Delhi and Simla.

HAKSAR, Lt.-Col. Kailas Narain, B.A., C.I.E., Mahsir-Khas-Bahadur; Pol. Member, Gwalior Durbar, since 1912; *b.* 1878. *Educ.:* Victoria College, Gwalior; Allahabad University; Hon. Prof. of History and Philosophy, 1899-1902; Priv. Sec. to Maharaja Scindia in 1903-12; Under Sec., Pol. Dept., on dep. 1905-7; Capt., 4th Gwalior Imp. Ser. Inf., 1902; Lt.-Col., 1910; Sen. Member, Board of Revenue, 1910-13. *Address:* Gwalior.

HALL, Major Ralph Ellis Carr, C.I.E., I.A.; Mily. Accts. Dept., Field Controller, Poona; *b.* 1873. Joined army, 1894; Major, 1912; served Tirah, 1897-98; European War, 1914-17. *Address:* Field Controller, Poona.

HAMILTON, C. J., M.A., F.S.S.; Indian Educational Service, Prof. of Economics, Patna College; Fellow of Patna University. *b.* 1878, *Educ.:* private tutor; King's College, London; Caius College, Cambridge; graduated first class Moral Science Tripos, 1901; Member of Mosely Educational Commission to U.S.A., 1903; Member of Inner Temple, 1903; Dunkin Lecturer at Oxford University, 1912; Minto Prof. of Economics, Calcutta University, 1913-19. *Publications:* "Trade Relation between England and India." *Address:* Patna College, Patna.

HARCHANDRAI VISHINDAS, B.A., LL.B., C.I.E. (1918); Mem., Legislative Assembly Pleader, Zamindar and Landlord. *b.* Apr. 1862. *Educ.:* Elphinstone College, Bombay. Elected Member, Karachi Municipality, 1888-1899; Legal Adviser, Karachi Municipality, 1899-1910; Again Elected Mem., Karachi Municipality, 1910-21; Pres, Karachi Municipality, 1911-1921; Elected Member, Bombay Leg. Council, 1910-1920; Chairman, Reception Committee, Indian National Congress, 1913; Pre., First Sind Prov. Confce. held at Sukkur 1908; Pres., Special Conference, Hyderabad on Reforms. *Address:* Lakhmidas Street, Karachi.

HARI KISHAN KAUL, Rai Bahadur Pandit, M.A., C.S.I., C.I.E., Commissioner, Jullunder Divn. since Nov. 1920. *b.* 1869; *s.* of Raja Pandit Suraj Kaul, C.I.E., *Educ:* Govt. Coll., Lahore. Asstt. Commsr., 1890; Jun. Secy. to Financial Commsr., 1893-97; Settlement Officer, Muzaffargarh, 1898-1903; Mainwali, 1903-8; Dy. Commsr., 1906; Dy. Commsr. and Supdt., Census Operations, Punjab, 1910-12; Dy. Commsr., Montgomery, 1913; on special duty to report on Criminal Tribes, Dec. 1913-April 1914; Deputy Commissioner for Criminal Tribes, 1917-19; Dy. Commissioner, Jhelum, 1919; Commissioner, Rawal Pindi Division, 1919-20. Appointed to Royal Commission on Services, 1923. *Address:* Abbott Road, Lahore.

HARI SINGH, Rao Bahadur Thakur, of Sattasar, O.B.E., C.I.E., (1923); Military: Member of the Bikaner State Council. *Educ.* Mayo College. *Address:* Sattasar House, Bikaner.

HARNAM SINGH, The Hon. Raja Sir, K.C.I.E.; *b.* 15 Nov. 1851; *y. s.* of late H. H. Raja Rajgan Sir Raja Randher Singh, Bahadur of Kapurthala, G.C.S.I. *m.* 1875, Rani Lady Harnam Singh, 5 *s.* 1 *d. Educ.:* Kapurthala. Managed Kapurthala Estates in Oudh for over 18 years. Served as member of Hemp Drugs Commission in 1893-94; and is Hon. Life Secy. to B.I. Association of Talukdars of Oudh and Fellow of Punjab University, was member of Imp. Leg. Council and afterwards of Punjab Leg. Council 1900-2; Member of the Council of State since 1920. Member of the Central Committee of the Lady Dufferin Fund. Created Raja 1907. Decorated for General Public Service; Raja hereditary (1922). *Address:* Simla or Lucknow or Jullundur City.

HARRIS, Douglas Gordon, Dip. Eng. (Zurich), M.I.E., (Ind.), Deputy Secretary to the Government of India, Department of Industries and Labour, Public Works Branch. *b.* 19 Oct. 1883. *m.* Alice, *d.* of Spencer Ackroyd of Bradford, Yorks. *Educ.:* Rugby School and Federal Polytechnic, Zurich, Switzerland. Asst. and Executive Engineer, P. W. D. 1907-14; Under-Secretary to Government, U.P., P. W. D. 1915; Under Secretary to Government of India, P. W. D., 1916; Secretary to P. W. D. Reorganisation Committee, 1917; Under Secretary to Government of India, P.W.D. 1918; Asstt. Inspector-General of Irrigation in India, 1920; Secretary to New Capital Inquiry Committee, 1922; Deputy Secretary to Government of India, P. W. D., 1922. *Publications:* Irrigation in India (Oxford University Press.) *Address:* Holmcroft, Simla.

HARRIS, Leonard Tatham, C.S.I. (1921); Member, Board of Revenue, 1921. *Educ.:* Falmouth Grammar School; Bath College; New College, Oxford. Entered I.C.S., 1891; Dist. Magte. and Coll., Bangalore, 1899; Head Asst., 1902; Commissioner, Coorg 1905-12; Collector and Agent, Vizagapatam 1912-16; Member, Board of Revenue, 1919; Agency Commissioner, 1920. *Address:* Chepauk, Madras.

HARTLEY, Lewis Wynne, C.I.E. (1918), Commissioner of Income-tax, Bombay Presidency. *b.* 1867; *m.* to Annie, *d.* of William Rowlands, Rofft, Bangor, Wales. Educated at private school, *Address:* Bombay Club Bombay.

HARTNOLL, Sir Henry Sulivan, Kt.; Chief Judge, Court of Lower Burma, since 1906; Barrister, 1898. *Educ.:* Exeter Grammar School: Trinity College, Oxford. Entered I.C.S., 1881; served in Burma as Asstt Commissioner; Dy. Commissioner, 1890 Commissioner, 1902. *Address:* Chief Court Rangoon.

HARTOG, Philip Joseph, C.I.E. (1917); Vice Chancellor, Dacca Univ., since 1920. *b.* 5 March 1864. *m.* Mabel Helene, *d.* of H. J Kisch. *Educ.:* Univ. College School; Owens College, Manchester; Univ. of Paris and Heidelberg; College de France. Asstt Lecturer on Chemistry, Owens College 1891-1903. Lecturer in Victoria Univ., Manchester, 1898-1903. Sec. to Mosely Commn.

of Educational Inquiry, 1902-03. Sec. to Treasury Committee on Oriental Studies in London, 1907-09 and to India Office Committee on same subject, 1910-17. Crown member and Hon. Sec. of Governing Body of School of Oriental Studies, 1916; Member of Calcutta Univ. Commn. 1917-19 ; Academic Registrar, Univ. of London, 1903-20. Has published numerous works on educational subjects. *Address :* Ramna, Dacca.

HATWA, MAHARAJA BAHADUR GURU MAHA DEV ASRAM PRASAD SAHI OF ; *b.* 19 July 1893 , *S.* Oct. 1896 to the *Gadi* after death of father Maharaja Bahadur Sir Kishen Pratap Sahi, K.C.I.E., of Hatwa. *Address :* Hathuwa P. O., District Saran, Behar and Orissa.

HAY, SIR LEWIS JOHN ERROLL; 9th Bt. of Park, *cr.* 1663 ; Indigo Planter; *b.* Stirling N.B., 17 Nov. 1866 ; *e. s.* of 8th Bt. and *d.* of John Brett Johnston of Ballykilbeg, Co Down, *s.* father 1889. *Address :* Dooriah, Motipur, Behar.

HAY, ALFRED, D. Sc.; Professor of Electrical Technology, Indian Institute of Science, Bangalore ; *b.* Russian Poland, 1886 ; *Educ.:* School education received at one of Warsaw "Gymnasia." University of Edinburgh, B. Sc., 1891; studied electrotechnology in London under the late Prof. Ayrton at Central Technical College; Demonstrator in Electrical Engineering at Univ. Coll., Nottingham, 1892; Lecturer on Electro-Technics at Univ. Coll., Liverpool, 1896-1901; graduated D. Sc., 1901; Professor of Electro-Technology, Cooper's Hill, 1901-04; Head of Physics and Elec. Eng. Dept., Hackney Technical Institute, London, 1904-08. *Address :* Indian Institute of Science, Bangalore.

HAYWARD, THE HON., SIR, MAURICE HENRY WESTON, KT., (1923), I.C.S., LL.B., (Cantab.) Member, Executive Council, Bombay, since Jan. 1921 ; *b.* 2 June 1868 ; *s.* of the late R. B. Hayward, Esq., F.R.S., of the Park, Harrow, *m.* to Alice Christine, *d.* of the late Judge Barber, Q.C., of Ashover, Derbyshire. *Educ.:* Harrow School and St. John's College, Cambridge. Assistant Collector, Bombay, 1889 ; Under-Secretary to Bombay Government, 1895; Judicial Assistant, Kathiawar, 1897 ; District Judge, Karachi, 1899 ; Legal Remembrancer and Secretary to Government, 1905 ; Additional Judicial Commissioner, Sind, 1907; Acting Judicial Commissioner, Sind, 1909, 1913 and 1916; Ag. Judge, High Court, Bombay, 1911, 1914 and 1915; Judge, High Court Bombay, 1918-1920. *Address :* Secretariat, Bombay.

HEADLAM, CAPT. EDWARD JAMES, C.M.G. (1919), D.S.O. (1916), F.R.G.S., M.R. Met. S. F.R.S.A., Director, R. Indian Marine; *b.* 1 May 1873 ; *m.* Nancy Benyon, widow of Stanley Hobson, Nigeria, *Educ.:* Durham School, H.M.S. Conway. Sub.-Lieut. R.I.M. 1894, Asstt. Marine Transport Officer, N. China. 1900-01, R. Humane Soc's. medal. Hon. Member, American Mly. Order of Dragon; China Medal. Served gun-running operations, Persian Gulf (medal with clasp); served European war (Despatches four times). Principal, Naval Transport Officer, South and East African Force, 1914-15; Star British and allied medals, Naval Transport Officer, East African Expeditionary Force, 1914-17; Principal, Naval Transport Officer, South and East Africa, (1917-19). *Publication:* History of Sea Service under the Govt. in India. *Address :* Bombay.

HENDERSON, ROBERT HERRIOT, C.I.E., Tea Planter (retired), Supdt. of Tarrapur Company's Tea Gardens, Cachar, Assam ; Chairman, Ind. Tea Assoc., Cachar and Sylhet. Represented tea-planting community on Imp. Leg. Council, 1901-2, when legislation regulating supply of indentured coolie labour was under consideration. Was Member, Legislative Council of E. Bengal and Assam, President, Manipur State Durbar, 1917-19. *Address :* Bengal Club, Calcutta.

HENRY, WILLIAM DANIEL, C.I.E.; Manager, Alliance Bank of Simla, Ltd., Simla, and Colonel Commanding Simla Rifles, I.D.F., V.D.; A.D.C. ; *b.* 1855. *Educ.:* Dr. J. Yeats' School, Peckham. *Address :* Kelvin Grove, Simla.

HEPPER, SIR (HARRY ALBERT) LAWLESS, Kt. (1918), Director, Bombay Govt. Development Dept. *b.* 30 January 1870. *m.* Kathleen Florence Keelan. *Educ. :* Rossall and R. M. A., Woolwich. Commissioned in Royal Engineers, 1890. Joined N. W. Railway, 1894, Served with Chitral Relief Expedition, 1895 ; Deputy Agent, C. I. P. Railway, 1900. Retd. from Army, 1912 ; Agent, G. I. P. Ry., 1911-1920. President, Indian Railway Conference Association, 1916-17 ; Controller of Munitions, Bombay, May 1917 to August 1918. *Address :* Pedder Road, Malabar Hill, Bombay

HICKLEY, VICTOR NORTH, C.I.E., V.D., Lieut.-Col., Behar Light Horse ; A. D. C. to Lt.-Govr., Behar and Orissa; Indigo planter in Behar. *Educ.:* Eton; Exeter College, Oxford. *Address :* Mozufferpore.

HICKMAN, LT.-COL. ROBERT ST. JOHN, V.D., C.I.E., A.D.C., Comdt., 2nd Surma Valley, L.H. (I.D.F.), Tea Planter. *Address :* Dwarband, P.O. Assam.

HIDAYATALLAH, THE HON. KHAN BAHADUR SHAIKH GHULAM HUSSAIN, Minister, Govt. of Bombay ; *b.* Jan. 1879. *Educ.:* Shikarpur High School, D. J. Sind Coll. and Govt. Law School, Bombay ; Pleader; Member and elected Vice-Presdt., Hyderabad Municipality; Presdt., District Local Board, Hyderabad, and member, Bombay Leg. Council, for past 8 years. *Address :* The Secretariat, Bombay.

HIGNELL, SIDNEY ROBERT, C.S.I. (1922), C.I.E. *Educ.:* Malvern; Exeter College, Oxford. Entered I.C.S., 1896 ; Magte. and Collr., 1912. Dy. Secretary, Govt. of India, Home Deptt., 1915-19 ; Officiated as Home Secretary on four occasions during that period, Private Secretary to H.E. the Viceroy, 1920. *Address :* Delhi or Simla.

HIRST, LIEUT.-COL. FREDRICK CHRISTIAN ; Director of Surveys, Bengal, since 1914. *b.* 24th December 1874. *Educ.:* Bath Coll. and R.M.C., Sandhurst. Entered 2nd Bn. Manchester Regt., 1895 ; Captain (I.A.), 1904 ; Major, 1913 ; Lt. Col., 1921. Joined Survey Department, 1900;

permanently appointed to Bengal Surveys, 1914. *Publications:* Numerous books upon the old and modern maps and surveys of Bengal, Bihar and Orissa and Assam. *Address:* United Service Club, Calcutta.

HOE, EDGAR, Lt.-Commissioner, Salvation Army, Northern Territory; Landed in 1889. *Address:* Ferozepore Road, Lahore.

HOLE, ROBERT SELBY, C.I.E. (1919); Indian Forest Department. *b.* 15 January 1875. *Educ.:* Clifton College and Cooper's Hill. *m.* Beatrice Mary, *d.* of Surg.-General B. P. Rooke. Joined Forest Department, 1896. Forest Botanist, Forest Research Institute, Dehra Dun, since 1907. *Address:* Dehra Dun, U. P.

HOLLAND, ROBERT ERSKINE, C.S.I. (1921), C.I.E. (1917), C.V.O. (1922), V.D., I.C.S., Political Department, Government of India. *b.* 1873; *s.* of Sir Erskine Holland, K.C.; *m.* 1910. *Educ.:* Winchester Oriel Coll., Oxford. Entered I.C.S., 1895; Secretary, Board of Revenue, Madras, 1903; served Foreign Department of Government of India, 1904-08; Political Agent and Consul at Muscat, 1908-10; Political Agent, Eastern States, Rajputana, 1911-13; Depy. Secy., Govt. of India, 1914. On political duty with Mesopotamia Field Force, 1915 and 1917. Agent to Governor-General, Rajputana, 1919. *Address*: The Residency, Mount Abu.

HOLMAN, MAJOR-GENERAL SIR HERBERT CAMPBELL, K.C.B., *cr.* 1920, C.B. 1918; C.M.G. 1915; D.S.O., 1901; P.S.C.; G.O.C., Sind-Rajputana District (1922). *b.* 3rd May 1869. *s.* of late William Laban Holman. *m.* 1902, Annie Ethel Talbot, 2nd *d.* of Major-General W. Howey. *Educ.:* Dulwich; Sandhurst. Entered Army, 1889; Capt., 1900; Major, 1907; Bt.-Lt.-Col., 1914; Lt.-Col., 1915. Bt.-Col., 1916; Major-General, 1919; served with Wuntho Expedition, 1891 (wounded); operations of Irrawady column as staff officer (despatches, medal with clasp); China, 1900, as Adjutant, 16th Bengal Lancers, 1st class officer interpreter and Special Service Officer, graded, as D.A.A.G. (despatches, D.S.O. Medal); Attaché with Russian Forces in Manchuria, 1905 (Order of St. Stanislaus, 2nd class, with swords, and Russian war medal); served European War, 1914-18 (despatches 9 times, C.B., C.M.G., promoted Bt.-Col. and Maj.-Gen.; Legion of Honour); Chief of British Military Mission to South Russia, 1919-20 (K.C.B., Order of St. Anne, 1st Class, with swords; Order of St. Stanislaus, 1st class with swords, Order of St. Vladimir, 4th class, with swords); Asstt. Secretary-Military Department, Govt. of India, 1901; staff Captain, Intelligence Department, War Office, 1902; D.A.Q.M.G., General Staff, 1904; awarded Royal Humane Society's Medal, 1907; General Staff Officer, Army Headquarters, India, 1910; Deputy Quartermaster General in India, 1921. *Address:* Karachi.

HOOPER, REV. WILLIAM, D.D.; Missionary, C.M.S.; Translator, Mussoorie, since 1892; *b.* 1837. *Educ.:* Cheltenham Preparatory School; Bath Grammar School; Wadham College, Oxford; Hebrew Exhibition; Sanskrit Scholarship; 1st class in Lit. Hum.; B.A., 1859; M.A., 1861; D.D. 1887. Went to India, C.M.S., 1861; Canon of Lucknow, 1906-1919; Vicar of Mount Albert, New Zealand, 1889-90. *Publications*:—The Hindustani Language, Notes on the Bible and many smaller works in English, Hindi and Urdu. *Address:* Mussoorie, India.

HORNELL, WILLIAM WOODWARD, C.I.E. (1917); Deputy Secretary, Government of Bengal (Ministry of Education) 1921. *b.* 18 September 1878. *Educ.:* Radley and Trinity College, Oxford. Appointed to Indian Education Service, 1902; Board of Education (London), 1908; Assist. Director of Special Inquiries and Reports, 1911, Secretary to the first Imperial Educ. Conference, 1911; D. P. I., Bengal, 1913; Member of Calcutta University Commission, 1917-19. Director of Public Instruction, Bengal, 1913-1923. *Address:* Bengal Club, Calcutta.

HORSKINS, JULIUS, Lt. Commissioner, Salvation Army Territorial Commander for Bombay Presidency. Has served as an officer for 43 years and seen Service in England, S. Africa, Australia and the British West Indies. *Address:* Morland Road, Byculla, Bombay.

HOWARD, ALBERT, C.I.E., M.A., A.R.C.S., F.L.S.; Imperial Economic Botanist to Govt. of India, since 1905. *b.* 1873. *Educ:* Royal Coll ge of Science, London; St. John's College, Cambridge. First Class Hons. Nat. Science Tripos, 1898; B.A., 1899; M.A., 1902; Mycologist and Agricultural Lecturer, Impl. Dept. of Agriculture for West Indies, 1899-1902; Botanist to South-Eastern Agricultural College, Wye, 1903-1905. *Publications:* Numerous papers on botanical and agricultural subjects. *Address:* Pusa, Bihar.

HOWARD, SIR HENRY FRASER, K.C.I.E. (1923), C.I.E. (1913); C.S.I. (1919); First Division first class Classical Tripos, Part I; Finance Department, Government of India. *b.* 20 July 1874. *m.* 1913, Mabel Rosa Roney-Dougal. (*d.* 1923). *Educ.:* Aldenham School and Trinity Hall, Cambridge. Entered Indian Civil Service, 1897; Under Secretary, Finance Department, Government of India, 1905; Collector of Customs, Calcutta, 1909; Controller of Currency, 1914; Financial Secretary, Government of India, 1917; Temporary Finance Member of Viceroy's Council, 1919; Representative of India at Brussels International Financial Conference, 1920; Controller of Finance, India Office, 1920; Secretary, Indian Retrenchment (Inchcape) Committee, 1922-23. *Address:* Simla and Delhi.

HOWELLS, GEORGE, B.A. (Lond.); M.A. (Camb.); B. Litt. (Oxon); B.D. (St. Andrews); Ph.D. (Tubingen), Principal of Serampore College, Bengal, since 1906. *b.* May 1871. *Educ.:* Gelligaer Grammar School; Regent's Park and University Colleges, London; Mansfield and Jesus Colleges, Oxford; Christ's College, Cambridge; Univ. of Tubingen. Appointed by Baptist Missionary Society for Educational work in India, 1895; located at Cuttack, Orissa, engaged in High School and theological teaching, and general literary and Biblical translation work, 1895-1904; originated movement for reorganisation

of Serampore College. Angus Lecturer, 1909; published under the title "The Soul of India." and Fellow of University of Calcutta, since 1913. *Address:* Serampore College, Serampore, Bengal.

HUDDLESTON, CAPTAIN ERNEST WHITESIDE, C.I.E., C.B.E.; Royal Indian Marine. Port Officer, Madras. *b.* Aug. 1874. *Educ.:* Bedford School. Entered R.I.M., 1895; served Egyptian Camp, 1895-96; wrecked in Warren Hastings' troopship off Reunion, 1897; received Roy. Humane Society's silver medal, and Lloyd's silver medal for saving life on this occasion; Lieut., 1900; served China Expedition (Boxer Rising), 1901-02; as Assist. Mar. Transport Officer; Mar. Transport Officer, Somaliland Expedition, and was in charge of landing operations in Obbiat, 1902-4; Staff Officer, Bombay Dockyard, 1911; Commander, 1913. Captain, 1917. Senior Marine Transport Officer, Bombay, 1914-19. *Address:* Presidency Port Office, Madras.

HUDSON, GENERAL SIR HAVELOCK, K.C.I.E. (1919), K.C.B. (1918), Commanding in Chief Eastern Command (1920), A.D.C. General, July 1922. *b.* 26 June 1862. *m.* Kate, *d.* of late Major Hawkins. *Educ.* Reading School. 2nd Battalion Northants Regiment, 1881-84; 19th Lancers (I.A.), 1885-1910. Served in N. W. F. Campaigns, 1889 and 1897; China, 1910; European War, 1914-17. Mentioned in despatches five times. Commanded 8th Division in France. Adjutant-General in India, 1917-20. *Address:* Naini Tal or Lucknow.

HULL, REV. ERNEST R., S. J., EDITOR of *The Examiner*. *b.* 9 September 1863. *Educ.* Society of Jesus, English Province. Came to India, 1902 and since then engaged in literary work in Bombay. *Publications:* The Examiner and a series of Examiner Reprints, on theological, historical and controversial subjects. *Address:* *The Examiner* Press, Medows Street, Bombay.

HUMPHRYS, LIEUT-COLONEL FRANCIS HENRY, C.I.E., (1920), H. B. M.'s Envoy Extraordinary and Minister Plenipotentiary at the Court of H.M. The Amir of Afghanistan, Jan. 1922. *b.* April 24, 1879, *m.* Gertrude Mary Deane, *d.* of Sir Harold Deane, K.C.S.I. *Educ.:* Shrewsbury and Christ Church, Oxford, Joined 2nd Worcesters, 1900; South African War; Joined 25th Punjabis, 1902. Entered Political Dept., Government, of India, 1903; Dy Commr., Bannu and Kohat; Pol. Agent, Tochi; Malakand, Khyber; Joined Royal Flying Corps in Europe, March 1918; Dy. Foreign Secretary, Govt. of India, 1921. *Address:* British Legation, Kabul, *via* Peshawar.

HUNTER, MATHEW, C.I.E.; Principal, University College, Rangoon, since 1911. *Educ.:* Giggleswick School; Queen's College, Oxford; Strassburg and Heidelberg Universities; Honours Final School of Natural Science, Oxford: Burdett-Coutts University Scholarship in Geology; M.A., 1890. Lecturer in Chemistry and Physics, Rangoon College, 1890-1909; Chemical Examiner to Govt. of Burma, 1890-1905; Acting Principal, Rangoon College, and 1909-11. *Address:* University College, Rangoon.

HUSSAIN, MOULVI AHMED, C.S.I., NAWAB AMEEN JUNG BAHADUR, Assistant Minister to H. H. Nizam, since 1914, and Ch. Sec. to Nizam's Govt., since 1896. *Educ.:* Christian College, Presidency College, Madras Univ. M.A., 1890; Dy. Coll. and M., Madras Presidency, 1890-92; Asst Priv. Sec. to H. H. Nizam, 1893; F.S.A., 1912; F.R.A.S., 1914.

HYDARI, A., B.A., NAWAB HYDAR NAWAZ JUNG BAHADUR, Finance Minister, Hyderabad *b.* 8 Nov. 1869. *m.* Amena Najmuddin Tyabji (Kaiser-i-Hind Gold Medal). *Educ.:* St. Xavier's College, Bombay. Joined Indian Finance Deptt., 1888; Asstt. Acctt. General, U.P., 1890; Dy. Acctt. General, Bombay, 1897; Dy. Acctt. General, Madras, 1900; Examiner, Govt. Press Accounts, 1901; Acctt. General, Hyderabad State, 1905; Financial Secretary, 1907; Secretary to Government, Home Deptt., 1911; Ag. Director-General of Commerce and Industries, 1919; Accountant General, Bombay, 1920; Finance Member, Hyderabad Executive Council, 1921. First-President, Hyderabad Educational Conference in 1915. President, All-India Mahomedan Educational Conference, Calcutta (1917); Conceived and organised Osmania University, Hyderabad; organised State Archæological Department. *Address:* Hyderabad, Deccan.

HYDERABAD, HIS EXALTED HIGHNESS ASAF JAH MUZAFFAR-UL-MAMALIK NIZAM-UL-MULK NIZAM-UD-DAULA NAWAB MIR (SIR OSMAN ALI KHAN BAHADUR FATEH JANG) OF, G. C. S. I., (1911), SON OF THE LATE LIEUT.-GENL. MIR SIR MAHBOOB ALI KHAN BAHADUR, G. C. B., G. C. S. I., NIZAM OF HYDERABAD; *b.* 1886; *ed.* privately; Hon. Col. in the Army, and of 20th Deccan Horse. *Address:* Hyderabad, Deccan.

IDAR, MAHARAJA OF, since July 1911, MAHARAJA DHIRAJ MAHARAJA; SIR SHRI DOLAT SINGHJI, K.C.S.I. *m.* Maharaniji Shri Poonglanji. *Heir:* *s.* Maharaja Kumar Himmatsighji. *Address:* Himmatnagar (Mahikantha Agency).

IMAM, SYED HASAN, Barrister. *b.* 31 August 1871. *Educ.:* Patna and in England. Called to the Bar (Middle Temple), 1892. Practised at Patna and Calcutta until 1911. Judge of the High Court, Calcutta, 1912-16. Resumed practice at Patna; President, Special Session, Indian National Congress, September, 1918; President, All-India Home Rule League; Delegate to London Conference on Turkish Peace Treaty, 1921. India's representative to the League of Nations, 1923. *Address:* Hasan Munzil, Patna.

IMPEY, LT.-COL. LAWRENCE, C.S.I., C.I.E.; Resident at Baroda. *b.* 1862. *Educ.:* Marlborough; Sandhurst, Indian Army, 1885; employed under Govt. of India in the Pol. Dept., 1887; has held appointments of Pol. Agent in Alwar, Bhopal, Eastern States, Rajputana, Bundelkhand, etc. *Address:* Baroda.

INDORE, MAHARAJA OF, H. H. MAHARAJAH-DHIRAJA RAJ RAJESHWAR SAWAI SHRI TUKOJI RAO HOLKAR, BAHADUR. *b.* 1891, *Educ.:* Mayo Chiefs Coll., Ajmere; Imp, Cadet Corps. *Address:* Indore.

INNES, THE HON. SIR CHARLES ALEXANDER, B.A. (Oxon.), K.C.S.I. (1924). C.I.E. (1919), Member (Commerce and Railways) of Governor General's Council. *b.* 27 Oct. 1874. *m.* Agatha Roslie, *d.* of late Col. K. F. Stevenson. *Educ.*: Merchant Taylor's School, London, and St. John's Coll., Oxford. Joined I.C.S., 1898; Asstt. Settlement Officer, Malabar, 1901 to 1905; Under Secry. to Govt. of India, 1907-1910; Collector of Malabar, 1911-1915; Director of Industries and Controller of Munitions, Madras, 1916-19; Foodstuffs Commissioner, Govt. of India, 1919; Secretary, Commerce Dept., 1920-21. *Publications*: Malabar District Gazetteer. *Address*: Commerce Department, Government of India, Simla.

IRWIN, HENRY, C.I.E., M.I.C.E. *b.* 1841; joined P.W. Dept., 1868; Consulting Architect to Govt., 1889; retired, 1896. *Address*: Adyar House, Adyar.

ISRAR, HASAN KHAN, KHAN BAHADUR, SIR, Home Member and President, Judicial Council, Bhopal. *b.* Shahjahanpur. *Educ.*: Shahjahanpur, Bareilly. *Address*: Bhopal.

IYENGAR, S. SRINIVASA. *b.* 11 September 1874. *Educ.*: Madura and Presidency College, Madras. Vakil (1898). Member of Madras Senate, 1912-16; President, Vakils' Association of Madras; President, Madras Social Reform Association; Member of All-India Congress Com.; Advocate-General, Madras. *Publication*: a book on law reform (1909). *Address*: Mylapore, Madras.

IZZAT NISHAN, KHUDA BAKHASH KHAN TIWANA. Nawab, Malik; Dist Judge, Dera Ghazi Khan. *b.* 1866. *Educ.*: Government High School, Shahpore; private training through Col. Corbyn, Deputy-Commissioner. Appointed an Hon. Magistrate, 1881; Extra Asst. Commsr., 1894; British Agent in Cabul, 1903-06. *Address*: Khwajabad, district Shahpore, Punjab.

JACKSON, SIR JOHN ERNEST, KT. (1924), C.I.E.; A.C.A., Chief Auditor, B. B. & C. I. Railway, Bombay. *b.* 26 November 1876. *m.* *Educ.* Marlborough College. *Address*: Ryculla Club, Bombay.

JACOB, ARTHUR LESLIE, C.I.E., Major I. A.; Pol. Ag., Zhob, since 1912; in military employment, 1891-98; Pol. Asst., Zhob, 1898; Asst. to Gov.-General's Agent, Baluchistan, 1901; Pol. Ag., Baluchistan, 1909. *Address*: Zhob, Baluchistan.

JACOB, GENERAL SIR CLAUD WILLIAM, K.C.S.I. (1914), K.C.B., *cr.* 1917; K.C.M.G. *cr.* 1919; C.B., 1915; Indian Army; Chief of the General Staff since Jan. 1920. A.D.C., General to H. M. the King. *b.* 21 Nov. 1863; *m.* 1894, Clara Pauline, *d.* of Rev. J. L. Wyatt, Rector of Brandon, Suffolk. *Educ.*: Sherborne School; R.M.C. Sandhurst. Entered army, 1882; General Staff Officer, 1st Grade, India, 1912; Brig. Gen. Commanding Dehra Dun Brigade, 1915; Commanding Meerut Division, 6 Sept. 1915; 21st Division, 18th Nov. 1915; 2nd Army Corps, 28th May 1916; served Zhob Valley, 1890; N.-W. Frontier, India, 1901-2 (medal with clasp); European War, 1914-18 (C.B. wounded, Prom. Major-General, Lieut.-Gen. 3 June 1917, General, 31 May 1920). Order of St. Vladimir 4th class with swords (Russia), despatches ten times, Grand Officer de l'ordre de la Couronne (Belgium) with Croix de Guerre, Grand Officer de Legion d'Honneur, France, Grand Officer de Pordre de Leopold, Distinguished Service Medal, American. *Address*: Army Headquarters, India.

JADHAV, THE HON. MR. BHASKARRAO VITHOJI-RAO, M.A., LL.B., Minister of Education, Bombay. *b.* May 1867. *m.* to a lady from the Vichare family of Ratnagiri District. *Educ.*: Wilson College, Elphinstone College, and Government Law School. Served in Kolhapur State and retired as Revenue Member of the State Council. *Address*: Narayan Dabholkar Road, Bombay.

JAFFER, HON. KHAN BAHADUR EBRAHIM HAROON, Member of the Council of State; *b.* Dec. 27, 1881. *Educ.*: Deccan College, Poona; Landlord and proprietor of Messrs. Jaffer Jussuff & Co., President, Anjuman-i-Islam, Poona; Hon. Secy., Islamia School; Managing Trustee of Jame-Musjid and trustee and member of other institutions and funds. Organised Bombay Presidency Muslim League, 1908; revived Bombay Presidency Mahomedan Educational Conference; President, All-India Muslim Confce., Lucknow, 1919, at which All-India Central Khilafat Committee established; Member, Cantonment Reforms Committee; Member, Bombay Legislative Council, 1916-19; represented Bombay Presidency Mahomedans on the Imperial Legislative Council, 1919-20. President, 34th Session, All-India Mahomedan Educational Conference, 1920; President, Third Sessions, All-India Cantonment Conference, 1922; Member of the Court, Muslim University, Aligarh. *Address*: East Street, Poona.

JAGATNARAYAN, THE HON. PANDIT, Minister, U. P. Govt. for Local Self Govt. and Public Health. *b.* Dec. 1864. *Educ.*: Canning Coll., Lucknow. *m.* Srimati Kamalapati, *d.* of P. Sham Narayan Saheb Raina. *Address*: Golaganj, Lucknow.

JAMIAT RAI, DIWAN, RAI BAHADUR, C.I.E. *b.* 1861. *m.* 1891. *Educ.*: Bhown, Kohat and Gujrat. Ent. Govt. Service, 1880; served in Political Office with Kurum F.F., 1880; accompanied Afghan Boundary Commission, 1885-1886; special duty, boundary settlement of Laghari Barkhan, 1897; Asst. to the Supdt. of Gazetteers of Baluchistan, 1902-07; services acknowledged by Govt. of India; on special duty in connection with revision of Establishments, 1910; Asst. to Supdt. of Census Operations, Baluchistan, 1910-11; Ex. Asst. Commsr., 1902: Settlement Officer, Baluchistan, 1912; Provincial Superintendent of Census for Baluchistan 1920. *Publications*: Quetta Municipal Manual; History of Freemasonry in Quetta, Reports on the settlement of Duki and Barkhan; Notes on (1) Domiciled Hindus, (2) Hindus of Kandahar and Ghazni, (3) Purbia menial castes and sweepers, (4) Notes, (5) Afghan Pawindhas and (6) Revenue rates and economic conditions. *Address*: Quetta.

JAORA STATE, MAJOR H. H. FAKHAR-UD-DAULA NAWAB SIR MUHAMMED IFTIKHAR AL-KHAN BAHADUR SAULAT JANG, K.C.I.E. *b.* 1883. H. H. served in European War. *Address:* Jaora State, Central India.

JARDINE, WILLIAM ELLIS, C.I.E., F.R.G.S., M.R.A.S. *b.* 1867. *Educ.:* Fettes College, Edinburgh; Wren's, Trinity College, Cambridge. Ent. I.C.S., 1886; joined Pol. Dept. of Govt. of India, 1893; became 2nd Asst. Resident, Hyderabad 1st Asst.; Ag. to Govr.-Gen. in Cent. Ind. and 1st Asst. Resident, Hyderabad; Pol. Ag., Bundelkhand, 1904-09; Malwa, 1910-11; Resident, Gwalior, 1912-13; Baroda, 1914; Gwalior, since 1914; Knight of Grace of Order of St. John of Jerusalem. *Address:* Gwalior.

JATKAR, BHIMRAO HANMANTRAO, B.A., LL.B., Pleader and Member, Legislative Assembly. *b.* 24 April 1880. *m.* to Annapurnabai Jatkar. *Educ.:* at Basim A. V. School, Amraoti High School, Fergusson College, Poona and Govt. Law School, Bombay. Joined Yeotmal Bar in 1906; a Congressman working as one of the Joint Secretaries of the District Association, Yeotmal, since its inception in 1915; non-official elected Chairman, Yeotmal Municipality, since 1919. *Address:* Yeotmal (Berar).

JAYANTI RAMAYYA PANTULU, B.A., B.L., Member, Legislative Assembly. *b.* Aug. 1861. *Educ.:* at Rajahmundry and Madras. Served in Rev. Deptt. in Madras Presidency and retd. as 1st Grade Depy. Collr. 1917; acted as Presidency Magistrate, Madras for 3 years. *Publications:* A defence of literary Telugu and several articles on literature, history and archæology. *Address:* Muktisvaram, Tottaramudi, P. O. Godavari Dist.

JEHANGIR, SIR COWASJEE, 1st Baronet; nephew and adopted son of late Sir Cowasjee Jehangir Readymoney, C.S.I. *b.* 8th June 1853. *m.* 1876, Dhunbai, *d.* of the late Ardeshir Hormusjee Wadia; one *s.* 2 *d. Educ.:* Proprietary School; Elphinstone College and University of Bombay. Banker, millowner and landed proprietor: Delegate of the Parsee Matrimonial Court; and Trustee and member of the Parsee Panchayet. Appointed Sheriff of Bombay in 1919; has assumed the name of Cowasjee Jehangir. Bart. 1908. *Address:* Readymoney House, Malabar Hill, Bombay.

JEHANGIR, COWASJI (Junior), M.A. (Cambridge), C.I.E. (1920); O.B.E. (1918); Member of the Bombay Executive Council 1923. *b.* Feb. 1879; *m.* to Hirabai, *d.* of H. A. Hormasji of Lowji Castle. Educated at St. Xavier's College, Bombay, and St. John's College, Cambridge. Partner in the firm of Cowasji Jehangir & Co. Member of the Bombay Corporation since 1894; Chairman of its Standing Committee, 1914-1915; Member of the Bombay Improvement Trust; President, Bombay Municipal Corporation, 1919-1920.; Temporary Member of the Executive Council, Bombay (Dec. 1921). *Address:* Nepean Sea Road, Malabar Hill, Bombay.

JEJEEBHOY, SIR JAMSETJEE, 5th Baronet; K.C.S.I., Vice-Presdt., Legis. Assembly. *b.* 6th March 1878; *s.* father Sir Jamsetjee, 1908, and assumed the name of Jamsetjee Jejeebhoy in lieu of Rustomjee; Head of the Zoroastrian Community in Bombay; Pres. of the Sir Jamsetjee Charity Funds, and Member of Municipal Corporation. *m.* 1906, Serenebai Jalbhoy Ardesar Sett. *Address:* Mazagon Castle, Bombay.

JEVONS, HERBERT STANLEY, M.A., B.Sc. (Lond.), F.G.S., F.S.S.: Univ. Prof. of Economics in Univ. of Allahabad since 1914 and Hon. Treas., Indian Economic Association. *b.* 8 October 1875. *Educ.:* Giggleswick Gram. Sch.; University Coll., London; Trin. Coll., Cambridge; Geol. Inst., Heidelberg; Univ. Demonstrator in Petrology, Cambridge, 1900-01; Lecturer in Mineralogy and Geology, and Asst. to Prof. T. W. Edgeworth David, F. R. S., in University of Sydney, N. S. W., 1902-04; Lectr. and later Fulton Prof. of Econ. and Pol. Science in Univ. Coll. of S. Wales and Monmouthshire, Cardiff, 1905-11; engaged in garden city and housing reform propaganda, 1911-14. Has undertaken researches in rural economics, irrigation on periodicity in Economic Phenomena and other Indian Currency and finance, 1915-1921. Until recently was editor of the Indian Journal of Economics. *Publications:* Essays on Economics; The Sun's Heat and Trade Activity; The British Coal Trade; Consolidation of Agricultural Holdings in the U.P.: Economics of Tenancy Law and Estate Management; Money; Banking and Exchange in India; The Future of Exchange; and numerous books, papers and articles on Petrology, Mineralogy, Economics, Politics, Housing Reform, etc., *Address:* 4, Thornhill Road, Allahabad.

JEYPORE, MAHARAJA OF, Lieutenant Sri Sri Sri Maharaja Ramchandra Deo Maharaja of Jeypore Samasthanam, *s.* of late Maharaja Sir Sri Vikrama Deo Bahadur, K.C.I.E., and late Sri Sri Sri Lady Seethapatta Maharani Circar. *b.* 31st Dec. 1893. *Educ.:* privately. *m.* 1913 Sri Sri Sri Lakshmi Patta Maharani Circar, *d.* of the late Maharajah Sir Sri Bhagavat Prasad Singh Bahadur, K.C.I.E., of Pairam pur, United Provinces of Agra and Oudh. First Landed Zamindar in the Madras Presidency, owning about 14,000 square miles. *Address:* Fort, Jeypore, Vizagapatam Agency, Madras Presidency, India.

JHALA, RAJ RANA SHRI MANSINHJI SURATSINHJI, C.I.E. (1918); Dewan, Dhrangadhra State and some time Member, State Cabinet at Jaipur, Rajputana. *Educ.:* Dhrangadhra and Rajkot. Was first Guardian to H. H. Maharaja Saheb of Dhrangadhra when he was Heir-Apparent and accompanied him to England; was afterwards for a few years in Government service and left it as Dy. Superintendent of Police to join service in his parental State, where he was for a year Personal Assistant to H. H. Maharaja Saheb and then his Dewan. Member of the State Council, Jaipur, from Dec. 1922 to March 1923. *Address:* Lal Bungalow, Dhrangadhra.

JHALAWAR, H. H. MAHARAJ RANA SIR BHAWANI SINGH BAHADUR OF; K.C.S.I.; *b.* 1874; *s.* 1899. *Educ.:* Mayo Coll., Ajmer. Has greatly extended education through-

out the state and established several libraries. He has recently proposed to confer the right of legislation on the people by the creation of two Houses a lower and an upper one on the lines adopted in British India. *Publication*: Travel Pictures. *Address*: Jhalrapatan, Rajputana.

JIND, H. H. FARZAND-I-DILBAND RASIKH-UL-ITIKAD DAULAT-I-INGLISHIA, RAJA-I-RAJGAN MAHARAJA SIR RANBIR SINGH RAJENDRA BAHADUR, LT.-COLONEL, G.C.I.E., K.C.S.I. *b.* 1879; *s.* 1887. *Address:* Sangrur, Jind State, Punjab.

JOGLEKAR, RAO BAHADUR RAMCHANDRA NARAYAN, I.S.O., B.A., Chief Land Officer, Tata Co., Coll. Baroda State, from Decr. 1916 to June 30, 1920. Depy. Coll. First grade and Native Asst. to Commsr., C.D., 1901-16; some time Adv. to Chief of Ichalkaranji; *b.* Satara, 8th Dec. 1858. *Educ.*: Deccan Coll., Poona. Held non-gazetted appointments in Nasik, Satara, Ahmednagar, Poona and Sholapur Dists., 1883-1899; Depy. Coll., 1899. *Publications*: Land Revenue Code annotated up to 1st Octr. 1920; Watan Act annotated up to 1st Sept. 1920; Alienation Manual; Inspection of Revenue offices; Court fees in Revenue and Magisterial offices. *Address*: 203, Kala Haud, Shukrawar Peth, Poona City.

JOHN, SIR EDWIN, KT. (1922), C.B.E., 1921; Kt. of the Order of St. Gregory the Great (Civil Order) 1901. Grand Commander, St. Sylvester the Great (1920), Cotton and Seed Merchant and Mill-owner, *b.* 3 August 1856, *m.* 1879, Mary Sykes, Southport Lancs; one *d.* *Educ.*: Stonyhurst. *Address*: 8, Cantonments, Agra, U. P.

JOHNSTON, FREDERICK WILLIAM, C.S.I., C.I.E., I.C.S.; in Pol. Dept. of Govt. of India; Resident, Second class and Revenue and Judicial Commissioner in Baluchistan; *b.* 2nd Nov. 1872. *Educ.*: Kelvinside Acad., Glasgow; Trinity Hall, Cambridge (B. A., 1894). Asst. Commsr., 1896; went to N.-W. Fron., 1899; and was employed there till end of 1911, Govt. of India, Finance Dept., 1911-15; Ministry of Munitions, England, 1915-17 *Address*: Quetta.

JOSHI, SIR MOROPANT VISHVANATH, KT., B.A., LL.B., Home Member, Central Provinces, *b.* 1861. *Educ.*: Deccan Coll., Poona, and Elphinstone Coll., Bombay. Practised as Advocate in Judicial Commr.'s Court in Berar from 1884-1920. *Address*: Nagpur, C. P.

JOSHI, NARAYAN MALHAR; Member of the Servants of India Soc. *b.* June 1879. *Educ*: Poona New English School and Deccan Coll. Taught in private schools and Govt. High Schools for 8 years. Joined Servants of India Soc., 1909. Sec., Bombay Social Service League, since 1911, and Sec., Bombay Press. Social Reform Assoc., since 1917; Sec., W. India Nat. Liberal Assoc. since 1919. Was sent to Mesopotamia by Govt. of India as representative of the Indian Press, 1917, and in 1920 to Washington and in 1921 and 1922 to Geneva as delegate of the working classes in India to International Labour Confce. Kaisar-i-Hind Silver Medal (1919), Member of the Bombay Municipal Corpn. since 1919, up to end of March 1923. Was awarded, but declined C. I. E. in 1921. Nominated by Govt., a Member of the Legislative Assembly in 1921 to represent labour interests. *Address*: Servants of India Society, Sandhurst, Bombay.

JUGMOHANDAS VARJIVANDAS, SIR, KT., Merchant and Landlord; *b.* 1869. *Educ.*: Fort High Sch., Bombay. Mem., Bombay Corpn., 1900-06; trustee of several charitable institutions. *Address*: Bombay.

JUKES, JOHN EDWIN CLAPHAM, C.I.E. (1921). Joint Sec., Finance Dept., Govt. of India since 1920. *b.* 12 Nov. 1878. *Educ.*: Aldenham Sch., Pembroke Coll., Cambridge. Porson Univ. prizeman, 1899. Chancellor's Classical Medallist, 1902. *m.* Marguerite Jessie, *d.* of the late James Searle of Reigate. *Address*: Richmond, Simla.

KAJIJI, MR. JUSTICE ABDEALI MAHOMEDALI, B.A., LL.B. (Cantab.), Bar.-at-Law; Judge, High Court, Bombay. *b.* 12 February, 1871. *Educ.*: St. Mary's Institution, Byculla; St. Xavier's Coll., Bombay, Downing Coll., Cambridge, and Lincoln's Inn. Ord. Fellow, Syndic and Dean in Law of Bombay; Univ. President, Anjuman-i-Islam, Bombay; Vice-President, Islam Club and Islam Gymkhana. *Address*: Dilkhoosh, Grant Road, Bombay.

KALE, THE HON. MR. VAMAN GOVIND. Member of the Council of State. *b.* 1876. *Educ.*: New English School and Fergusson Coll., Poona. Joined the Deccan Education Soc., Poona, as a life member in 1907. Fellow of Bombay Univ. since 1919. Prof. of History and Economics, Fergusson Coll., Liberal in Politics; has addressed numerous public meetings; has published many articles on economics and political and social reform, and the following works: "Indian industrial and economic problems," "Indian administration", "Indian Economics," "Dawn of Modern Finance in India," "Gokhale and economic reforms," "India's war finance," "Currency reform in India," "Constitutional reforms in India," etc. *Address*: Fergusson Coll., Poona.

KAMAT, BALKRISHNA SITARAM, B.A., M.L.A. (1921). Merchant and Contractor. *b.* 21 March, 1871. *Educ.*: Deccan Coll. *m.* Miss Yamunabai R. M. Gawaskar of Cochin. Member, Bombay Legis. Council, 1913-16, 1916-20. Member of various educational bodies. Has taken part in work for social and agricultural reform. *Address*: Ganeshkhind Road, Poona, or Tambe Building, Dadar, Bombay.

KANDATHIL, RIGHT REV. MAR. AUGUSTINE, D.D. Titular Bishop of Arad, and Vicar Apostolic of Ernakulam. Was Co-adjutor with right of succession to the first Vicar Apostolic of Ernakulam, since 1911; *b.* Chemp, Vaikam, Travancore, 25 Aug. 1874. *Educ.*: Papal Seminary, Kandy, Ceylon. Priest, 1901 Parish Priest for some time: Rector of Prep. Sem., Ernakulam, and Private Sec. to the first Vicar Apostolic of Ernakulam, to end of 1911. *s.* Rt. Rev. Dr. A. Pareparambil as Second Vicar-Apostolic, 9 Decr. 1919; Installed on 18 Decr. 1919. *Address*: Bishop's House, Ernakulam, Malabar.

KANHAIYA LAL, THE HON. MR. JUSTICE, Rai Bahadur, M.A., LL.B., Judge, High Court, Allahabad, *b.* 17 July 1866. *m.* Shrimati Devi, *d.* of Vyas Gokuldasji of Agra. *Educ.:* The Muir Central College, Allahabad: Joined the U.P., Civil Service on 22 April 1871 as Munsiff, acted as Subordinate Judge in 1907; appointed Asst. Sessions Judge with the powers of Additional District Judge in Feb. 1908; acted as District and Sessions Judge in 1910 and again in 1911; appointed Additional Judicial Commissioner, Oudh, July 1912; acted as Judge of Allahabad High Court in 1920 and subsequent years for different periods. Promoted Judicial Commissioner of Oudh in 1922. Appointed Judge of Allahabad High Court again in 1923. *Publications:* Elementary History of India; Dharma Shiksha or a treatise on Moral culture in the vernacular; and A Note on the Reorganisation of the Judicial Staff. *Address:* No. 9, Elgin Road, Allahabad.

KANIKA, THE RAJA OF, HON. RAJA RAJENDRA NARAYAN BHANJA DEO BAHADUR, O.B.E. OF KANIKA; M.L.A. *b.* 24 March 1881. *m.* *d.* of Feudatory, Chief of Nayagarh, 1899. *Educ.:* Ravenshaw Coll. Sch.; Coll., Cuttack. Received management of Killah Kanika from Court of Wards, 1902; Mem. of the Bengal Leg. Council, 1909-12; Mem. of Bihar and Orissa Leg. Council, 1912-16; Member, Imperial Leg. Council, 1916-20; Mem., Bihar and Orissa Legislative Council, 1921-22; Mem. Indian Legislative Assembly, 1922-23; Pres., Orissa Landholders' Assn.; Vice-Pres. Bengal Landholders' Association; Vice-President, Bihar Landholders' Association; Mem. of Bengal Fishery Board; Mem., Roy. Asiatic Soc. Member Governing Body, Ravenshaw College, Kuttack; Fellow, Patna University. *Address:* Kuttack or Rajkanika, Orissa.

KAPURTHALA, H. H. JAGATJIT SINGH BAHADUR, MAHARAJA RAJA-I-RAJGAN OF, G.C.S.I., G.C.I.E.; *b.* Sept. 1872; *s.* father, 1877. *Address:* Kapurthala, Punjab.

KARAULI, H. H. MAHARAJA DHIRAJ SIR BHANWAR PAL, DEO BAHADUR, YADUKUL CHANDRA BHAL, G.C.I.E., K.C.I.E. *b.* 24 July 1854. *Educ.:* Mayo Coll., Ajmer. *s.* 1886. *Address:* Karauli, Rajputana.

KASIMBAZAAR, MAHARAJA SIR MANINDRA, CHANDRA NANDY OF, K.C.I.E., Member, Council of State. *Educ.:* Hindu School; Presdt., Bengal Landholders' Association and British India Association, Calcutta. Belongs to Moderate School of politics, takes a keen interest in and is a magnificent patron of education, industries, agriculture, literature and politics. *Publications:* Upasana B. S. Panjika, The Indian Medical Plant, A History of Indian Philosophy, Great Baisnava Granthas, Part 10 of Sreemat Bhagbat, Fundamental unity of India, History of Indian Shipping and Maritime Activity. *Address:* Kasimbazaar, Bengal.

KAYE, LT.-COL. C., C.S.I., C.I.E., C.B.E., I.A., Dr. of Intelligence Bureau, 1919. *b.* 27 May 1868; *m.* 5 September 1905, Margaret Sarah, *d.* of Rev. Thomas Bryson, London Mission, Tientsin, N. China; one *s.* 2 *d's. Educ.:* Winchester; Joined 2nd Bn. Derbyshire Regt., 1889; transferred to I. A., 1892; served N.-W. F. of India, 1897-98; Gen. Staff Offr. at I. A. Hd.-quarters, Simla, 1908; Dy. Chief Censor, India, 1914-19. *Address:* Simla.

KAZI SYED, HIFAZAT ALI, B.A., LL.B., Minister for Local Self-Government, Public Works, Public Health, etc., Central Provinces; *b.* 1892. *Educ.* Jubbulpore, Aligarh and Allahabad. Elected President Municipal, Committee, Khandwa, 1920. *Address:* Temple Road, Nagpur.

KEANE, MICHAEL, C.I.E. (1921); Presdt., U.P. Legislative Council. *b.* 1874; *m.* Joyce Lovett Thomas. *Educ.:* Jesuit School, Clongowes Wood, and Univ. Coll., Dublin. Entered I.C.S., 1898. Has been Under-Sec. to Govt., on deputation under the Govt. of India for settlement work in the Tonk and Sirohi States in Rajputana; District Officer in Agra and Cawnpore, Judicial Sec. to Govt., and Ch. Sec. to Govt. *Address:* Lucknow.

KEELING, SIR HUGH TROWBRIDGE, KT. (1923), C.S.I., 1915, A.M.I.C.E., Ch. Eng., and Sec. to Ch. Commr., Delhi, since 1912; Mem. of Delhi Imp. Commn., 1913; Mem., Institute Engineers. (Ind.) *b.* 14 April 1885. *Educ.:* Marlbrough and Cooper's Hill; *m.* Edith, *d.* of Col. T. O. Underwood, late 4th Punjab Cavalry. Asst. Eng., Madras P. W. D., 1887; Exec. Eng., 1898. Superintending Eng., 1910. *Address:* P. W. D., Delhi.

KEEN, LIEUT.-COLONEL WILLIAM JOHN, C.I.E. (1916), C.B.E. (1920), Pol. Dept., Government of India. *b.* 24 March 1873; *m.* 1899, Marion Beatrice, *d.* of Col. A. McL. Mills, 37th Dogras, two *s.* two *d. Educ.:* Haileybury College, R. M.C., Sandhurst. Gaz. to R. Welsh Fus., 1892; Trans. to I. A., 37th Dogras, 1894; served Chitral Re. Exp., 1895; Joined Punjab Commn., 1898; Pol. Dept., Govt. of India, 1901; serving in N. W. Fron. Prov.; served Kabul Khel Exp., 1902; Mohmand Exp., 1908; Great War, 1914-18; Afghan War, 1919. *Address:* Revenue Commissioner, Peshawar, N.W.F.P.

KEITH, THE HON. MR. WILLIAM JOHN, C.I.E., 1917, I.C.S., M.A., Member and Vice-President of the Executive Council of the Governor of Burma and Finance Member of the Burma Legislative Council, 2nd June 1923. *b.* 1873; *m.* 1915 Isabel, only *d.* of Sir Harvey Adamson, Kt., K.C.S.I., Lt.-Govr. of Burma (1910-15); one *s.* one *d. Educ.:* Edinburgh H. Sch. and Univ.; Christ Church, Oxford. Ent., I.C.S., 1895 (first in final Exam. 1906), Sec. to Fin. Commr., 1899-1905; Sett. Offi. 1907-10; Sec. to Govt. of Burma, 1911- of Rev. Secry., 1912-19 and Mem. of Council 12; Lt.-Governor; Commr. Magwe Divn., 1919-21; Member, Indian Leg. Assembly Delhi Sessions, 1921 & 1922, Offg. Development Commissioner, Burma 1922, Financial Commissioner, 1923, and Vice-President of the Legislative Council of the Lieut.-Governor of Burma. *Address:* Pegu House, Rangoon; Midhurst, Maymyo.

KEMP, NORMAN WRIGHT, Bar-at-Law (Inner Temple); Addl. Jud. Commr., Sind, *b.* 29 October 1874. *Educ.:* the Collegiate, Edinburgh

and Inner Temple. Chief Presidency Magistrate, Bombay, Chief Judge of Small Causes Court, Bombay; Acting Judge, High Court, Bombay. *Address*; Sind Club, Karachi.

KENYON, MAJOR-GENERAL LIONEL RICHARD, C.B., 1917; R.G.A., Director-General of Ordnance since 1919; *s.* of J. R. Kenyon, K.C., D.C.L. of Pradoe, Shropshire; *b.* 26 July 1867; *m.* 1896, Elizabeth Jane, *d.* of P.C. Sutherland, M.D., F.R.G.S., etc. Surveyor-General of Natal. *Educ.*: Winchester; R.M.A., Woolwich. 2nd-Lt. R.A., 1887; Military Assistant to Chief Supdt. Ordnance Factories, 1905-7; Secretary, Ordnance Board, 1907-10; Deputy Director, Ordnance Factories, India, 1911-16; Director of Munitions Inspection in U.S.A., 1916-19. *Address*: Army Headquarters, India.

KERR, SIR JOHN HENRY, K.C.S.I., K.C.I.E.; Governor of Assam Since Oct. 1922, *b.* 1871. *Educ.*: Glasgow Academy and Univ.; Clare Coll., Cambridge, Joined I.C.S., 1892; Settlement Officer, Bihar, 1899; Coll. of Midnapore, 1904; Dir. of Land Rec., Bengal, 1905; Depy. Sec., to Govt. of India, 1907; Rev. Sec. to Govt. of Bengal, 1911; Chief, Secretary to Govt. of Bengal, 1915 Member Executive Council, Bengal, 1921. *Publication*: Settlement reports of Saran and Darbhanga; joint-editor of Rampini's Bengal Tenancy Act. *Address*: Government House, Shillong, Assam.

KETTLEWELL, ARTHUR BRADLEY, C.I.E., I.C.S.; late Add. Sec. to Govt., Punjab. *Educ.*: Cheltenham; New Coll., Oxford. Ent. I.C.S., 1890; Pol. Offi., Wana, 1898-99. Depy. Commsr., 1903; Sec. to Govt., Punjab, 1903-07. *Address*: Lahore.

KHAPARDE, GANESH SHRIKRISHNA, B. A., (1877), LL.B. (1884). Advocate. *b.* 1855. *m.* to Laxmi Bai. *Educ.*: in Berar and Bombay. Extra Asstt. Commissioner in Berar from 1885 to 1889; returned to the Bar, Vice-Chairman of the Local Municipality and Chairman of the District Board of nearly 17 years. Member of Viceroy's Legislative Council. Member of the Council of State. *Address*: Amraoti, Berar, C. P.

KINCAID, CHARLES AUGUSTUS, C.V.O., Judicial Commr. in Sind. *b.* 8 Feb. 1870. *Educ.*: Sherborne Sch., Balliol Coll., Oxford. Passed I.C.S. examination, 1889; came out to India, 1891; Pol. Sec., 1910; Agent for Sardars in Deccan, 1914; Dist. and Sess. Judge, Satara, 1913-18; Addl. Judl. Commsr., Sind, 1918; *Publications*: Outlaws of Kathiawar, and The Tale of a Tulsi Plant (Essays on Indian Subjects); Deccan Nursery Tales, 1914; The Indian Heroes, 1915; Ishtur Phakde, 1917; Tales from the Indian Epics, 1918; A History of the Maratha People, Vol. I., 1918, Tales of the Saints of Pandharpur, 1919; Shri Krishna of Dwarka, 1920; Hindu Gods, 1920. Tales of King Vikrama, 1921; Tales of Old Sind; The Anchorite; History of the Maratha People, Vol. II, 1922. *Address*: Karachi.

KING, CHARLES MONTAGUE, C.S.I. (1922); C.I.E.; Depy. Commsr., Punjab, since 1901. *Educ.*: St. Paul's School; Balliol Coll. Oxford. Ent. I.C.S., 1892. Depy. Commsr., 1901. Commissioner, 1917. *Address*: Lahore.

KISHENGARH H. H. MAHARAJA ADHIRAJ MAHARAJA MADANSINGH BAHADUR, K.C.S.I., K.C.I.E.; *b.* Nov. 1864; *s.* father, late Maharaja Sir Sardul Singh Bahadur, G.C.I.E.; *cr.* 1892; *m.* 2nd *d.* of present Chief of Udaipur; served European War, 1914-15. *Address*: Kishengarh, Rajputana.

KISHUN PERSHAD, RAJA-I-RAJAYAN MAHARAJAH BAHADUR, YAMINUS-SULTANATH, SIR, G.C.I.E., K.C.I.E., Peishkar, Hyderabad State, Deccan. *b.* 28 Jan. 1864; *Educ.*: Nizam Coll., Hyderabad, Min. of Mil. Dept., 1893-1901. *Decorated* for service's rendered to the Hyderabad State. *Publications*: 57 works in prose poetry, Persian, Urdu and Marathi. *Address*: City Palace, Hyderabad, Deccan.

KITCHEN, ARTHUR JAMES WARBURTON, C.I.E., I.C.S., Commissioner, Rawalpindi, Punjab; *b.* 31 Jan. 1870. *Educ.*: Clifton College; Pembroke Coll., Cambridge (B.A.). Ent. I.C.S., 1893 (Retired).

KNAPP, SIR ARTHUR ROWLAND, K.C.I.E. (1924); C.S.I. (1922); C.B.E. (1919). Member of the Executive Council (1922), Madras. *b.* 10 Dec. 1870. *Educ.*: Westminster School, Christ Church, Oxford. *m.* Florence Annie, *d.* of the late Dr. E. Moore, Princ. of St. Edmund's Hall, Oxford, and Canon of Canterbury. Entered Civil Service, 1891. Chief Secretary to Govt., 1919; Reforms Commissioner, 1920; Temp. Member of Council in 1919-20, and in 1921. Special Commissioner for Malabar, 1921. *Address*: Rosewood, Ootacamund, and Madras Club.

KOLHAPUR, HIS HIGHNESS SHRI RAJARAM CHHATRAPATI Maharaja of, since 1922; *b.* 30 July 1897; *s. s.* of Col. Sir Shahu Chhatrapati Maharaja of Kolhapur (d. 1922); direct descendant of Shivaji the Great, the Founder of the Maratha Empire; *m.* 1918 H. H. Shrimati Tarabai Saheb, *g. d.* of H. H. Sir Sayajirao Maharaj Gaekwar, Ruler of Baroda. *Educ.*: Privately in Kolhapur; Hendon School; studied agriculture at Ewing Christian College, Allahabad. *Address*: Kolhapur.

KOLLENGODE, THE HON. RAJA VASUDEVA RAJA, VALIA NAMBIDI OF, C.I.E. (1915), F.M.U. (1921); Landholder. *b.* Oct. 1873. *m.* to C. Kalyani Amma, *d.* of Mr. K. Rama Menon, Chief Justice of Travancore. *Educ.*: Rajah's High School, Kollengode, and Victoria College, Palghat. Senior member and manager of the aristocratic family of Venganad in Malabar; twice nominated as member of Madras Legislative Council, afterwards elected Member, Madras Legislative Council, representing landholders; Member, Council of State (1922). *Address*: Kollengode, Malabar Dist.

KOTAH, H. H. LIEUT.-COLONEL SIR UMED SINGH BAHADUR, MAHARAO OF, G.C.S.I., G.C.I.E., G.B.E., K.C.S.I.,; Hon. Lt.-Col. in Army; Hon. Major, 42nd Deoli Regt. *b.* 1873. *s.* 1889, *Address*: Kotah, Rajputana.

KOTLA, HON. RAJA KUSHALPALSINGH OF, M.A. (Cal.), LL.B. (All.) LL.D., Ph.D., Member of the Indian Legislative Assembly

b. 15 Dec. 1872; *s.* to Kotla estate 1905. Mem. of U. P. Leg. Coun. since 1909. Mem. of Imp. Leg. Coun. as Rep. of landed aristocracy of Prov. of Agra, 1913; Sp. Mag., Vice-Chairman of Agra Dist. Bd.; Chairman of Firozabad Mun.; Trustee and Mem. of Managing Comm. of Agra Coll. *Address:* Kotla Fort, P.O. Kotla, Dist. Agra, U.P.

KRISHNAN, CHERUVARI, DEWAN BAHADUR, M.A. (Cantab.), Bar.-at-Law, Judge, High Court, Madras. *b.* 26 November 1868. *m.* in 1895. *Educ.:* High School, Cannanore; Government College, Calicut; Presidency College, Madras; Christ's College, Cambridge; Government of India Scholar and Scholar, Christ's College, Cambridge. Joined Madras Bar, 1891. Acted as Prof. of Chemistry, Presidency College, Madras; Ch. Presidency Magistrate, Madras; Ch. Judge, Court of Small Causes, Madras; was Fellow, University of Madras. *Address:* Shenstone Park, Harrington Road, Madras.

KUTCH, H. H. MAHARAJA DHIRAJ MIRZAN MAHARAO SHRI KHENGARJI SAWAI BAHADUR OF, G.C.S.I., G.C.I.E.; *b.* 23 Aug. 1866; *s.* 1875; *m.* 1884. *Address:* The Palace, Bhuj, Kutch.

LAHORE, BISHOP OF, since 1913, RT. REV. HENRY BICKERSTETH DURRANT, M.A., D.D., C.B.E. *Educ.:* Highgate Sch.; Pembroke Coll., Camb. Ch. Miss. Coll., Islington. Curate of St. Matthew's, East Stonehouse, 1894-95; C.M.S. Missionary, Lucknow, 1896; St. John's Coll., Agra, 1897. Vice-Prin., 1900; Prin., 1911; Fellow, Allahabad Univ., 1906; served European War, Mesopotamia (Kut-el-Amara), 1915 (Despatches), 1918 (Despatches). *Address:* Bishopsbourne, Lahore.

LAKHTAR, CHIEF OF, THAKOR KARAN SINGHI VAJRAJJI, C.S.I., 1911; *b.* 1846. *Address:* Lakhtar, Kathiawar Agency, Bombay.

LAKSHMI NARAYAN LAL, son of Munshi Dyal Narayan Lal, Pleader and Zemindar, *b.* 1870. *m.* to Srimati Navarani Kunwer. *Educ.* at Aurangabad, Gaya and Patna. Passed pleadership examination in 1890 and since practising as a pleader at Aurangabad and Gaya in the Province of Bihar and Orissa. Hon. organiser of co-operative societies; Director and Deputy Chairman of the Central Bank, Aurangabad; Chairman of the Central Bank, Aurangabad; Chairman of the Divisional Co-operative Federation, Patna; a Councillor of the Co-operative Federation, Bihar and Orissa and a nominated member of the Legislative Assembly. *Publications:* Glories of Indian Medicine. *Address:* Aurangabad or Gaya (Bihar and Orissa).

LAL, RAO BAHADUR BAKSHI SOHAN, M.L.A. (non-Mahomedan Constituency, Jullundur Divn.), Vakil, H. Ct., Lahore. *b.* 4 April 1857. Practised as Vakil in Kangra, Jullundur and Lahore. Elected Member, Punjab Leg. Council, 1912 and 1916. *Address:* High Court, Lahore.

LAL, PIYARE, Bar-at-Law, Member, Legislative Assembly. *b.* Jan. 1860. *Educ.:* Muir Central College, Allahabad. Called to the Bar in 1886; practised up to 1896; was Minister of Sailana State, 1896-1890; Chief Justice and latterly Judicial Member, Council of State, Indore, from 1900 to 1906; travelled round the world in 1913. *Address:* Meerut.

LATIF, CAMRUDIN AMIRUDIN ABDUL, B.A.; late Mem. of Sec. of State's Adv. Comm. for Ind. Students; *b.* Cambay, 28 Sept. 1856. *Educ.:* Elphinstone Coll., Bombay; Bombay Univ.; practised as Vakil of Consular Courts, Zanzibar and Mombassa, 1880-93; Legal Adviser to successive Sultans of Zanzibar. Fellow, Bombay Univ.; J.P., Bombay; Hereditary Inamdar, Cambay State. *Address:* Chowpati, Bombay.

LATTHE, ANNA BABAJI, M.A., LL.B. (Bombay), Vakil. *b.* 1878; *m.* to Jyotsnabai Kadre of Kolhapur. *Educ.:* Deccan College, Poona. Prof. of English, Rajaram College, Kolhapur, 1907-1911; Educational Inspector, Kolhapur, till 1914; President, Deccan Non-Brahmin League and Karnatak Non-Brahman League; Member of the Indian Legislative Assembly. *Publications:* "Introduction to Jainism" (English); "Growth of British Empire in India" (Marathi). *Address:* Belgaum.

LAWRENCE, HENRY STAVELEY, C.S.I., Kaisar-i-Hind Medal; Member of Exec. Council, Bombay, since April 1921. *b.* 20 Oct. 1870; *m.* to Rosamond Napier, *d.* of Col. E. Napier, late Carabineers. *Educ.:* Haileybury, Magdalen College, Oxford. Arrived in India 1890; Under Sec. and Sec. to Govt. of Bombay, 1897-1902; Dir. of Land Records and Agriculture, 1902-06; Collr. in Sind, 1908-13; Commsr. Southern Divn., 1914-16. Commissioner in Sind 1916-20. Ch. Sec. to Govt., 1920-21. *Publications:* Paper on Indian Agriculture before the Royal Society of Arts, 1909. *Address:* Secretariat, Bombay.

LEFTWICH, CHARLES GERRANS, C.B.E. (1919), Indian Trades Agent, East Africa. *b.* 31 July 1872. *m.* Evadne Fawcus of Alnmouth, Northumberland. *Educ.:* Christ's Hospital and St. John's College, Cantab. Entered I.C.S. 1896. Served in C. P. *Address:* Mombasa.

LEGGE, FRANCIS CECIL, C.B.E., V. D. (1919), Director of Wagon Interchange, Indian Railway Conference Assocn. *b.* 14 September 1873. *Educ.:* Sherborne School. *Address:* Bengal Club, Calcutta.

LEGH, EDMUND WILLOUGHBY, B.A. (Oxon.), C.I.E. (1924); I.C.S., Secretary to the Government of Madras, Revenue Department. *b.* 28 March 1874. *m.* Baronesse Elisabeth (B.F.S.) von Engelhardt, (1914). *Educ.* at Malvern Sch., and Univ. Coll., Oxford; apptd. after exam. of 1896; arrived, 6th December, 1897, and served in Madras as Asst. Collr. and Mag. Head Asst. Collr. and Mag., September, 1907; Sub-Collr. and Joint Mag., May, 1910; Collr. and Dist. Mag., Dec. 1915. *Address:* Secretariat, Madras.

LESLIE-JONES, FREDERICK ARCHIBALD, M.A., C.B.E. Principal of Mayo College. *b.* 1874. *m.* Christiana Mary Baskett. *Educ.:* Bromsgrove and Lincoln College, Oxford. Assistant and House Master, Marlborough College, 1897-1904. Princ., Aitchison College, Lahore, 1904-1917. *Publication:* A View of English History. *Address:* Mayo College, Ajmere.

LEVETT-YEATS, GERALD AYLMER, C.I.E., I.S.O., V.D.; Factory Supdt., Opium Dept., U.P., since 1903; *b.* 7 March 1863; *Educ.:* Private tuition. Managing Director, Opium Factory, 1919; retired 20 Decr. 1920. *Address:* Ghazipur, U. P.

LEWIS, ARTHUR CYRIL WENTWORTH, B.A., (Oxon.) 1908; Editor, *The Englishman,* (1923); *b.* Oct. 4, 1885; *Educ.:* Felsted School and Exter Coll., Oxford; Student of the Inner Temple. Started journalism in 1909 on the staff of the *Nottingham Daily Express;* literary editor and leader-writer, *Sheffield Daily Telegraph,* 1910-1914; on Editorial staff of *The Times,* 1914 and 1919-1923; special correspondent in Denmark, Morocco, etc.; 1921-22 Chief Correspondent in Paris, Great War saw service in France, Egypt, Palestine and Salonika, Lieut-Col., A.D.A.P.M. S.S. Egypt and Salonika. *Address:* The Englishman, Ltd., 9, Hare Stret; and The Bengal Club, Calcutta.

LEWIS, LLEWELLYN WILLIAM, C.I.E. (1918), Chief Engineer, Reclamation and Development Directorate. *b.* 9 March 1870, *m.* Dorothy Cox. *Educ.:* Royal Indian Engineering College, Cooper's Hill. Burma, P. W. D. 1891; Superintending Engineer, New Capital Works, Delhi, 1914; Deputy Director, Port Administration and Conservancy M.E.F., 1916; Director of Irrigation, M.E.F., 1918; Superintending Engineer, Delta Circle, Burma, 1919; Chief Engineer and Joint Secretary to Government of Burma, P. W. D., 1919; Chief Engineer Reclamation Development Directorate, 1920. *Address:* Back Bay House, Colaba, Bombay.

LEY, ARTHUR HERBERT, O.I.E. (1918). Late temporary Secretary to Government of India, Commerce and Industry Department. *b.* 7 November 1879. *Educ.:* Winchester and New College, Oxford. Entered I.C.S., 1903. Director-General, Commercial Intelligence, 1914-16. *Address:* Simla.

LINDSAY, DARCY, C.B.E., M.L.A., *b.* Nov. 1865. Secretary. Calcutta Branch, Royal Insurance Co. *Address:* 26, Dalhousie Square, Calcutta.

LINDSAY, HARRY ALEXANDER FANSHAWE, C.B.E., Offg. Secretary, Commerce Dept. Government of India. *b.* 11 March 1881; *m.* Kathleen Louise Huntington. *Educ.* St. Paul's School, London; Worcester College, Oxford. Entered I.C.S.; was Director-General of Commercial Intelligence. *Address:* Bengal Club, Calcutta.

LITTLEHAILES, RICHARD, D.P.I., Madras, 1919; *b.* 14 February 1878. *Educ.:* Balliol Coll., Oxford and Kiel University. Demonstrator and Lecturer, Clarendon Laboratory, Oxford. Joined I.E.S., 1903 as Prof. of Mathematics, Presidency College, Madras. *Address:* Moore Road, Madras.

LLOYD, ERNEST SAMPSON, B.A., I.C.S., Acting Chief Secretary 1923. *b.* 26 May 1870; *m.* Mary Young. *Educ.:* Clifton College and Lincoln College, Oxford. Arrived India 1894. Asstt. Collector and Magistrate till 1901; Under-Secretary to Govt., Rev. Deptt., 1901; Distt. Magte., Bangalore, 1902-04; President, Corporation of Madras, 1906-10; Collector and Dist. Magte., 1910-1918; Revenue Secretary to Govt. since 1919. Finance Secretary 1922. *Address:* Madras Club, Madras.

LOHARU, THE HON. NAWAB SIR AMIR-UD-DIN, AHMED KHAN BAHADUR, K.C.I.E.; *b.* 1860, *S.* 1884. Ruling Chief of Moghal tribe. Abdicated in favour of his Heir-apparent and Successor in 1920 voluntarily retaining titles and 9 guns salute as personal distinctions. For two years Mem. of Imp. Leg. Council and for two years Mem. of Punjab Council. Superintendent and Adviser to the Malerkotla State in the Punjab for 12 years. Attached to Pol. Dept. in Mesopotamia. *Address:* Loharu, Hissar.

LUCKNOW, BISHOP OF, RT. REV. GEORGE HERBERT WESTCOTT, D.D. (1914) *Educ.:* 1889, Marlborough; Peterhouse, Cambridge (M.A.), Ordained, 1886. Consecrated Bishop, 1910. *Publications:* "Kabir and the Kabir Pouth." *Address:* Bishop's Lodge, Allahabad.

LUNAWADA, HIS HIGHNESS MAHARANA SIR SHRI WAKHATSINHJI DALELSINHJI, RAJAH OF, K.C.I.E.; *b.* 11 Aug. 1860; *S.* 1867; a Virpura Solunki Rajput; *Educ.:* Rajkumar Coll. Rajkot. *Address:* Lunawada, Rewa Kantha, Bombay.

LYALL, FRANK FREDERICK, C.I.E., I.C.S., Commissioner, Ranchi Division. *b.* 12 June 1872. *Educ.:* Edinburgh Academy; Balliol Coll., Oxford. Ent. I.C.S., 1891; *m.* Miss I. K. Markham (1906). *Address:* Ranchi.

LYTTON, 2ND EARL OF, P.C., G.C.I.E., Governor of Bengal (1922); *b.* Simla, 9th Aug. 1876; *s.* of 1st Earl and Edith, *d.* of Hon. Edward Villiers, *niece* of 4th Earl of Clarendon. *s.* father 1891; *m.* 1902, Pamela, *d.* of late Sir Trevor Chichele-Plowden; two *s.* two *d.* Chairman of the Royal Commission for the Brussels, Rome and Turin Exhibitions, 1910; 1911; Civil Lord of the Admiralty, 1916; Additional Parliamentary Secretary to the Admiralty, 1917; British Commissioner for Propaganda in France 1918; Civil Lord of the Admiralty, 1919-20; Chairman of Trust Houses, Ltd.; President of Hampstead Garden Suburb Trust, Ltd., and of Welwyn Garden City; Ltd.; Under-Secretary of State for India, 1920-22. *Publication:* Life of Edward Bulwer, First Lord Lytton, 1913. *Address:* Government House, Calcutta.

MCCARRISON, LIEUT.-COLONEL, ROBERT, I.M. S., M.D., D.Sc., Hon. LL.D., F.R.C.P., (London); Foreign Associate Fellow College of Physicians (Philadelphia); Laureate Academy of Medicine, Paris; Hon. Surgeon to Viceroy, Kaiser-i-Hind (1st Class) 1911 C.I.E. (1923); In charge, Deficiency Diseases Inquiry Indian Research Fund Association, Pasteur Institute, Coonoor. *b.* 15 March 1878; *m.* Helen Stella, 3rd *d.* of J. L. Johnston, I.C.S. (Rtd.), late Judicial Commissioner, Sind. *Educ.:* Queen's College, Belfast. Graduated M.B., B.ch, B.A.O. (1st Class Hons. and Exhibition) (1900); M.D. (Hons.) 1900; M.R.C.P. (Lond), 1909; D.Sc. (Belfast) 1911; F.R.C.P., (Lond.) 1914; Entered I.M.S., 1901; Milory

Lecturer, College of Physicians, London, 1913; Mellon Lecturer, University of Pittsburgh, U.S.A., 1921: Mary Scott Newhold Lecturer, C. P. Philadelphia, 1921; Hanna Lecturer, Cleveland Ohio, U.S.A. 1921; May Foundation Lecturer, Rochester, In, U.S.A. 1921; Arnott Memorial Gold Medallist, Irish Medical Schools and Graduates Association 1921; Prix Amussat Academy of Medicine Paris (1914); Laureate of the Academy of Medicine, Paris (1914); Stewart Prize for Research British Medical Association (1918, Foreign Associate Fellow, College of Physicians of Philadelphia (1922); Hon. LL.D. Queen's University, Belfast, 1919; Brevet-Lt.-Colonel (1918) "for distinguished Service in the Field." *Publications:* "The Thyroid-Gland in Health and Disease," London, 1917 "Studies in Deficiency Disease," London, 1921; Numerous scientific papers on the physiology and pathology of the thyroid and parathyroid glands; and on disorders of Nutrition in Proc.. Roy. Soc., Proc. Royal Soc. Med., Indian Journal Medical Research, etc. *Address:* Pasteur Institute, Coonoor. South India.

McCARTHY, Sir Frank, Kt. (1923), C.B.E. (1920), M.L.A.,(Burma European Electorate) Late managing proprietor, *Rangoon Gazette* (retd. 1920). *b.* 1862. *Educ.:* Queen's Univ. Barrister-at-law (Gray's Inn.). Joined Editorial Staff, *Rangoon Gazette*, 1889; Chrmn., Burma Joint War Committee, 1917-19; *m.* May Innes. *Address:* Fairfield, Rangoon.

MACARTNEY, Sir George, K.C.I.E., C.I.E., Brit. Con.-Gen. at Kashgar, Chinese Turkestan, since 1911; *b.* Nankin (China), 19 Jan. 1867. *Educ.:* Dulwich Coll., France. Bachelier ès Lettres of Universite de France. Ent. service of Govt. of India, 1889; received thanks of Government of India, 1906. *Address:* Kashgar, Chinese Turkestan, *via* Gilgit (Kashmir).

MacGLASHAN, John, M. Inst., C. E., M.I.E. (Ind.), Chief Engineer, Calcutta Port Commissioners; *b.* 24 Sep. 1874; *m.* Grace Isabel Fraser. *Educ.:* Aberdeen. *Address:* Port Commissioner's Office, Calcutta.

MACKENNA, James, C.I.E., I.C.S., Development Commissioner, Burma. *b.* Aug. 1872. *Educ.:* Dumfries Academy; Edinburgh Univ.; Balliol Coll., Oxford. Ent. I.C.S., 1894; Dir. of Agriculture, Burma, 1906; President, Indian Cotton Committee, 1917; President, Indian Sugar Committee, 1919. *Publication:* Agriculture in India. *Address:* Rangoon.

MACKENZIE, Lieut.-Colonel John, C.I.E., Indian Army; Military Secretary to H.E. The Earl of Lytton, Governor of Bengal (1922); *b.* 21 Sep. 1876; *m.* Dorothy Helen *o. d.* of Col. W.G. Massy, C.M.G., one *s.* one daughter. *Educ.:* Merchiston Castle Sch. R.M.C., Sandhurst. Comptroller of Household to following Viceroys of India; Earl of Minto, 1907-10; Lord Harding, 1910-16; Lord Chelmsford, 1916-21. *Address:* Govt. House, Calcutta.

MACKISON, James Walls, B.Sc. (Edin.), M. Inst., C.E., J.P., C.I.E. (1921); Special Engineer, Development Works to Bombay Municipality. *b.* 18 Dec. 1869. *Educ.:* Dundee Institution, St. Andrew's University and Edinburgh University; Civil Engineer with Dundee Municipality from 1886 to 1906; Consulting Engineer in Private practice, 1906-11; Executive Engineer, Bombay Municipality, 1911-1921. *Address:* The "Grange," Wodehouse Road, Bombay.

MACLAGAN, Sir Edward Douglas, K.C.S.I. (1921), K.C.I.E., M.A., C.S.I.; Governor, Punjab, 1921. *b.* 1864. *Educ.:* Winchester; New Coll., Oxford. Ent. I.C.S., 1885; Under Sec., Govt. of India, Rev. and Agric. Dept., 1892; Ch. Sec. to Govt., Punjab, 1906; Sec. to Govt. of India, Rev. and Agric. Dept., 1910-14; Education Department, 1915, Lt.-Governor, Punjab, 1919. *Address:* Lahore and Simla.

MACLEOD, Hon. Sir Norman Cranstoun, Kt. (1919); Chief Justice, Bombay, 1919; *b.* 10 July, 1866. *Educ.:* Wellington Coll. New Coll., Oxford. Called to Bar, 1890: Offi. Assignee, Bombay, 1900; Mem. of Imp. Leg. Council, 1908; Puisne Judge, High Court Bombay, 1910-19. *Address:* Mount Pleasant Road, Bombay.

MACMUNN, Lieut.-Gen. Sir George Fletcher, K.C.B. (1917), K.C.S.I. (1919), D.S.O. (1893); Legion d'Honneur (1915); Quartermaster General, India, 1920; *b.* 14 August 1869. *Educ.:* Kensington Grammar School. *m.* Alice Emily, *d.* of Col. J. R. Watson. Joined R.A., 1888. Served in Upper Burma, 1892, with Kohat Field Force and in the Tirah, 1897, S. African war and in European war, Gallipoli, Egypt, Mesopotamia, where he was G.O.C. in C., 1919-20. Gold Medallist, U.S. Institution, India, 1904, and Royal Artillery Institution. *Publications:* The Armies of India. A Free Lance in Kashmir. Pike and Carronade. *Address:* Simla.

MACNAGHTEN, Sir Henry Pelham, Kt. (1920); Merchant. *b.* 4 September 1880; *m.* Frances Cropper, *d.* of the Very Rev. The Dean of Gibraltar. *Educ.:* Eton and King's College, Cambridge; East India Merchant since 1902; Partner, Wallace & Co., Bombay. *Address:* Wallace & Co., Bombay.

MACPHAIL, the Rev. Earle Monteith, M.A., B.D., Hon. D. D. (Edn.), 1922; C.B.E. (1919); Vice-Chancellor of the Madras University (1923); *b.* Jan. 31, 1861; *m.* Mary, elder *d.* of late James Meliss Stuart of Eriska, Argyllshire. *Educ.:* Edinburgh Academy, Edinburgh University, New College, Edinburgh, Jena, Tubingen and Berlin Universities. Ordained Missionary of Free Church of Scotland, 1890; became Prof. of Hist. and Economics, Madras Christian College, Fellow of Madras University, 1899; Mem. of the Syndicate of Madras University 1906; Representative of Madras University, on the Madras Legislative Council, 1909 and 1919; Chairman, Madras Publicity Board, 1918; Principal, Christian College, Madras 1921; Member, Madras Legislative Council, 1921-22. *Address:* College Road, Madras Benderloch Kodaikanal, South India.

MACTAGGART, COLONEL CHARLES, C.S.I., 1919, C.I.E.; Inspector-General of Civil Hospitals, U.P.; *b.* 1861. *Educ.:* Campbelltown Gram. Sch. Glasgow Univ., Ent. I.M.S., 1886; Insp.-Gen. of Prison, 1902; Mem., Indian Factory Labour Commission, 1907-08; Mem. of U.P. Leg. Council, 1909. *Address:* Lucknow.

MACWATT, THE HON., MAJOR-GENERAL ROBERT CHARLES, C.I.E., M.B.B.Sc., M.R.C.P.E., F.R.C.S., F.Z.S., K.H.S.; Director-General, Indian Medical Service; Member of the Council of State. *Address:* Simla and Delhi.

MCLEAN, ROBERT, B.Sc., Edinburgh; Agent, G.I.P. Railway; *b.* 3 Feb. 1884; *m.* Evelyn Noel Brien. *Educ.:* Edinburgh Academy, Edinburgh University. *Address:* Malabar Hill, Bombay.

MCPHERSON, HUGH, C.S.I., 1919; B.A., Member of Exec. Council, Bihar and Orissa, since April 1921; *b.* 3 May 1870; *Educ.*, Paisley Gram. Sch., Glasgow Univ.; Balliol Coll., Oxford. Passed into I.C.S., 1889, arrived India, 1891; Settlement Officer, Santal Parganas, 1898-1905; Director, Land Records, Bengal, 1907-12; Rev. Sec., Behar and Orissa, 1912-1915; Ch. Secy., Bihar and Orissa, 1915-1919; Mem., Board of Revenue, Patna, 1919; Secretary to Govt. of India, Home Dept., 1919-20; Member of Executive Council, Bihar and Orissa, 1921. *Address:* Patna and Ranchi.

MCWATTERS, ARTHUR CECIL, C.I.E. (1918); I.C.S., Secretary to the Govt. of India, Finance Department (1923); *b.* 13 September 1880; *m.* Mary, only *d.* of Sir Stephen Finney C.I.E., one *s. Educ.:* Clifton, Trinity College, Oxford, Joined I.C.S., 1904. Served in the U. P. Under-Sec., Government of India, Department of Commerce and Industry, 1910-13. Wheat Commissioner, 1915. Controller of Hides and Wool, 1917, Chairman Board of Special Referees, Excess Profits Duty Act, 1919; Secretary to Government of India; Secretariat Procedure Committee-1919; Represented Govt. of India on Commercial Mission to Persia 1920; Controller of Currency, 1920-23. *Address:* The Secretariat, Delhi or Simla.

M'IVER, JOHN ALEXANDER, I.S.O.; Supdt., Govt. Photozincographic Dept., Bombay, C. S.; Land Rec. Dept., since 1906; *b.* 10 Sep. 1859. *Educ.:* privately, Yorkshire. Joined the B. C. S., 1880. *Address:* Poona.

MADHAVA RAO, V. P., C.I.E. For 34 years in service of Mysore State in important capacities, being Mem. of Council of Regency, 1898-1902; Member of Exec. Council and Rev. Commsr.; Dewan of Travancore, 1904-06; Dewan of Mysore, 1906-09. *Address:* Tanjore.

MADHAVLAL, SIR CHINUBHAI, Bt.; *see* Runchorelal.

MADRAS, BISHOP OF, since 1923, Rt. Rev. Edward Harry Mansfield Waller, M.A., (Cantab.); *b.* 8 Dec. 1871. *Educ.:* Highgate Sch. Corpus Christie College, Cam. Ordained 1894; Principal, St. Paul's Divinity Sch., Allahabad, 1903; Sec., C.M.S., Indian Group, 1913; Canon of Lucknow, 1910-15; Bishop of Tinnevelly, 1915-1922. *Address:* Sullivan's Gardens, Royapettah, Madras.

MAFFEY, SIR JOHN LOADER, K.C.V.O. (1921), C.S.I. (1920), C.I.E., I.C.S.; Ch. Commr., N.-W. Frontier Province. *b.* 1 July 1877. *Educ.:* Rugby; Christ Church, Oxford. Ent. I.C.S., 1899. Private Sec. to Lord Chelmsford; Chief Sec. to H. R. H. the Duke of Connaught during his tour in India. *Address:* Peshawar.

MAGNIAC, BRIG.-GENERAL SIR CHARLES LANE, C.M.G. (1916); Brevt., 1917; C.B.E. (1918); Kt. (June 1923); Legion d' Honneur Officer. Agent, Southern Mahratta Railway. *b.* 14 Dec. 1873. *m.* Letilla Anne Knolles, *d.* of T.H.W. Knolles, Esq., of Oatlands, Keasale, Cork, Ireland. *Educ.:* United Service College, Westward Ho. Royal Engineers, 1894; Indian Railways, Sep. 1896 to August 1914; Great War, France, from Sept. 1914 to Armistice; A.D.R.T. and D.D.R.T., Afghan War, 1919; A.H.Q Simla. *Address:* Rostrevon, Cathedral P.O., Madras.

MAHALANOBIS, S.C., B.Sc. (Edin.), F.R.S.E., I. E. S.; Prof. of Physiology, Presidency Coll., Calcutta, since 1900. Fellow and Syndic, Calcutta University. *b.* Calcutta, 1867. *Educ.:* Edinburgh Univ; *m.* 1902, fourth *d.* of Keshub Chunder Sen and sister of H. H. the Maharani of Cooch-Behar. *Publications:* Muscle Fat in Salmon; Life History of Salmon; New form of Myograph; Teachers' Manual; Text Book of Science. *Address:* 210, Cornwallis Street, Calcutta.

MAHDI HUSAIN, KHAN WAHUD-UD-DAULA, AZOD-UL-MULK, NAWAB MIRZA, KHAN BAHADUR, C.I.E.; *b.* 1834. *Educ.:* India; Arabia. Travelled extensively in Arabia, Persia, Afghanistan, Baluchistan, and Europe; visited Mecca, Medina Kaymiani. *Address:* Tirminigaz, Lucknow.

MAHOMED USMAN, Khan Bahadur, B.A., Kaiser-i-Hind 2nd Class (1923); Landlord and Medical Practitioner; Sheriff of Madras (Dec. 1923). *b.* 1884. *m. d.* of Shifa-ul-Mulk Gynulabidin Sahib Bahadur, B.A. *Educ:* Madras Christian College. Councillor, Corporation of Madras since 1913; Hon. Pres. Magte., 1916-20; Fellow of the Madras Univ., 1921-22; Member, Town Planning Trust since 1921; Commitee on Indigenous Systems of Medicine, 1921-23; Member, Publicity Board, 1918 and 1921-22; Member, Cinema Board since 1921; Hon. Sec., Muthialpet Muslim Anjuman, Madras, since 1913; Hon. Visitor, Govt. Mahomedan Coll. since 1919 and Hon. Visitor, Government School of Arts and Crafts, 1923; Member, Madras Excise Licensing Board since 1922; Gave evidence before the Reforms Committee and the Jail Committee. Elected Member, Madras Legis. Council, 1921-23. *Address:* Hakim Manzil, Popham's Broadway, Madras.

MAHUMUDABAD, RAJA OF, SIR MOHAMMAD ALI MAHOMED KHAN, KHAN BAHADUR, K.C.S.I., K.C.I.E., Home Member, Executive Council of the U. P. Government, 1921; Hon. Secretary, Lucknow University, Collection Committee; President, All-India Educa-

tional Conference. Vice-Chancellor of Ali garh Univ.; *b.* 1877. *Educ.:* privately. *Address;* Mahmudabad House, Kaiserbagh, Lucknow.

MAHMOOD SCHAMNAD, SAHEB BAHADUR, Landholder and Member, Legislative Assembly. *b.* 7 March 1870; *m.* 1896 to Mrs. Maryam Schamnad, *Educ.:* St. Aloysius Coll., Mangalore and Christian Coll., Madras. Served on the South Kanara Dist. Board for about 12 years; Hon. Magte. since 1913; Pioneer of Moplah education in S. Canara. *Address:* Sea View, Kasaragod, S. Kanara.

MAHOMED, KHAN BAHADUR, NAWAB SYED, I.S.O.: Ent. Govt. Service, 1873; Insp.-Gen. of Registration, Bengal; retired, 1913; a distinguished Urdu scholar and dramatist; wrote The Nawabi-Darbar, first drama in Urdu on English lines. *Address:* 82, Toltollati Lane, Calcutta.

MAJITHIA, THE HON. SARDAR BAHADUR SUNDER SINGH, C.I.E. (1920); Revenue Member, Government of Punjab; *b.* 17th Feb. 1872; *m.* grand daughter of Sardar Sir Attar Singh, K.C.I.E., Chief of Bahadur (Patiala State). *Educ.:* Punjab Chiefs' College and Government College, Lahore. Worked as Hon. Secretary of the Khalsa College, Amritsar, for 11 years and Hon. Secretary, Chief Khalsa Diwan, a representative body of the Sikhs from its inception in 1902 to the close of 1920. *Address:* 27, Lawrence Road, Lahore and "Majithia House," Albert Road, Amritsar (Punjab).

MALAVIYA, PANDIT MADAN MOHAN; President of Indian National Congress, 1909 and 1918; *b.* Allahabad, 25 Dec. 1861. *Educ.:* Sanskrit at the Dharma Jnanopadesh Pathshala, Govt. High School, Muir Central Coll., Allahabad; B.A. (Calcutta), Schoolmaster, 1885-87; edited the Indian Union and the Hindusthan, 1885-1889; LL.B., Allahabad Univ., 1892; Vakil, High Court, Allahabad, 1892, Member, Prov. Leg. Council, 1902-12; Member Imp. Leg. Council, 1910-1919; Member, Indian Industrial Commission, 1916-18; President, Sewa Samitis, Prayag; Chief Scout, Sewa Samiti Scouts Association, Vice-Chancellor, Benares Hindu University; since 1919. *Address:* Benares.

MALER KOTLA, HON. KHAN, SIR ZULFIQAR ALI KHAN, K.C.S.I., C.S.I.; estate holder in Maler Kotla State; Member of Imp. Council representing Mohamedan Community of Punjab; Ch. Minister of Patiala State, since 1911; *b.* 1875; *Educ.:* Chiefs' Coll., Lahore; Cambridge; Paris. *Address:* Lahore.

MALIK MOHAMMED UMAR HYAT KHAN (TIWANA), COLONEL THE HON. SIR, K.C.I.E., C.B.E., M.V.O.; Member of Council of State, 1921; *b.* 1875. *Educ.:* Chiefs' Coll., Lahore. One of largest landholders in Punjab. Attaché to H. M. the Amir, 1907; Deputy Herald, Delhi Durbar, 1911; Member of Imperial Council, 1910-1921. *Address:* Kalra, Shahpur.

MALLIK, DEVENDRA NATH, B.A. (Cantab), Sc.D. (Dub.), F.R.S.E.; Prof. of Mathematics; Presidency Coll., Bengal, since 1908; *b.* Bengal 1866. *Educ.:* St. Xavier's Coll., Calcutta; Univ. Coll., London; Peterhouse, Cambridge. *Publications:* Numerous works on Mathematics, and Physics. *Address:* Astronomical Observatory, Presidency College, Calcutta.

MANIPUR, H. H. MAHARAJA CHURA CHAND SINGH, C.B.E.: *b.* 1886; *m.* March 17, 1905. *Educ:* Mayo College, Ajmer. *s.* 1891. State has area of 8,000 sq. miles, and a population of 384,016. Salute 11 guns. *Address:* Imphal Manipur, State Assam.

MANGALORE, R. C. BISHOP OF; *see* Perini.

MANN, HAROLD HART, D. Sc., F.I.C., F.L.S., Kaisar-i-Hind Medal (1st Class) 1917. Director of Agriculture, Bombay Presidency; *b.* 16 Oct. 1872. Married. *Educ.:* Elmfield Sch., York; Yorkshire Coll., Leeds, Pasteur Inst., Paris; Chemical Asst. for Research to R. A. S., 1895-98; Scientific Officer to Ind. Tea Assoc., Calcutta, 1900-07. Principal, Agricultural College, Poona and Agricultural Chemist to Govt. of Bombay, 1907-18. *Publications:* Numerous on questions relating to tea culture and manufacture, and many other Indian agricultural questions (with Sir G. Watt); The Pests and Blights of the Tea Plant; also on sociological subjects. Land and Labour in a Deccan Village, No. 1 and No. 2. *Address:* 43, Sassoon Road, Poona.

MANSINGH, SARDAR, B.A., LL.B., Vakil, High Court, Vice-President, The Chief Khalsa Diwan. and Member, Legis. Assembly. *b.* 1887. *Educ.:* Khalsa College, Amritsar, won Gold medal for writing Punjabi poetry. Practised as Vakil for a period of about ten years; edited Khalsa Young Men's Magazine from 1905 to 1909. *Publications:* Translated Kalidas, Vikramorvasi from Sanskrit into Punjabi poetry and prose, has written religious tracts. *Address:* Lahore.

MANSINGHJI, *see* JHALA.

MANT, SIR REGINALD ARTHUR, K.C.I.E. (1924); C.S.I. (1919), B.A., Finance Member, Punjab Executive Council, April 1923; *b.* 27 September 1870; *m.* Eleen Gertrude, *d.* of Col. E. O. Tandy, I.M.S. *Educ.:* Maryborough Gr. School, Queensland, and Trinity College, Oxon. Joined I.C.S., 1893. Under Secretary to Government of India, Finance Department, 1901; Deputy Secretary, Finance Department, 1904-05. Offg. Joint Secretary, Military Finance Branch, 1908. Financial Secretary, Punjab, 1910-15. Secretary to Govt. of India, R. and A. Dept., 1916-1920; Offg. Member of Governor-General Council, April to Oct. 1919; Member, Indian Fiscal Commission, October 1921 to July 1922. *Address:* Simla and Delhi.

MARACAIR, THE HON. KHAN BAHADUR SIR AHMED THAMBY, Merchant and Joint Passenger Agent, B.I.S.N. Co., Ltd.; *b.* 1878; *m. d.* of Mr. Meera Thamby Maracair, Nagore. *Educ.:* Negapatam. Served on all local bodies as Chairman and President for many years. Served consecutively for 8 years in the Madras Legislative Council; A Member of the Council of State (1921). *Address;* "Ahmed Mahal," Negapatam.

MARJORIBANKS, THE HON. NORMAN EDWARD, C.S.I. (1922); C.I.E. (1919), Member, Board of Revenue and Commissioner of Salt and Excise, Madras; *b.* 16 Oct. 1872; *m.* Barbara *d.* of the late Edward Watson, H.M.'s Inland Revenue Service. *Educ.* at Royal Academical Institution, Belfast; Queen's Coll., Belfast, and Trinity Hall, Cambridge. Entered I.C.S., 1893; Asstt. Collr. and Magte. until 1896; Under-Secretary to Govt., 1897-1903; Dy. Director and Director of Land Records, 1904-1910; Collr. and Dt. Magte., 1911-1918; Chief Secry. to Govt. and Member, Board of Revenue, 1919-1922. *Publications:* Report on Emigration (in collaboration with Sir Ahmed Thamby Maracair). *Address:* Brodie Castle, Adyar, Madras.

MARRIS, SIR WILLIAM SINCLAIR, K.C.S.I. (1921); K.C.I.E. (1919): Governor of the United Provinces, since December 1922; *b.* 1873; *Educ.:* Wanganui, N.Z.; Canterbury Coll., N.Z., Christ Church, Oxford. Passed I.C.S., open 1895; Under-Secretary to Govt. of India, 1901; Dy. Sec. to Govt. of India, 1904: service lent to Transvaal Govt., 1906; C.S. Commsr., Transvaal, 1907; Ag. Secy. to Govt. of India, Home Depart., 1913, Insp.-Gen. of Police U.P., 1916; Spec. duty, 1917-18. Home Secretary, 1919; Reforms Commissioner, 1919, Governor of Assam, 1921. *Address:* Lucknow.

MARSHALL, SIR JOHN HUBERT, Kt., *cr.* 1914, C.I.E., 1910; Litt. D. M.A., Ph.D. F.S.A. Hon. A.R.I.B.A.; Vice-President of the India Society; Director-General of Archæology in India since 1902; *b.* Chester, 19 March 1876; *m.* 1902 Florence, *y. d.* of Sir Henry Longhurst, C.V.O. *Educ.:* Dulwich; King's College, Cambridge (scholar). Craven Travelling student; made journeys of exploration in Greek lands. *Address:* Benmore, Simla.

MARTEN, SIR AMBERSON BARRINGTON, Kt. (1924), LL.D., M.A.; Puisne Judge of Bombay High Court since 1916. *b.* 8 Dec. 1870; *s. s.* of late Sir Alfred Marten, K.C., M.P. *Educ.:* Eton; Trinity College, Cambridge (1st Class Law Tripos). Studentship Council of Legal Education, 1895; called to Bar Inner Temple, 1895; Mem. of Bar Council, 1909-10; practised in Chancery Division till 1916. *Address:* High Court, Bombay.

MARTIN, JAMES REA, B.A., C.I.E. (1923), I.C.S., Secretary to Government of Bombay, Development Department and Commissioner, Bombay Suburban Division. *b.* 2nd Aug. 1877. *m.* Frances Lilly Elsie Webb. *Educ.* Methodist College and Queen's College, Belfast. Assistant Collector, Manager, Sind Incumbered Estate, Deputy Commissioner, Upper Sind Frontier, Collector of Karachi and Surat; Deputy Director of Development. *Address:* 6 Rocky Hill Flats, Malabar Hill, Bombay.

MARTINDELL, HERBERT EDWARD WEST, M. R. San. I., C.I.E. (1921); Chief Engineer and Secretary to the Govt. of Burma, P.W.D., *b.* 14 Sept. 1866; *m.* Miss L. Davidson. *Educ.:* St. Paul's School, Darjeeling and Civil Engineering College, Sibpur. Joined the Burma, P. W. D. as an Assistant Engineer on 6th February 1890. Had practical training in England from 17th June 1891 to 29th June 1893. Promoted to Executive Engineer from 21st March 1901 to Offg. Superintending Engineer on 22nd February 1910 and was confirmed in that rank from 13th August 1914. Was appointed Offg. Chief Engineer and Joint Secretary to the Government of Burma, P. W. D., from 18th July 1916. Proceeded on long leave from 15th October 1917. Returned to Burma on 9th January 1919 and was appointed as Chief Engineer, temporary rank, and Joint Secretary from that date. Confirmed in the appointment of Chief Engr. from 26th October 1919. Assumed charge of the appointment of Chief Engineer and Secretary to the Government of Burma from the 3rd November 1919. *Address:* Pegu Club, Rangoon and "Craig Dhu," Maymyo, Upper Burma.

MARZBAN, JEHANGIR B., C.I.E. (1921) Propr. of *The Jame-Jamshed. b.* 21 Sept. 1848. *Educ.:* Elphinstone Coll. Was Assist. Manager, *The Times of India*, for 7 years under Col. Nassau Lees; Manager, *The Bombay Gazette* for 9 years. Propr., *The Advocate of India* for 5 years. Editor and Propr., *The Jame-Jamshed*, for 30 years. Founder and Managing Trustee of the Khan Iala Sanitarium. Founder of Parsi Widows' Relief Fund. *Publications:* 30 vols. of travel, fiction, etc. *Address:* Shallemar, Hughes Rd., Bombay.

MASANI, RUSTOM PESTONJI, M.A., J.P., Kaiser-i-Hind Silver Medal; Dy. Munpl. Commissioner; *b.* 23 Sept. 1876; *m.* 9 Decr. 1902, Manijeh P. Wadia, *Educ.:* New H.S. and Elphinstone Coll.; Fellow, Elphinstone College 1897 and 1898; Jt., Propr. and Editor of *Gup Sup* (1898); Editor of English columns of *Kaisar-i-Hind* (1899-1900); Editor, *Indian Spectator* (1901-02); Jt. Hon. Secry., Society for the Protection of Children in W. India; also of the K. R. Kama Memorial Institute and the Parsi Girls' Schools Association and Trustee, Secretary, Bombay Food Prices Committee (1914-17) Municipal Secretary, 1907-1919. *Publications:* English: Child Protection, Folklore of Wells. The Law and Procedure of the Municipal Corporation of Bombay; Gujarati: *Dolatno Upayog* (Use of Wealth); *Gharni, tatha nishalni keluvni* (Home and School education), *Tansukh mala* (Health series); and novels named *Abyssiniano Habshi: Bodhlu Chandra Chal: Address:* Versova (*via* Andheri Station.)

MASOOD, SYED, ROSS, NAWAB MASOOD JUNG Bahadur Director of Public Instruction, Hyderabad (Deccan). *b.* 1889. *Educ.:* M.A.O. College, Alligarh, and New College, Oxford. Bar-at-law; Imperial Education Service, Headmaster, Patna School, 1913. Senior Prof. of History, Ravenshaw College, Cuttack, 1916. Formerly Fellow of the University of Calcutta; Fellow of the Madras University, Member Council of the Osmania University; Member, Court of the Muslim University; Aligarh. *Publications:* "Japan and its Educational System." *Address:* Hyderabad.

MATHER, RICHARD, B.Met., M.I.E. (Ind.) Metallurgical Inspector, Government of India. *b.* 19 Sept. 1886. *Educ.:* Royal Grammar School, Sheffield, Univ. of Sheffield. Mappin Medallist 1906; Metallurgist, Ormesby Iron Works, Middlesborough, 1907-1911, Dy. Dir. Metallurgical Research, War Office, Woolwich, 1911-1919; Member of Govt. Commission to investigate German and Luxemburg steel industry, 1919; Member of Iron and Steel Institute, Inst. of Metals, Faraday Society, Technical Inspection Institute. *Publications:* Papers for technical society. *Address:* Tatanagar, B. N. Ry.

MATHESON, MAJOR-GENERAL TORQUHIL GEORGE, C.B., 1918; C.M.G., 1919; G.O.C. Waziristan Force, *b.* 4 Feb. 1871. *m.* 1900 Ella Louisa, *d.* of late Capt. James Wingfield Liston and Countess of Aylesford. *Educ.:* Eton. Served in 4th Batt., Bedfordshire Regt. (Herts Militia), 1890-94; Commission in Coldstream Guards, 1894; Adjutant, 1st Batt.; 1897-1902; Regimental Adjutant, 1903-5; attached Gen. Staff, London District, 1907-11; appointed to the command of a Batt. Coldstream Guards, 1917; served S. African War (King's and Queen's medal, despatches), European War (despatches 10 times.) Brevet Lt.-Col., Brevet Col., C.B., C.M.G., (Major-General); appointed to command an Infantry Brigade, 1915. A Division, 1917. *Address:* Guard's Club, London and Flagstaff House, Dera-Ismail Khan.

MAW, WILLIAM NAWTON, C.I.E., I.C.S.; Commissioner, Nerbadda Division, C.P., since April 1923. *b.* 1 Aug. 1869; *m.* 1898, Una Agnes Brook-Meares, *d.* of Col. G. Brook-Meares; Com., Royal Irish Fusiliers. *Educ.:* Wesley Coll., Sheffield: St. John's Coll., Cambridge (B.A.). Ent. I.C.S., 1893. In C. P. Secretariat, 1906-12: Dy. Commissioner, Jubbulpore, 1913-16. Served as Commissioner in the Jubbulpore, Nagpur and Nerbudda Divisions of C.P. and in Berar, 1916-23. *Address:* Hoshangabad, C.P.

MAYHEW, ARTHUR INNES, Director of Public Instruction, Central Provinces. *b.* 27 September 1878. *m.* Mary Catherine, daughter of the late Sir James Davies, High Court Judge, Madras. *Educ.:* Winchester and New College, Oxford. (1st class Lit. Hum.) Inspector of Schools, Madras. *Educ.:* Adviser to the Nizam's Government. *Address:* Nagpur, C. P.

MAYNARD, HERBERT JOHN (THE HON. SIR JOHN), M.A. (Oxon.), C.S.I. (1915); K.C.I.E. (1920) Member, Executive Council, Punjab and Chancellor, Punjab University. *b.* 12 July 1865. *m.* Alfreda Horner, *d.* of Dr. Richard Eppes, M.D. (Virginia). *Educ.:* Merchant Taylor's School, London and St. John's Coll., Oxford. Joined first appointment in Indian Civil Service, Punjab, Dec. 1886; Vice-Chancellor, Punjab Univ., 1917; Member, Executive Council, 1921. *Address:* Lahore, Punjab.

MAYNE, JONATHAN WEBSTER CORYTON, M.A. (Oxford), C.I.E. (1922), Guardian to H. H. the Maharaja of Jaipur. *b.* 26 April 1868. *m.* Margery Howel Scratton. *Educ.:* The Wells House, Malvern Wells. Tonbridge School, Keble College, Oxford. Studied at Leipzig, 1890-1891; Assistant Master, Brighton Coll., 1891-1898. Nominated to I.E.S., 1898; from then till 1903 held posts of Headmaster, Karachi and Poona Government High Schools, Educational Inspector (Acting), Central and Northern Divisions, Bombay Presidency; from February 1903 to January 1923. Principal, Rajkumar College, Rajkot, *Publications:* Newspaper articles in the *Times of India* under nom-de-plume "Oxon," occasional poems and some songs (in England). *Address:* Rambagh, Jaipur, Rajputana.

MEARS, SIR GRIMWOOD, KT. (1917), and Kt. of Order of Crown Belgium. Chief Justice, Allahabad, 1919. *Educ.:* Exeter College, Oxford. Barrister, 1895: Hon. Sec. to Bryce Committee on German Outrages, Hon. Sec. to R. Com. on rising in Ireland, 1916; Sec. to the Dardanelles Commission, 1916-17; British Embassy, Washington, 1918; at office of War Cabinet, Aug. 1918 to Jan. 1919; Paris, Jan; 1919; British Embassy, Washington, 1919. *Address:* Allahabad.

MEHTA, KHAN BAHADUR, SIR BEZONJI DADABHOY, KT. *Address:* Nagpur.

MEHTA, CHUNILAL VIJBHUCANDAS, M.A., LL.B., Member, Executive Council of the Bombay Government, since June 1923. *b.* 12 Jan. 1881. *m.* to Tarabai Chandulal Kankodiwala. *Educ.:* St. Xavier's College, Bombay. Captain, Hindu XI; elected to the Bombay Municipal Corporation in 1907; Chairman, Standing Committee, 1912; President of the Corporation, 1916; Elected to the Bombay Legislative Council by the Corporation in 1916; elected to the City Improvement Trust, 1918; Chairman of the Indian Merchants Chamber, 1918. Elected to the Bombay Port Trust, 1920. Millowner and Director, Tata Iron and Steel Co.; Bombay Electric Supply and Tramways Co., and several other joint stock companies. Minister, Bombay Government 1921-23. *Address:* 108, Ridge Road, Malabar Hill, Bombay.

MEHTA, DHANJIBHAI HORMASJI, L. M. & S. Kaiser-I-Hind Gold Medal (1920); Donat of St. John Silver Medal (1917); Raj Ratna Silver Medal, Baroda (1916); Retired Sanitary Commissioner, Baroda. *b.* 4. Feb. 1864, *m.* to a cousin. *Educ.:* at Sir Cowsaji Jehangir Naosari Zarthosti Madressa and the Grant Medical College, Bombay. Joined Baroda Med. Service, 1887; did Inoculation work with Prof. Haffkine; gave evidence on the value of inoculation before 1st Plague Commission. Has popularised St. John's Ambulance work and Red Cross Work all over Gujrat and Kathiawad and published books on Ambulance Nursing, Hygiene, Red-Cross, Midwifery, etc. *Address:* Sayaji Ganj, Baroda.

MEHTA, THE HON. MR. LALUBHAI SAMALDAS, J.P., C.I.E., (1914); Merchant. *b.* October 1863. *m.* Satyavati, *d.* of Bhimrao Bolanath Divatia of Ahmedabad. *Educ:* Bhavnagar High School and Elphinstone College. Under Secretary to His Highness the Maharaja of Bhavnagar, and Revenue Commissioner, Bhavnagar. Resigned service in 1899 and entered business at Bombay as Guaranteed

Broker to Gysi Klynanjung. Helped in starting the Bombay Central Co-operative Bank, Bank of Baroda, Indian Cement Company, and the Nira Valley Sugar Company. Director in commercial firms and banks. Nominated to the Bombay Legislative Council in 1910, 1913, and 1916. Elected to the Council of State in 1920. President of the Industrial Conference at Karachi in 1913. Member of the Maclagan Committee on Co-operation, 1914-15. President, Mysore Co-operative Conference, 1915. Chairman, Mysore Co-operative Committee, 1921-23. Member of the Senate of the Bombay University. Hon. Treasurer, Adams Wylie Hospital 1918-22, and of Seva Sadan. President, Indian Merchants' Chamber and Bureau, 1917-18. *Address:* 65, Apollo Street, Fort, Bombay.

MEHTA, SIR MANUBHAI NANDSHANKAR, KT. (1922), C.S.I. (1919), M.A., LL.B.; Diwan (Prime Minister) of Baroda, since 1916; *b.* 22 July 1868; *Educ.:* Elphinstone Coll., Bombay. Professor of Logic and Philosophy and Law Lecturer, Baroda College, 1891-99. Priv. Sec. to Gaekwar, 1899-1905; Rev. Min. and First Counsellor, 1914-16. *Publication:* The Hind Rajasthan or Annals of Native States of India; Principles of Law of Evidence (in Gujarati), 3 Vols. *Address:* Baroda.

MEHTA, ROOSTUMJEE DHUNJEEBHOY, J.P., C. I.E.; Merchant; Port Commissioner, 1888-91; Chairman, Local Board, Alipur, 1886-1917; Chairman, Manicktolla Municipality. Sheriff of Calcutta, 1893; Consul for Persia at Calcutta, 1899-1904. *Publications:* The Exchange Imbroglio: Indian Railway Economics; Indian Railway Policy, Indian Railway Management. *Address:* 9, Rainey Park, Ballygunge, Calcutta.

MEKRAN, NAIB WAZIR OF, whose territory forms the northern littoral of Gulf of Oman. *Address:* Mekran, Baluchistan.

MESTON, REV. WILLIAM, M.A., B.D. (Kaiser-i-Hind Medal (First Class), 1921. Acting Principal and Professor of English, Madras Christian College. *b.* 4 May 1871. *m.* Mary Innes Sinclair. *Educ.:* Grammar School Aberdeen and University of Aberdeen; New College, Edinburgh and University of Edinburgh, St. John's College, Cambridge Appointed to Staff of Madras Christian College, 1893. Nominated Member of Legislative Council (Madras), 1921 *Publication:* Joint-author of "Our Madras Mission." Aspects of Indian Educational Policy. *Address:* College Park, Kilpauk, Madras.

MEULEMAN, MOST REV. BRICE, S.J.; Catholic Archbishop of Calcutta, since 1902; *b.* Ghent, 1 March 1862. *Educ.:* St. Barbe's Coll., Ghent. Joined Soc. of Jesus, 1879; nominated Superior of Jesuit Mission in Bengal 1900. *Address:* Calcutta.

MILLER, SIR DAWSON, KT., K. C., Ch. Justice of Patna High Court, since 1917; *b.* Dec. 1867. *Educ.:* Durham Sch. and Trinity Coll., Oxford, Bar, Inner Temple, 1891. *Address:* High Court, Patna.

MILLER, SIR LESLIE, KT. (1914), C.B.E. (1919). Chief Judge, Mysore 1914-22. *b.* 28 June 1862. *m.* Margaret Lowry, C.B.E. *Educ.:* Charterhouse, and Trinity College, Dublin. Entered I.C.S., 1881. Judge of the Madras High Court, 1906-14. *Address:* Glen Morgan, Pykara, Nilgiri Hills.

MINCHIN, LT.-COL. ALFRED BECKETT, C.I.E.; Agent to the Governor-General Punjab States, since 1st Nov. 1921. *b.* 28 Dec. 1870. Ent. army, 1891; Captain, 1901; Major, 1909; served Isazai Exp., 1892; Chitral Red. For., 1895; Malakand and Swat, 1897; Asst. to Gov.-General's Agent, Rajputana, 1899-1904; Pol. Ag., Bundelkund, 1902; Assistant Sec. to Govt. of India, For. Dept., 1908. Political Agent in Bundelkhand, 1917-1921. *Address:* Lahore.

MISRA, PYARE LAL, Bar-at-Law,, *b.* Aug. 17 1872. *Educ.:* Saugor, C. P. and Nagpur Hislop College; Gray's Inn, London. Was elected to the C. P. Council in 1917 and to the Legislative Assembly in 1920. Is Vice-President of the Municipality, Hon. Secry., Co-operative Bank, Member of the C. P. Board of Agriculture; First President of the Hindi Literary Conference held at Raipur, Mem. All-India Hindi Association. *Publications:* Hindu Law in Hindi, History of English journals in Hindi, a small pamphlet in English criticising the Calcutta University Commission's Report during Lord Curzon's Vicerovalty. *Address:* Chhindwara, C.P.

MITCHELL, DAVID GEORGE, B.Sc. (Edin.), C.I.E. (2nd June 1923). Indian Civil Service *b.* 31st March 1879, *m.* to Elizabeth Duncan Wharton. *Educ.:* George Heriots School, Edinburgh, Edinburgh University, Lincoln College, Oxford. Joined I.C.S. Oct. 1903 Divisional and Sessions Judge in Central Provinces, 1913, Legal Secretary, and Legal Remembrancer to Government of C.P. and Secretary to C.P. Legislative Council, 1919. *Address:* Nagpur, Central Provinces, India.

MITTER, SIR BINOD CHUNDER, KT. (1918), Barrister and Advocate, Calcutta. Member, Council of State (1921). *b.* 1872. *m.* Miss Charushilla De. *Educ.:* Presidency College and Ripon College. Twice officiated as Advocate-General, Bengal; Vice-President, National Liberal League; Member of the Bengal Legislative Council, 1910-16; Standing Counsel to the Government of India, 1910-17, Member of Moderates Deputation to England. 1919. *Address:* 2-1, London Street, Calcutta.

MIYAN ASJAD-ULLAH, MAULVI, M.L.A. Hon. Magte., Kishanganj, Zamindar of Meherpur. *b.* 5. Jan. 1883. *m.* Bibi S. Nisa, *d.* of late Moulvi Insaf Ali of Henria. *Educ.:* at Mehengaon. Member, Dist. Board, Purneah (Bihar) and Member, Local Board, Kishanganj, Vice-President, Anjuman-i-Islamia, Kishanganj. *Address:* Mehengaon, P. O. Kishanganj, Dist. Purneah, Bihar.

MODI, JIVANJI JAMSHEDJI, SHAMS-UL-ULAMA (1893), C.I.E. (1917), Sec., Parsi Panchayat. Bombay. *b.* 26 October 1854. *Educ.:* Elphinstone High School, Elphinstone College. *m.* Shirinbai, *d.* of the late H. N. Saklatwala, Has published numerous historical and antiquarian works chiefly dealing with Parsi history and religion. Is Ph. Doc. (Hon).

Heidelberg, and Officier de l'Instruction publique. Received the Campbell Gold Medal, Bombay Branch R. Asiatic Society (1917). *Address:* 1, Wodehouse Road, Bombay.

MODI, MAGANLAL THAKORDAS BALMUKUNDAS, L.C.E., C.I.E., (1921); Cotton Merchant trading as Narandas Rajaram & Co., *b.* 5 Feb. 1852 *m.* Manglabai. *Educ*: Surat Govt. High School and Poona Engineering College. Served Government in Irrigation Deptt., in Khandesh, 1882-83; Cotton Merchant since 1884. *Address*: 3, Esplanade Road, Fort, Bombay.

MODY, HORMUSJI PEROSHAW, M.A. (1904) LL.B. (1906); Advocate, High Court, Bombay; *b* 23 Sept. 1881; *m* Jerbai, *d.* of Kawasji Dadabhoy Dubash. *Educ:* St. Xavier's Coll., Bombay. Mem. of Bombay Mun. Corp. Chairman of its Standing Committee, 1921-22; and President, 1923-34; Partner C.N. Wadia & Co. *Publications:* The Political Future of India (1908); Life of Sir Pherozeshah Mehta (1921). *Address:* Cumballa Hill, Bombay.

MOHAMED AHMAD SAID KHAN, NAWAB, C.I.E. (1921); Minister of Industries and Agriculture to the Governor of the United Provinces. *b.* 1893. *m.* to daughter of Nawab Bahadur M. Abdus Samad Khan. *Educ.:* M.A.O. College, Aligarh. *Publications:* Council Speeches; Presidential address, All India Moslem Rajput Conference. *Address*: 'Oakover,' Naini Tal; and Chhatari (Bulland Shahar).

MOHAMMED YAMIN KHAN, B.A., of the Allahabad University (1911), Bar-at-Law; Senior Vice-Chairman, Municipal Board, Meerut. *b.* June 1888. *m.* to a cousin. *Educ.* at Meerut College, M.A.O., College, Aligarh and England. Practising as Barrister in Meerut, since Dec. 1914. Acted as Secretary of U. P. War Fund for Meerut District: Secretary, Y.M.C.A. Funds, Secretary, Dist. War League. Was elected a member of the Municipal Board, Meerut, in 1916 and Vice-Chairman a year later. Elected member Legislative Assembly, 1920. *Address*: Junnut Nishan, Meerut.

MOIR, THOMAS EYEBRON, B.A., C.I.E. (1917); C.S.I. (1922), Finance Secretary to Govern. ment of Madras (on leave). *b.* 1874. *Educ* Fettes Coll., Edinburgh, Wadham Coll Oxford, Ent. I.C.S., 1898. *Address:* Fort St. George, Madras.

MOLONY, JOHN CHARTRES, M.A., I.C.S. Collector and District Magistrate, North Arcot. *b.* 27 Feb. 1877; *Educ.:* Portora Royal Sch., Enniskillen; Trinity Coll., Dublin. Asstt. Political Agent for Banganapalle, 1905-09. President. Madras Corporation, 1914-19; Supdt. of Census, Madras, 1910-11. *Address:* Madras.

MONTGOMERIE, ALEXANDER. M.A., C.I.E., (1921), I.C.S., Secretary to Govt. of Bombay, Home Department. *b.* 27 Feb. 1879; *m.* Katherine MacDonald Rankin. *Educ*; Glasgow High School, Glasgow University. Balliol College, Oxford. Joined Indian Civil service 1903; served in various districts of Bombay Presidency. *Address:* Secretariat, Bombay.

MOOKERJEE, SIR ASUTOSH SARASWATI; SASTRAVACHASPATI, KT, C.S.I., M.A., D.L., D.Sc.; Judge of Calcutta High Court since 1904; Acting Chief Justice of Bengal, 1920; Vice-Chancellor of Univ. of Calcutta, since 1906; *b.* 28, June, 1864; *Educ.:* S. Suburban Sch.; Presidency Coll; City Coll.; Fellow and Syndic of Calcutta Univ., since 1889; Add. Mem. of Imp. Council, 1903-04; Fellow of numerous learned societies, *Address:* 77 Russa Road North, Bhowanipur, Calcutta.

MOOKERJEE, SIR NARAYAN, Zamindar of Uttarpara; *b.* April 1859. Member, Bengal Legislative Council, since 1918; *m.* 1878; one *s. Educ.:* Uttarpara School; Presidency College, Calcutta; Chairman of the Uttarpara Municipality since 1887; Chairman of the Bench of Hon. Magistrates, 1889; Managing Committee of the British Indian Association, 1889; a Member of the Asiatic Society; a life Member of St. John Ambulance Association; Member of the Provincial Advisory Committee for Indian Students, 1918; a Member of the National Liberal League, and Vice-President of Bengal Humanitarian Association; elected to Executive Committee of All India Landholders' Association, 1919. *Address:* Uttarpara near Calcutta.

MOOKERJEE, SIR RAJENDRA NATH, K.C.I.E., K.C.V.O. (1922), M.I.M.E. (Hon. Life), Civil Engr.; *b.* 1854; *Educ.:* London Missionary Institution at Bhowanipur: Presidency College, Civil Engineering Branch, Calcutta Senior Partner in Martin & Co., Calcutta; Member of Indian Industrial Commission, 1917-1918; Member of Indian Railway Committee, 1920-1921. President, Howrah Bridge Committee, 1921; President, Bengal Retrenchment Committee, 1922; Member, All-India Retrenchment Committee, 1922; of Board of Trustees, Asiatic Museum, Calcutta; a Fellow of Calcutta Univ., Member of Court of Visitors, Ind. Inst. Science; Sheriff of Calcutta, 1911; Member of the Board of the Governing Body of Bengal Engineering College. Ex-President, the Institution of Engineers (India). Member, Board of Apprenticeship Training of Calcutta School of Tropical Medicine and Hygiene; Member, Calcutta Technical School Committee; of Calcutta Communications Committee; President, Indian Science Congress, 1922. *Address:* 7, Harington Street, Calcutta.

MOORE, PIERCE LANGRISHE, C.I.E.; Ag. Financial Secretary to the Government of Madras. *b.* 29th June 1873. *m.* Muriel, *d.* of the late Lumsden Strenge. *Educ.:* Cheltenham; Christ Church, Oxford. Ent. I.C.S., 1896; President, Madras Corporation, 1910-14. Inspector-General of Police, Madras, 1914-18. *Address:* Madras Club, Madras.

MORSHEAD, LEONARD FREDERICK, C.S.I. (1924), I.C.S., Board of Revenue, Bihar and Orissa. *b.* 5 Sep. 1868. *m.* Sybil May, *d.* of Archibald Hills, Esq. *Educ*: Winchester and Balliol. Entered Indian Civil Service, 1889; Collector of Customs, Calcutta, 1902; Inspector-General of Police, Bengal and Behar and Orissa, 1908-12; Commissioner, Board of Revenue, 1919 to 1923.

MOUNTFORD, LEWIS JAMES, C.B.E., Commissioner, Southern and Central Division, Bombay Presidency, 1916-20; Addl. Mem. of the Viceroy's Legislative Council, 1919, *b.* 1st Aug. 1871. *Educ.:* Dulwich Coll. and Pembroke Coll. (Cantab.). Joined I.C.S. Asst. Collr., 1892; Manager of Sind Encumbered Estates, 1896; Collr. of Larkhana, 1903; Spl. Collr., Bombay, 1905; Collr., Sholapur, 1907; Satara, 1911; Poona, 1913; Ahmedabad, 1916. Member of Standing Committee, Presidency Recruiting Board, 1917. *Publications:* Pamphlet on the Relations between Debtor and Creditor in Sind. *Address:* The Secretariat, Bombay.

MOZOOMDAR, RAI JADUNATH BAHADUR, Vedanta Vachaspati, M.A., B.L., Kaiser-i-Hind (1915), C.I.E. (1921), M.L.A., Vakil and Landholder. *b.* Oct. 1859. *m.* Srimati Saratkumari, *d.* of late Babu Abhaya Charan Sarkar. *Educ.* Canning Coll., Lucknow and Free Church Coll., Calcutta. Professor, Sanskrit College, Calcutta; editor, *Tribune*, Lahore; Secry., Finance Dept., Kashmir; Principal, Katmandu Coll., Nepal; Vakil, Calcutta High Court; Member, Legislative Assembly. *Publications:* Amitvar Prasar in 2 parts in Bengali; Commentary on Vedanta Philosophy in Bengali; Religion of Love in English, essays and addresses in English; Appeal to young Hindus in English; and numerous other works; editor, *Hindu Patrika*. *Address:* Jessore, Bengal.

MUDDIMAN, SIR ALEXANDER PHILLIPS, KT. (1922); C.S.I. (1920); C.I.E.; President, the Council of State. *b.* 14 Feb. 1875. *Educ.:* Wimborne Sch. Ent. I.C.S., 1897; served in Behar and Bengal, in various capacities. Dy. Sec., Govt. of India, Leg. Dept., 1910-15. Sec. to Govt. of India, Leg. Dept., 1915-20. *Address:* Delhi.

MUHAMMAD ABDULLAH, SAIYED, B. A., Zemindar and Member, Legislative Assembly, (1920), *b.* 1878. *m.* Mahmudetun Nesa Bibi, *d.* of late Chaudhury Keramutullah of Salar (Murshidabad) 1887. *Educ.:* Calcutta Madrassa Presidency Coll., & Ripon Coll., Hon. Magte., Rampurbet, 1896; elected member, Local and Union Boards; Commissioner, Meherpur Municipality; apptd. Sub. Deputy Collr., and Magte., 1905 and Sub-Divl. Officer, Begusarai Dt., Monghyr and Meherpur (Nadia Dist). Asstt. Settlement Officer, Bhabna (Shahabad). Resigned 1917. *Address:* Margram, Birbhum Dist.

MUHAMMAD ABDUL QUADIR, KHAN SAHEB MAULVI, B.A., LL.B., M.L.A., Pleader. *b.* 26th Dec. 1867. *Educ.:* Government College, Jubbulpore, C.P. and M.A.O. College, Aligarh. Was for some time Headmaster, Mohindra High School, Tikamgarh, Orchha, Bundelkhand. Practised in 1898 at Amraoti (Berar); Official Receiver (1917): Hon. Secry., Berar Mahomedan Educational Conference. *Address:* Amraoti Camp (Berar), C.P.

MUHAMMAD MUKARRAM ALI KHAN, MUMTAZ-UD-DOWLAH NAWAB, Chief of Pahasu Estate and Tazimi Jagirdar (Jaipur State). *b.* 2 Sept. 1895. *m. d.* of late Ali Khan, Chief of Saadabad. *Educ.:* Maharaja's Coll., Jaipur and M.A.V. Coll., Aligarh; Member of State Council, Jaipur, in the Foreign Dept., *Publications:* Sada-i-Watan, Tauqeed Nadir; Swarajya Home Rule. *Address:* Nawab's House, Jaipur, Rajputana.

MUKHERJEE, BABU JOGENDRA NATH, M.A., B.L., M.L.A., Vakil, High Court, Calcutta. *b.* 23rd June 1861. *m. d.* of late Babu Harinath Chatterjee, of the Provincial Executive Service. *Educ.:* Presidency College and Hindu School, and Government Pathashala, Calcutta. Practised as pleader at Purnea, 1886-1908; was Municipal Commissioner; Vice-Chairman, Purnea Municipality; and Chairman altogether for about 18 years; Member of Bengal Legislative Council (1905-1907), practised Calcutta High Court from 1908; Prof. of Hindu Law in the Calcutta Law College from 1909-1919; Chairman of Professors, Criminal Law in that Coll., 1918-19. *Address:* 17, Pran Kissen Mookerjee Road, Tallah, Calcutta.

MULJI, VASANJI TRIKAMJI, RAO SAHIB, SIR, Kt., J.P.; Hon. Magistrate; Mem., Bombay Cotton Exchange; *b.* 8 July 1866. *Address:* Malabar Hill, Bombay.

MULLA, THE HON. MR. JUSTICE DINSHAH FARDUNJI, M.A., LL.B., Additional Temporary Judge of the Bombay High Court. *b.* April 1868. *m.* Jerbai, *d.* of F. F. Karaka of Bombay. *Educ.:* at Sir Jamsetji Jijibhoy School and Elphinstone College, Bombay. Fellow of the Bombay University (1906-1921); President, Tribunal of Appeal, Bombay, 1919-1921. *Publications:* Commentaries on the Code of Civil Procedure; Principles of Hindu Law; Principles of Mahomedan Law; Joint author of Pollock and Mulla's Indian Contract Act. *Address:* 21, Marine Lines, Bombay.

MULLICK, SIR BASANTA KUMAR, KT. (1920); Judge, Patna High Court, since 1916. *Educ.:* Univ. Col. Sch.; King's Coll., Cambridge. Ent. I.C.S., 1887; Actg. Judge, Calcutta High Court, 1913; Puisne Judge, 1915. *Address:* Bankipore.

MUMTAZUDDOLAH, NAWAB SIR MOHAMMAD FAIYAZALI KHAN, K.C.V.O., K.C.I.E., C.S.I., C.B.E., Nawab of Pahasu, Minister, Jaipur State; *b.* 4 Nov. 1851; late Member of Supreme and Provincial Legislative Councils. *Address:* Nawab's House, Jaipur.

MURSHIDABAD, NAWAB BAHADUR OF, K.C.S.I., K.C.V.O., The Hon. Ihtisham-ul-Mulk, Rais-ud-Dowla, Amir-ul-Omrah, Nawab Asef Kudr Syud Wasef Ali Meerza, Khan Bahadur, Mahabut Jung; premier noble of Bengal, Behar and Orissa; 38th in descent from the Prophet of Arabia; *b.* 7 Jan. 1875; *m.* 1898, Nawab Sultan Dulin Fugioor Jahan Begum Saheba. *Educ.:* in India, under private tutors and in England, at Sherborne, Rugby, and Oxford; has six times been Mem. of Bengal Leg. Council. *Address:* The Palace, Murshidabad.

MURTRIE, DAVID JAMES, O.B.E., I.S.O.; Dy. Dir.-Gen., Post Offices, 1916-1921 (retired); *b.* 18 Dec. 1864; *Educ.*: Doveton Prot. Coll., Madras. Ent. Govt. Service in Post Office, 1884; Pres. Postmaster, Bombay, 1913-16. *Address:* "Looland," 8a., Cunningham Road, Bangalore.

MYSORE, H. H. THE MAHARAJA OF, COL. SIR SRI KRISHNARAJA WADIYAR BAHADUR, G.C. S.I.; G.B.E. *b.* 4th June 1884; *s.* father, 1895. Invested with full ruling powers by Lord Curzon, at Mysore, 1902; present at Delhi Durbar, 1903. Area of State is 29,444 square miles, and its population is nearly 6,000,000. *Address:* The Palace, Bangalore, Mysore; Fern Hill, Nilgiris.

MYSORE, YUVARAJA OF, SIR SRI KANTHIRAVA NARASIMHARAJA WADIYAR BAHADUR, G.C.I.E., Extraordinary Member of Council in Mysore; *b.* 5 June 1883; *y. s.* of late Maharaja Sri Chamarajendra Wadiyar Bahadur. Takes keen interest in welfare of people and in all matters of education, health, and industry. *Address:* Mysore.

NABHA, MAHARAJA SRI RIPUDAMAN SINGHJI MALAVENDRA, BAHADUR OF, F.R.G.S., M.R.A.S.; *b.* 14 March 1883; *s.* 1911. *Educ.:* privately. Travelled good deal in India and abroad; Mem., Viceroy's Council, 1906-08; Pres. of Ind. Nat. Soc. Confce., 1909; attended Coronation of King, accompanied by Maharani, 1911; made handsome contributions towards various War Funds and Loans including gift of fully-equipped Hospital Ship for Mesopotamia. Abdicated, 1923.

NAG, GIRIS CHANDRA, RAI BAHADUR, M.A., B.L., Member, Legislative Assembly, *b.* 14 Feb. 1864. *m.* Sreemati Kunjalata, *d.* of Rai Saheb P. C. Deb of Sylhet. *Educ.:* Calcutta Presidency College. Professor, Ravenshaw Coll., Cuttack (1886-1890); Pleader, Sylhet Judge's Court, 1890-1892; Member, Assam Civil Service, 1892-1910 and Member, Dacca University Court. *Publications:* "Back to Bengal." *Address:* Bakshi Bazar, Dacca.

NAGOD, RAJA JADUBIND SINGH, RAJA OF; *b.* 30 Dec. 1855; *s.* 1874; dynasty has ruled at Nagod for over nine centuries; State has area of 501 square miles, and population of 84,097; salute 9 guns. *Address:* Nagod, Baghelkhand.

NAGPUR, BISHOP OF, since 1903, RIGHT REV. EYRE CHATTERTON, D.D., F.R.G.S.; *b.* 22 July 1863; *m.* 1910 Lilian Agnes Haig, 2nd *d.* of Henry Alexander Haig, 43, Kensington Park Gardens. *Educ.:* Haileybury; Dublin Univ.: ordained, 1887. Head of Dublin University Mission, Chota Nagpur, 1891-1900. *Publications:* The Story of 50 years, Mission Work in Chota Nagpur (S.P.C.K.), 1900: The story of Gondwana (Isaac Pitman & Co.), 1916; with the Troops in Mesopotamia, 1916; Mesopotamia Revisited, 1917. *Address:* Bishop's Lodge, Nagpur, C.P.

NAGPUR, R. C. BISHOP OF; *see* Coppel.

NAIDU, SAROJINI, MRS., Fellow of Roy. Soc. of Lit. in 1914; *b.* Hyderabad, Deccan, 13 Feb. 1879. *Educ.:* Hyderabad; King's Coll., London; Girton Coll., Cambridge. Published three volumes of poetry in English, which have been translated into all Indian vernaculars, and some into other European languages; also been set to music; lectures and addresses on questions of social, religious, and educational and national progress; specially connected with Women's Movement in India, and welfare of Indian students. *Address:* Hyderabad Deccan.

NAIR, MANNATH KRISHNAN, DEWAN BAHADUR (1915); Member, Madras Legislative Council. *b.* August 1870. *Educ.:* Alathur; Calicut; and Christian College and Law College, Madras. Vakil, Calicut Bar, Ch. Justice, Travancore High Court, for four years Dewan, Travancore, May 1914 to July 1920. *Address:* Palghat, Malabar District.

NAIR, *see* Sankaran Nair.

NANDY, MAHARAJA SIR MANINDRA CHANDRA, K.C.I.E.; Add. Mem. of Imp. Council. *Address:* Kasimbazaar, Bengal.

NANJUNDAYYA, H. VELPANURU, C.I.E.; *b.* 13 Oct. 1860; *Educ.:* Wesleyan Mission Sch., Mysore; Christian Coll., Madras; Madras Univ. (Fellow, 1895). Ent. service of Mysore Govt., 1885; Judge, Chief Court of Mysore, 1904; Mem. of Council and Ch. Judge of Chief Court; retired 1916; Vice-Chancellor, Mysore Univ. *Address:* Mallesvaram, Bangalore.

NARIMAN, SIR TEMULJI BHICAJI, KT., M.R.C.P. (Edinburgh), Hon. Causa, 1922; Sheriff of Bombay, 1922-23. Chief Physician, Parsi Lying-in Hospital; President, College of Physicians and Surgeons; *b.* Navsari, 3rd Sept. 1848; *Educ.:* Grant M.C.; Elphinstone Coll.; Fellow of Bombay Univ., 1883; J.P., a Syndic in Medicine, 1891; a Dean in Faculty of Medicine, 1901-02; Mem., Bombay Leg. Council, 1909; Mem. of Provincial Advisory Committee, 1910. Member, Bombay Medical Council, 1913. *Address:* Bombay.

NARSINGARH, H. H. SRI HUZUR RAJA SIR ARJUN SINGHJI SAHIB BAHADUR OF, K.C.I.E.; *b.* 10 Jan. 1887; belongs to Parawar or Ponwar branch of Agnikal Rajputs; *s.* 1897. *Educ.:* Mayo Coll.; Imp. Cadet Corps. Invested 1909; State is 734 sq. miles in extent, and has population of 1,01,426; salute of 11 guns. *Heir:* *s.* Shri Maharaja Kumar Shri Vikram Singh Bahadur, *b.* 21 Sept. 1909. *Address:* Narsingarh.

NATARAJAN, KAMAKSHI, B.A. (Madras University), 1889, J.P., Editor, *The Indian Social Reformer*, Bombay; *b.* 24 Sept. 1868. *Educ.:* St. Peter's H. S., Tanjore; Pres. Coll., Madras; Govt. Coll., Kumbakonam; and Law Coll., Madras. Headmaster, Aryan H. S., Triplicane, Madras; Asst. Editor, the *Hindu*, Madras; Fellow of Bombay Univ. and Mem. of Syndicate (1918); Mem., Bandra Municipality; Pres., Madras Prov. Soc. Confce., Kurnool, 1911; and Pres., Bombay Prov. Soc. Confce., Bijapur, 1918. President, Mysore Civic and Social Progress Conference, 1921, and President, National Social Conference, Ahmedabad, 1921. *Publications:* Presidential addresses at above conferences; Report of Census of Hyderabad (Deccan), 1911. *Address:* *The Indian Social Reformer* Office, Fort, Bombay, and Tata's Bungalow, Khar Road, Bandra, Bombay.

NATESAN, G. A., head of G. A. Natesan & Co and Editor, *The Indian Review*. *b.* 25 August 1874. *Educ.:* High School, Kumbakonam; St. Joseph's School, Trichinopoly; H. H. School, Triplicane; Presidency College, Madras University B.A. (1897), Fellow of the

Univ. and Commissioner, Madras Corpn. Has taken a leading part in Congress work. Joined Moderate Conference, 1919. Sec., Madras Liberal League. Joint Secretary, National Liberal Federation of India, 1922. *Publications*: chiefly patriotic literature and speeches, etc., of public men, "What India Wants," "Autonomy within the Empire." *Address*: George Town, Madras.

NATHUBHAI, TRIBHOVANDAS MANGALDAS, J.P.; Hon. Mag. and Fellow of Univ., Bombay; Sheth or head of Kapol Banya community; resigned presidentship after tenure thereof for 25 years, 1912. *b.* 28 Oct. 1856. *Educ.*: St. Xavier's Coll., Bombay. Was for 20 years an elected Mem. of Bombay Mun. Corpn.; has been Hon. Mag. since establishment of Courts of Bench Magistrates in Bombay. *Address*: Sir Mangaldas House, Lamington Road, Bombay.

NAWANAGAR, H. H. MAHARAJA JAM SHRI RANJITSINHJI, G.C.S.I., G.B.E., K.C.S.I., Hon. Lt.-Colonel in army; *b.* Sarodar, 10th September 1872; *Educ.*, Rajkumar Coll., Rajkot; Trinity Coll., Cambridge. First appearance for Sussex C. C. C., 1895; head of Sussex averages same year; head of Sussex averages, 1895-1902; champion batsman for all England in 1896 and 1900, scoring 2,780 runs with an average of 59·91; went with Stoddart's All England XI to Australia, 1897-98; served European War, 1914-15. *Address*: Jamnagar, Kathiawar.

NELSON, WILLIAM HARDCASTLE, O.B.E. (1919), M.A., M.A.I., M. Inst. C.E., M.I. Mech. E., *b.* 21 Feb. 1875; *m.* Ethel Maud, only *d.* of the late Frank Phillips of Plymouth. *Educ.*: Mr. Strangway's School, Dublin; Trinity College, Dublin; Asstt. Engineer, Keyham Dockyard Extension, Devonport; Asstt. Engineer, Calcutta Port Commissioners, Port Engineer, Chittagong, Port Commissioners; Chief Engineer, Karachi Port Trust; Chief Engineer, Bombay Port Trust; Major, No. 8 M.G. Coy., A.F.I. *Publications*: Report on Grain Elevators in Canada and United States. *Address*: Bombay Port Trust.

NEOGY, KSHITISH CHANDRA, M.L.A. (non-Mahomedan Electorate, Dacca Divn., E. Bengal), Vakil, High Court, Calcutta. Journalist. *b.* 1888. *Educ.*: Presy. Coll., Calcutta. Dacca Coll. *m.* Sreematy Lila Devi, is a member of the All-India Council of the Nat. Lib. Fedn. Elected Member of the Dacca Univ. Court, 1921. *Address*: 48, Toynbee Circular Road, Ramna, Dacca; and 84-1, Amherst Street, Calcutta.

NEPAL, MAHARAJA CHANDRA SHUM SHERE JUNG BAHADUR RANA, G.C.B., G.C.S.I., G.C.M.G., G.C.V.O., D.C.L. (Oxon, 1908); F.R.G.S., Hon. General in British Army; Hon. Colonel of 4th Gurkha Rifles: Thong-lin-pimma-kokang-wang-syan (Chinese 1902); Prime Minister and Marshal of Nepal; *b.* 8 July 1863. *Educ.*: Durbar H. S., Khatmandu. Entered army as a Colonel; Commander-in-Chief, 1901; Maharaja, Prime Minister, and Marshal, 1901; during European War, 1914, presented 31 machine guns, first gift of munitions, to the King, and placed whole of military resources of State at the King's disposal. *Address*: Singha Durbar, Khatmandu, Nepal.

NEVILL, COLONEL (Temp. Col. on the Staff) HENRY RIVERS, B.A.; O.B.E. (1919); V.D. (1920); C.I.E. (1921), Indian Civil Service. *b.* 24th May 1876. *m.* Euphan, *d.* of T. Maxwell, Esq., of Irvine, Ayrshire. *Educ.*: Charterhouse, Oriel College, Oxford. Entered Indian Civil Services, 1899; posted to U.P. Commanded U. P. Horse, 1913-17; services placed at disposal of C.-in-C., Nov. 1917; Asstt. Adjutant-General at A. H. Q. and from August 1921; Director of Auxiliary and Territorial Forces. *Publications*: Dist. Gazetteers of the United Provinces. *Address*: Army Headquarters, Simla.

NEWBOULD, HON. MR. BABINGTON BENNETT; Puisne Judge, High Court, Calcutta, since 1916; *b.* 7 March 1867. *Educ.*: Bedford Sch.; Pembroke Coll., Cambridge. Ent. I.C.S., 1885. *Address*: Bengal United Service Club, Calcutta.

NIHAL SINGH, REV. CANON SOLOMON, B.A., Evangelistic Missionary; *b.* 15 Feb. 1852. *Educ.*: Govt. H. S., Lakhimpur; Canning Coll., Lucknow, ordained, 1891; Hon. Canon in All Saints' Cathedral, Allahabad, 1906. *Address*: 2, Pioneer Road, Allahabad.

NOLAN, JAMES JOSEPH, F.J.I., Director of Publicity, Burma; Journalist, Editor, *Rangoon Times*, 1915-1920; *b.* Limerick, 7 May 1869. *Educ.*: Crescent Coll., Limerick; King's Coll., London. Asst. Editor, *Hearth and Home*, 1897. Editor, 1906-12; late Editor of *The Citizen*; Editorial staff, *Black and White*, 1903-12; Asst. Editor of *Canada*, 1912-14. *Address*: Pegu Club, Rangoon.

NORMAND, ALEXANDER ROBERT, M.A., B.Sc., Ph.D., Prof. of Chemistry, Wilson Coll., Bombay; *b.* Edinburgh, 4 March 1880; *Educ.*: Royal H. S. and Univ., Edinburgh. *Address*: Wilson College, Bombay.

NORTON, EARDLEY, Bar.-at-Law (Lincoln's Inn). *b.* 19 Feb. 1852. Called 1876. *Educ.*: Rugby Sch.; Merton Coll., Oxford. Advocate of the High Courts of Bengal (1888); and Madras (1879). *Address*: Bar Library, High Court, Calcutta.

NOYCE, FRANK, I.C.S., C.B.E. (1919); Secretary to the Government of Madras, Law Department and Development Department (1923); *b.* 4 June 1878; *Educ.*: Salisbury Sch. and St. Catharine's Coll., Cambridge, *m.* Enid, *d.* of W. M. Kirkus of Liverpool. Entered I.C.S., 1902. Served in Madras. Under Sec. to Govt. of India, Revenue and Agricultural Dept., 1912-16. Sec., Indian Cotton Committee, 1917-18; Controller of Cotton Cloths, 1918-19; Vice-President and subsequently President, Indian Sugar Committee, 1919-1920. Member, Burma Land Revenue Committee, 1920-21; Indian Trade Commissioner in London, 1922-1923. *Publication*: England, India and Afghanistan (1902). *Address*: Madras Club, Madras.

OBAIDULLA, KHAN, NAWAB HAJI HAFIZ, MOHSIN-UL-MULK MOHAMAD BAHADUR, C.S.I.; Major-General, C.-in-C., Bhopal State Forces, Military Member, State Council, Hon. Lt.-Colonel, British Army; *b.* 3 Nov., 1878, 2nd *s.* of the Begum, Ruler of Bhopal. *Educ.*: at home by private tutors; A.D.C. to Viceroy.

1906; Commission as Captain in H. M.'s Army, 1908; accompanied the Begum on pilgrimage to Mecca; takes keen interest in education; is Trustee of M.A.O. Coll., Aligarh; Founder of Obaidullah Khan Scholarships. *Publication:* Life of Her Highness Nawab Sikandar Begum. *Address:* Jahan Numa Palace, Bhopal, C.I.

OLDFIELD, HON. JUSTICE FRANCIS DU PRE, Puisne Judge, Madras H. C., since 1913; *b.* 30 June 1869; *Educ.:* Marlborough; Trinity Coll., Cambridge; Fellow, Madras Univ., 1916. Ent. I.C.S., 1890. *Address:* Rutland Gate, Madras.

ORCHHA, H. H. SARAMAD-I-RAJAHA-I-BUNDELKHAND, MAHARAJA MAHINDRA SAWAI, SIR PRATAP SINGH BAHADUR, G.C.I.E., K.C.I.E., G.C.S.I.; *b.* 1854; *s.* brother 1874. State has area of 2,080 sq. miles and population of over 300,000. *Address:* Tikamgarh, Bundelkhand.

PADDISON, GEORGE FREDERICK, M.A. (Oxon), C.S.I. (1923), Commissioner of Labour, *b.* 1873, *m.* Miss E. L. Roberts. *Educ.:* at Richmond School, Yorkshire and Queen's College, Oxford. Special Asstt. Agent, Vizagapatam, Special Settlement Officer, Secretary and Member of the Forest Committee, Collector of Madura, Commissioner of Revenue Settlement, Labour Commissioner. *Address:* Madras Club.

PALANPUR, CAPTAIN H. H. ZUBDA-TUL-MULK DEWAN MAHAKHAN TALEY MUHAMMAD KHAN BAHADUR, K.C.I.E. (1920), K.C.V.O. (1922). *b.* July 7, 1883. State has area of 1,750 sq. miles and population of over 224,996. *Address:* Palanpur.

PALMER, RT. REV. E. J.; *see* Bombay, Bishop of.

PANNA, H. H. MAHENDRA MAHARAJA YADVENDRA SINGH OF; K.C.I.E. (1922), *b.* 1893; *S. cousin* on his deposition, 1902; *m.* 1912, Kunvari Shri Manhar Kunvarba, *o. d.* of Maharajah of Bhavnagar State; has area of 2,596 sq. miles, and population of about 200,000. *Address:* Panna, Bundelkhand.

PARANJPYE, THE HON. MR. RAGHUNATH PURUSHOTTAM, *b.* Murdi, 16 Feb. 1876; *educ.:* Maratha H. S., Bombay; Fergusson Coll., Poona; St. John's Coll., Cambridge (Fell.); Paris and Gottingen; First in all Univ. exam. in India; went to England as Govt. of India scholar; bracketed Senior Wrangler at Cambridge, 1899; Princ. and Prof. of Math., Fergusson Coll., Poona, 1902-20; has taken prominent part in all social, political, and educational movements in Bombay Pres.; Vice-Chancellor of new Indian Women's Univ, 1916-20; Bombay Leg. Council, 1913; up to date representing the University of Bombay since 1916. Awarded the Kaisar-i-Hind Gold Medal in 1916. Minister, Bombay Government, 1921-23. *Publications:* Short Lives of Gokhale and Karve. *Address:* Poona.

PAREKH, SIR GOKULDAS KAHANDAS, KT. (1924); *b.* 24 Jan. 1847. *Educ.:* Bombay University. *m.* Parvanbai, daughter of Hargovandas Tribhovandas of Cambay. School Master, Surat High School; Deputy Inspector, Gujarati Schools, Bombay; Pleader, High Court, Bombay; Member, Bombay Legislative Council, 1897-1920; presided at Satara Provincial Confce., Gujarat Political Confce., Surat, 1919; All-India Social Confce., Bombay, 1904; Temperance Confce., Lahore, 1909; and Temperance Confce., Ahmedabad, 1916. Instituted preliminary inquiries into land revenue collection irregularities and oppressive measures, 1899-1900, which resulted in special Government inquiry. *Address:* New Queen's Road, Bombay.

PARTAB BAHADUR SING, RAJA, TALUQDAR OF KILA PARTABGARH, C.I.E., Hon. Magistrate; Hon. Mem. of U. P. Leg. Council; *b.* 1866. *Address:* Kila Partabgarh, Oudh.

PARTABGARH, H. H. SIR RAGHUNATH SINGH BAHADUR, MAHARAWAT OF; K.C.I.E., *b.* 1859; *s.* 1890. State has area of 886 sq. miles and population of 62,704; salute of 15 guns. *Address:* Partabgarh, Rajputana.

PATIALA, MAJOR GENERAL HIS HIGHNESS FARZAND-I-KHAS-I-DAULAT-I-INGLISHIA MANSUR-I-ZAMAN AMIR-UL-UMRA MAHARAJA DHIRAJ RAJ RAJESHWAR SHRI MAHARAJA-I-RAJGAN BHUPINDER SINGH MOHINDER BAHADUR, Ruler of Patiala State, G.C.S.I., G.C.I.E., G.C.V.O., G.B.E., A.D.C., F.R.G.S., F.Z.S., M.R.A.S., M.R.S.A., F.R.C.I., F.R.H.S., *b.* Oct. 1891, the premier Ruling Prince of the Punjab, is one of the Ruling Princes of India, a member of the Standing Committee of Indian Princes Chamber, (Narendra Mandal) Commander-in-Chief, Patiala Forces, Hon. Major General in British Army, and Hon. Colonel, 15th Ludhiana Sikhs; served with Indian Expeditionary Force during European War 1914, on the staff in France, Belgium, Italy and Palestine in 1918, Afghan War, 1919, (Grand Gross of the Legion De Honour, Grand Cross of the Order of the Crown of Italy, Grand Cordon of the Order de Leopold, Grand Cordon of the Order of the Nile, Grand Cross of the Order of the Crown of Romania); represented India at the Imperial War Conference and Cabinet, 1918; Cr. G.C.I.E., 1911, G.B.E., 1918, G.C.S.I., 1921, G.C.V.O., 1922; A.D.C. to His Majesty the King Emperor, 1922. *Address:* (Winter) Patiala, (Summer) Chail, Simla Hills, Punjab, India.

PATON, NIGEL FAIRHOLT, Managing Partner, Graham & Co., Calcutta. *b.* 6 Nov. 1867. *m.* Nora Ermengarde, *d.* of the late William Skinner, Edinburgh. *Educ.:* Edinburgh Academy and Edinburgh University. Chairman, Bombay Chamber of Commerce, 1919-20; Mem., Imp. Legislative Council, 1919-20; Trustee of the Port of Bombay, 1915-20; Major, 15th Bombay Battalion, A.F.I., Hon. A.D.C. to Governors of Bombay, 1917-1921. Member, Bengal Chamber of Commerce Committee; Commissioner, Port of Calcutta; Member, Calcutta Board P. & O. Banking Corporation. *Address:* 3, Alipore Lane, Calcutta.

PATTANI, SIR PRABHASHANKAR DALPATRAM, K.C.I.E., President of Council of Administration, Bhavnagar State, 1920; Member of Exec. Council of Government of Bombay, 1912-1915; of the Bombay Legislative Council, 1916; of

the Imperial Legislative Council, 1917; of the Council of India, 1917-19; *b.* 1862. *Educ.*: Morvi, Rajkote, Bombay. *Address*: Anantwadi, Bhavnagar.

PAUL, KANAKARAYAN TIRUSELVAM, O. B. E. (1918), Nat. Gen. Sec., Y. M. C. A. of India Burma and Ceylon. *b.* 24 March 1876. *Educ.* Madras Christian College, Law College, Teachers' College. *m.* Miss K. Narasinga Rao Teacher. Headmaster, College Lecturer Municipal Commissioner and Chairman General Secretary, N.M.S., of India. *Publications*: "Citizenship in Modern India." "*Adult Education*: An Urgent Need of Modern India." *Address*: 5, Russell Street, Calcutta.

PEARS, STEUART EDMUND, C.I.E. (1916), C.S.I. (1923), Resident in Waziristan. *b.* 25 Nov. 1875. *m.* Winifred M. Barton. *Educ.*: Edinburgh University and Trinity Hall, Cambridge. Entered Indian Civil Service 1898; served in N.W.F. Province from 1901 onwards, as Political Agent in Tochi, Kurram, Khyber and Malakand. Delegate to Anglo-Afghan Conference at Mussoorie in 1920. *Address*: Dera Ismail Khan, N. W. F. Province.

PEASE, COLONEL HENRY THOMAS, C.I.E., V.D., A.V.S.; Hon. A.D.C. to C.-in-C. India, Prin., Vet. Coll., Punjab, since 1912; Commdt., Punjab L.H. *b.* 20th July 1862. *m.* Leila Marion. *d.* of Col. R. Stopford, 5th Bombay Cavalry, 1902. *Educ.*: St. Edmund's Coll., Old Hall Green, Ware. Insp.-Gen., Civ. Vet Dept., Simla, 1907-12. *Publications*: Journal of Tropical Veterinary Science, many professional papers in English and vernaculars. *Address*: Patiala, Punjab.

PERCIVAL, PHILIP EDWARD, B.A. (Oxon), I.C.S., M.L.A., Dist. and Sessions Judge, Hyderabad, Sind, *b.* 11th Nov., 1872, *m.* Sylvia Baines, *d.* of Sir J. A. Baines, C.S.I. *Educ.*: Charter-house and Balliol College, Oxford. Served under the Government of Bombay as Asstt. Collr., Asstt. Judge, Under-Secretary, Judicial Dept., Registrar, Bombay High Court, Remembrancer of Legal Affairs and Dist. and Session Judge, Satara. *Address*: Hyderabad, Sind.

PERINI, RT. REV. PAUL, S.J., D.D.; Bishop of Mangalore, since 1910; *b.* Brandola, Italy, Jan. 1867. *Educ.*: various Colleges of Society of Jesus in Austria, England and Belgium. Joined Society of Jesus, 1883; Rector and Prin. of St. Aloysius Coll., Mangalore, for six years. *Address*: Bishop's House, Mangalore.

PETIT, SIR DINSHAW MANOCKJEE, 2nd Baronet; *s.* of late Framjee Dinshaw Petit, 2nd son of 1st Baronet; *b.* 7th June, 1873; *s.* his grandfather, Sir Dinshaw Manockjee, under special remainder, 1901, and changed his name from Jeejeebhoy Framji Petit to Dinshaw Manockjee Petit; Merchant and cotton mill-owner; Member, Bombay Legislative Council; J. P. for Bombay; a Delegate of Parsee Ch. Matrimonial Court of Bombay; Pres. of Association for Amelioration of Poor Zoroastrians in Persia, the Petit Charity Funds, Petit Institute, and Parsee Orphanage, and Chairman and Member of Managing Committees of the principal Parsee charitable institutions in Bombay; *m.* Dinbai; *d.* of Sir Jamsetjee Jejeebhoy, 3rd Bart., and has issue. *Address*: Petit Hall, Malabar Hill, Bombay.

PETMAN, CHARLES EARLE BEVAN, C.I.E., *b.* 9 September 1866. *Educ.*: Privately and at Trinity College, Cambridge. Advocate, Calcutta H. Court, 1892 and of Chief Court, Punjab, 1892. Government Advocate, Punjab, 1909; Judge of the High Court, Lahore, from April to Aug. 1920 and from Octr. 1920 to Febr. 1921. *Publications*: "Report on Frauds and Bribery in the Commissariat Department"; "P. W. D. Contract Manual" (Revised Edition). *Address*: Lahore.

PETRIE, DAVID, C.I.E., C.V.O., C.B.E., *b.* 1978. *Educ.*: Aberdeen Univ.; Ent. Ind. Police, 1900; Asst. Dir., C.I.D., Simla, 1911-12; Spec. duty with Home Dept., since 1915. On special duty with H.R.H. the Duke of Connaught, 1921. On staff of H. R. H. The Prince of Wales, 1921-22; Senior Superintendent of Police, Lahore, Member of the R. Commn. on Public Service, 1923. *Address*: C/o King, King & Co., Bombay.

PEYTON, MAJ.-GENERAL SIR WILLIAM ELIOT, K.C.B. (1917), K.C.V.O. (1917), C.B (1913), D.S.O. (1898); G.O.C., United Provinces District. *b.* 7 May 1866; *m.* 1st, Mabel Maria; (*d.* 1901); *d.* of late Lt.-Gen. Hon. E. T. Gage, C.B., 3rd *s.* of 4th Viscount Gage; 2nd, 1903, Gertrude, (*d.* 1916); *d.* of Maj.-General A. R. Lempriere and widow of Capt. Stuart Robertson 14th Hussars. *Educ.*: Brighton College, Enlisted 7th Dragoon Guards, 1885, 2nd Lt., 7th Dragoon Guards, 1887; Capt.; 15th Hussars, 1896; Major-General, 1914; commanded 15th Hussars, 1903-7; served Dongola Expeditionary Force, 1896 (despatches, Khedive's medal with two clasps); Soudan, 1897 (dangerously wounded and horse speared): Soudan, 1898, (despatches, D.S.O., 4th class Medjidie, clasp); South Africa, 1899-1900 (Brevet Lieut.-Col.; Despatches, Queen's medal, 3 clasps): commanded Meerut Cavalry Brigade, 1908-12; late Military Secretary to H. E. the Commander-in-Chief in India; Delhi Herald of Arms Extraordinary for the occasion of the Coronation Durbar, 12 Dec. 1911; commanded 2nd Mounted Division on Gallipoli peninsula; action of 21 August 1915 and final evacuation 19 Dec. 1915 (despatches twice); commanded Western Frontier Force. Egypt, in expedition against Senussi, including the reoccupation of Barani and Sollum, and the rescue of the ship-wrecked British prisoners of H.M.S. Tara (received special thanks of the Admiralty; despatches); commanded 40th Division during operations in France and Flanders, June 1918-March 1919 (Commandeur Legion d'Honneur-); Order of the Nile, 2nd Class, 1916. *Address*: Meerut.

PIGGOTT, HON. MR. JUSTICE THEODORE CARO, B.A., I.C.S.; Puisne Judge, Allahabad, since 1914; *b.* Padua, 26 Oct. 1867. *Educ.*: Kingswood Sch. Bath; Christ Church, Oxford. Ent. I.C.S., Jud. Commsr. of Oudh, 1911. *Address*: High Court, Allahabad.

PILLAI, LOUIS DOMINIC SWAMIKANNU, M.A., B.L., LL.B. (London), C.I.E. (1924); Diwan Bahadur (1909); I.S.O. (1917); President, Madras Legislative Council. *b.* 4 Feb. 1865. *Educ*: St. Joseph's College, Negapatam; Assistant and Lecturer, St. Joseph's College, Trichinopoly, 1883-1887; Clerk to the Legislative Council and French Translator, Chief Secretariat, Fort St. George, 1888-1890; Latin Master, Presidency College, Madras, 1890-91; Deputy Collector and Magistrate, 1892-95; Fellow of Madras University, 1900; Asstt. Secretary, Board of Revenue, Madras, 1895-1906; Chairman, Board of Examiners to Madras University in Greek, Latin, French and German, 1903-17; Secretary, Board of Revenue, Revenue Settlement, Madras, 1906-11; Registrar of Co-operative Societies, 1911-1917; Collector and District Magistrate, 1917-1919; Secretary to Government and Director of Agriculture, 1920; Secretary, Legislative Council, 1920-23. Deputed to England to study House of Commons Procedure, April to July 1922; President, Madras Legislative Council, 1924. *Publications*: *Indian Chronology*, 1911; 2nd Edn. 1922; *Indian Ephemeris A.D.* 1800—2000; published 1915; 2nd Edn. 1922; *Indian Ephemeris A.D.* 700—1800, 6 Vols. (Madras Government publication 1922); Various articles in *Indian Antiquary* and *Epigraphia Indica* on Indian Chronology; Credibility of Indian Astrology, 1922; Maximum Age of Dhruva Nadi, 1923; and Secret of Memory, 1909. *Address*: "Roseville," Royapuram, Madras.

PILKINGTON, HARRY SEYMOUR HOYLE, C.I.E., M.V.O.; Postmaster-General, United Provinces. *b.* 1869. Ent. Ind. P.O., 1890; Asst. Dir.-Gen., 1900-16; served with F. P. O. in China Exp., 1900-02; took charge of postal arrangements during visits to India of Prince and Princess of Wales, 1905-06; Ameer of Afghanistan, 1906-07; and King George and Queen Mary, 1911-1912; Dir., Postal Services with Indian Forces in France, 1914-1916; mentioned in despatches. *Address*: Lucknow.

PONSONBY, MAJOR-GENERAL JOHN, C.B. C.M.G., D.S.O., Commanding Madras District *b.* 25 March 1866; *Educ*: Eton. Gazetted to Irish Rifles, 1886. Transferred to Cold. Stream Guards, 1913; promoted Major-Genl., 1918. Saw service in Matabeleland, Uganda Mutiny, South Africa and European War, 1914-18. *Address*: Head-quarters, Madras District, Wellington.

POSA, MAUNG, I.S.O. (1911), K.S.M. 1893, *b.* Toungoo, 13 May 1862. *Educ.*: St. Paul's R.C.M. Sch., Toungoo. Asstt. Civil Officer, Ningyai Column II, B. Expeditionary Field Force, 1885-1887; Burma Medal with clasp, 1885-87. Senior Member, Burma Provincial Judicial Ser. since 1911 Interpreter to Prince of Wales during visit to Burma Jan. 1906. Also to three Viceroys, 1898, 1901, 1908; Dist. Judge, 1916; Offg. Sessions Judge, 1918; Retired, June 1918; Asstt. Dir., Recruiting, July to Dec. 1918. Mentioned in despatches. *Address*: Thaton.

PRASAD, GANESH, M.A. (Cantab.), D.Sc.; University Professor of Mathematics at Benares Hindu University; Life President of the Benares Mathematical Society; Dean of the Faculty of Science, Benares Hindu University. *b.* 15th Nov. 1876. *Educ.*: Ballia; Allahabad: Cambridge; Gottingen. Member of Court, Council and Senate, Hindu Univ., Member of Court, Executive and Academic Councils and Faculty of Science, Allahabad Univ.; formerly Univ. Professer of Applied Mathematics of Calcutta Univ. *Publications*: "Constitution of Matter and Analytical Theories of Heat." (Berlin, 1903); textbooks on Differential Calculus and Integral Calculus (London, 1909 and 1910; "Mathematical Research in the last twenty years" (Berlin, 1922); and many other original papers published in the mathematical and scientific journals of England, Germany, Italy and India during 1900-1921. *Address*: 37, Benares Cantt.

PRASAD, THE HON. JUSTICE SIR JWALA, B.A., LL.B., Puisne Judge, Patna High Court, since 1916; Acting Chief Justice, 1921. *b.* 1875. *m.* 1888, *d.* of Munshi Mangul Sen Singh, Zamindar and retired Dy. Commissioner. *Educ.*: Patna College, Calcutta University; Muir Central College and Allahabad University; Vakil, Calcutta and Allahabad High Courts, Fellow of Patna University. Rai Saheb, 1914; Rai Bahadur, 1915. *Address*: Patna.

PRATT, THE HON. MR. JUSTICE EDWARD MILLARD; Judge, High Court, Bombay, 1918; *b.* 29th August 1865; *Educ.*: Dulwich Coll. and Univ. Coll., London. Appointed I.C.S., 1886; Dist. and Sess. Judge, 1897; Leg. Rem., 1905; Jud. Commsr. of Sind, 1910. *Address*: Crismill, Malabar Hill, Bombay.

PRATT, FREDERICK, I.C.S.; Commissioner, Northern Division, Bombay Presidency. *b.* 4th Dec. 1869. *Educ.*: Dulwich Coll., Hertford Coll., Oxford. *Address*: Shahibag, Ahmedabad.

PRICE, EDWIN LESSWARE, B.A. (Oxon). Bar. at-Law, O.B.E., Merchant, French Consular Agent at Karachi since 1914. *b.* 8th July 1874. Member, Legislative Assembly, 1921-22. *Address*: "Newcroft", Ghizni Road, Karachi.

PROES, ERNEST MARINUS, C.S.I. (1921); Chief Engineer and Secretary to Govt., P.W.D., Bombay. *b.* Oct. 28, 1871, *m.* Alice M.E. Gourdon de Genoulhac. *Educ.*: Royal Indian Engineering College, Coopers Hill. Asstt. and Exec. Engineer, P.W.D.; Under-Secretary to Govt., P. W. D.; Superintending Engineer, P.W.D.; C.R.E. of the B.E. Force in France, 1914-17; Army Rank Lt.-Col. *Address*: P.W.D. Secretariat, Bombay.

PUDUKOTTAI, H. H. RAJA MARTAND BHAIRAVA TONDIMAN BAHADUR RAJA OF, G.C.I.E., *b.* 1875; *s.* grandfather; 1886; *m.* 1915, State has area of 1,179 sq. miles, and population of 426,813 and had been ruled by Tondiman dynasty from time immemorial. Salute 11 guns. *Address*: Henry S. King & Co., London.

PUDUMJEE, NOWROJEE, 1st Class Sardar of Deccan, Bombay; C.I.E.; *b.* 1841; *Educ.*: Poona Coll. under Sir Edwin Arnold, war mem. of Bombay Leg. Council; Promoter and Chairman of several Industrial and Banking Companies. *Address:* Pudumjee House, Poona.

PURSHOTAMDAS, THAKURDAS, THE HON. SIR, Kt. (1923), C.I.E. (1919), M.B.E.; Nominated Member, Council of State; Cotton Merchant; *b.* 30th May 1879; *Educ.*: Elph. Coll., Bombay. President, Indian Merchants' Chamber and Bureau; President East Indian Cotton Association; Chairman, Bombay Cotton Exchange; Member, Lord Inchcape's Retrenchment Commitee; Director, the Imperial Bank of India, Bombay. *Address*: Malabar Castle, The Ridge, Bombay.

PURVES, ROBERT EGERTON, C.I.E.; P. W. D., retired; *b.* 1859; *Educ.*: Thomason Coll., Roorkee; Ex. Eng., 1895; Supdt. Eng., 1907; Ch. Eng. and Sec. to Govt., Punjab Irrigation Branch, 1913-14: retired, 1914; since practising as Hydraulic Eng. and Irrigation Expert. *Address*: c/o Messrs. King Hamilton & Co., Calcutta.

QUILON, BISHOP OF; *see* Benziger, Rt. Rev. A. M.

RADHANPUR, H. H. MAHOMED JALALUDHIN-KHAN BABI, BAHADUR, NAWAB OF; *b.* 1st April 1889; Pathan, Babi, Mahomedan *Educ.*: Rajkumar Coll., Rajkot. *S.* brother, 1910; State has area of 1,150 sq. miles, and population of 67,789. Salute 11 guns. *Address*: Radhanpur.

RAGHUNATHDAS, RAI BAHADUR, DIWAN BAHADUR CHAUBE, C.S.I.; *b.* Nov. 1849; *Educ.*: Humes H. S., Etawah; Govt. Coll., Agra. Entered Native State Service in Rajputana; was Mem. of State Council, Kotah; Diwan, Kotah State, since 1896. *Address*: Kotah.

RAHIM, THE HON. SIR ABDUR, M.A., Kt. (1919); Judge, Madras High Court, since 1908. *b* September, 1867; *m.* Nisar Fatima Begum. *Educ.*: Government High School, Midnapore; Presidency College, Calcutta. Called to the Bar (Middle Temple), 1890; practised as Advocate, Calcutta; Presidency Magistrate, Calcutta, 1900-03; Fellow, Madras University, since 1908; Member of the R. Commission on Public Services, 1913-15; officiated as Chief Justice, Madras, July-October 1916, and July to October 1919. *Publication*: "Principles of Mahomedan Jurisprudence." *Address*: College Bridge House, Egmore, Madras.

RAHIMTOOLA, SIR IBRAHIM, K.C.S.I., C.I.E., President, Bombay Legislative Council (1923). *b.* May 1862; Mem., Exec. Council, Bombay; was Mem. of Imp. Council; Mem., Bombay Leg. Council. *Address*: Pedder Road, Cumballa Hill, Bombay.

RAINY, GEORGE, C.S.I. (1921), C.I.E. (1918); Ch. Sec. to Govt. of Bihar and Orissa since 1919. *b.* 11th Feb. 1875. *Educ.*: Edinburgh Academy and Merton Coll., Oxford. Entered I.C.S., 1899; Under-Sec. to Govt. of India, Commerce and Industries Dept., 1906-09; Member, Imperial Delhi Committee, 1914-16; Dy. Sec. to Govt. of India, Finance Dept., 1916-19; Chief Secretary to the Government of Behar and Orissa, 1919-23. *Address*: V. S. Club, Calcutta.

RAJARATHNA MUDALIYAR, PAKAM, C.I.E., Diwan Bahadur; served in Salt Dept. since 1860; Insp.-Gen., Registration, 1896; Mem. of Madras Council, 1896-1902. *Address*: Madras.

RAJKOT, THAKUR SAHEB LAKHAJI BOWAJI; *b.* 17th Dec. 1885. *Educ.*: Rajkumar Coll., Rajkot. State has area of 282 sq. miles, and population of 49,938; Salute of 9 guns. *Address*: Rajkot.

RAJPIPLA, CAPTAIN HIS HIGHNESS MAHARANA SHRI VIJAYSINH, MAHARAJA OF, *b.* 1890. *s.* to the gadi in 1915. *Educ.*: at Rajkumar Coll., Rajkot, and subsequently with the Imperial Cadet Corps in Dehra-Dun. Enjoys permanent hereditary salute of 13 guns. *Address*: Nandod, Rajpipla State.

RAJWADE, MAJOR-GENERAL GANPATRAO RAGHUNATH RAO RAJA, MASHIR-I-KHAS BAHADUR SAUKAT-JUNG, C.B.E., A.D.C., Army Member, Gwalior Govt., and Inspector-General, Gwalior Army; Member of His Highness' Majis-i-Khas; ranks as First Class Sardar in the Bombay Presidency. *b.* Jan. 1884. *Educ.*: Victoria College. *Address*: Gwalior.

RAMA RAYANNINGAR, SRI P, THE HON. RAJAH of PANAGAL, M.A., Minister in charge of Local Self-Government, Madras, since 1921; *b.* 1866. *Educ.*: Triplicane Hindu High School, Presidency College, Was nominated Fellow of the Madras University; represented Zemindars of this Presidency in Imperial Legis. Council from 1912-1915; was invited to Imperial War Conference in 1918; again returned to Imperial Legislative Council in 1919; gave evidence before Joint Committees of Parliament on behalf of All-India Zemindars; pleaded also the cause of non-Brahmins of Madras. *Address*: Secretariat, Madras.

RAMPAL, RAJA; *see* Kuldehr.

RAMPUR, COL. H. H. ALIJAH, FARZAND-I-DILPIZIR-I-DAULAT-I-INGLISHIA, MUKHLIS-UD-DAULAH, NASIR-UL-MULK, AMIR-UL-UMARA, NAWAB SIR SAYED MOHAMMAD HAMD ALI KHAN BAHADUR, MUSTAID JUNG; G.C.S.I. (1921), G.C.I.E., G.C.V.O.; A.D.C. to King Emperor. *b.* 31st Aug. 1875; *S.* 1889. State has area of 892 sq. miles and population of 531,712; Salute of 15 guns. *Address*: Rampur State. U. P.

RANGACHARIAR, RAO BAHADUR TIRUVENKATA, B.A., B.L., M.L.A. (1920); Vakil, High Court, Madras. *b.* 1865; *m.* Ponnammal, *d.* of S. Rajagopala Aiyengar of Srirangam. *Educ.*: S. P. G. College, Trichinopoly. Schoolmaster for 3 years: enrolled as Vakil, High Court, Madras, 1891; Professor, Law Coll., 1898-1900; Member, Madras Corpn., since 1908; Member, Madras Legis. Council, 1916-1919; President, Telegraph Committee, 1921; Member, Frontier Committee; Chairman, Madras Publicity Board. *Publications*: A book on Village Panchayats.

RANGOON, BISHOP OF, since 1910; **RT. REV. BOLLESTONE STERRITT FYFFE, D.D.** *m.* 1914. Annis Kathleen, *d.* of late Herbert Hardy of Danehurst, Sussex, two *s. Educ.*: Clifton Coll., Emmanuel Coll., Cam., Ordained 1804; Curate of Bishopwearmouth, Sunderlands, 1894-98; Curate of S. Agnes, Bristol; in Charge of Clifton College Mission, 1898-1900; Vicar of St. Agens, Bristol, 1900-1904. S.P.G. Missionary, Mandalay, 1904-10. *Address:* Bishops Court, Rangoon.

RANJITSINHJI; *see* Nawanagar.

RANKIN, THE HON. MR. JUSTICE GEORGE CLAUS, Judge, High Court, Calcutta. *b.* 12th August 1877: *m.* Alice Maud Amy Sayer. *Educ.*: Trinity College, Cambridge. Barrister (Lincoln's Inn) 1904. Practised on Northern Circuit. R. Garrison Artillery, 1916-18. *Address:* High Court, Calcutta.

RAO, RAO SAHIB S. M. RAJA RAM, Editor, *The Wednesday Review. b.* 24th December 1876. *Educ.*: S. P. G. and St. Joseph's College, Trichinopoly. Started *The Wednesday Review* in 1905 and *The Zamindar and Progress* (monthly) incorporated into the *Feudatory and Zemindari India* in 1919. *Address*: Trichinopoly and 16, Harrington Road, Chetpet, Madras.

RATLAM, COL. H. H. SIR SAJJAN SINGHJI, K.C.S.I., K.C.V.O., A.D.C. to H.R.H. The Prince of Wales, Maharaja Sahib Bahadur of Rutlam. *b.* 13 Jan. 1880; *S.* father (Sir Ranjit Singhji, K.C.I.E.), 1893; *m.* 1902, *d.* of H.H. Rao of Kutch; descended from younger branch of Jodhpur family, and maintains moral supremacy over Rajput Chiefs in Malwa; served European War (France) from April 1915 to May 1918, mentioned in despatches; presented with Croix d'officier of the legion d' Honneur. Served Afghan War, 1919; Member of Managing Committee, Mayo College, Ajmer; Mem., Managing Committee, Daly College, Indore; Vice-President, Central India Rajputra Hit Karini Sabha. Salute 15 guns. *Address:* Ranjit Bilas Palace, Rutlam.

RAWLINSON, 1st Baron, *cr.* 1919; **HENRY SEYMOUR RAWLINSON,** 2nd Bt., *cr.* 1891; G.C.B., *cr.* 1919; K.C.M.G., *cr.* 1918; G.C.V.O., *cr.* 1917; G.C.S.I. (1924), K.C.B., *cr.* 1915; C. B. 1900. Commander-in-Chief in India since Nov. 1920; *b.* 20th Feb. 1864; *s.s.* of Maj.-Gen. Sir Henry Creswick Rawlinson, Bt., and Louisa, *d.* of H. Seymour Knoyle Wilts, *S.* father 1895; *m.* 1890, Meredith, *o.d.* of Coleridge J. Kennard. *Educ.*: Eton; R. M. C. Sandhurst; Staff College, Camberley (P.S.C.). Entered 60th K.R. Rifles, 1884; A.D.C. to Sir Frederick Roberts, Commander-in-Chief in India, 1887; served with Mounted Infantry, Burma campaign (medal and clasp); resigned A.-D.-C.-ship and returned to England, 1889; entered Staff College, 1892; exchanged into Coldstream Guards, 1892; served in Soudan campaign as D.A.A.G to Lord Kitchener, 1898; present at battles of Atbara and Khartoum (medal and two clasps; despatches twice); served in S. African war (two medals and eight clasps); A.A.G. (Ladysmith siege), Natal, 1899; A.A.G. Headquarters, S. Africa, 1902; commanded Mobile Column, 1901-2 (despatches three times); European war, 1914-18; commanded 4th Division 4th Corps and the Fourth Army despatches eight times, K.C.B., prom. Maj.-General, Lt.-General and General, K.C.B., G.C.B., G.C.V.O., K.C.M.G.); Commandant, Staff College, 1903-6; commanded 2nd Brigade, Aldershot, 1907-9; commanding 3rd Division, Salisbury Plain, 1910; Commanded Forces in N. Russia, 1919; received thanks of H.M.'s Government; Commander-in-Chief, Aldershot, 1919-1920; General, 1917; Member of Army Council; Grand Officers, Legion of Honour; Order of Danilo (Montenegro) 1st Class, 1917; commanded H. M. Forces in North Russia, 1919; 1st Class Order of Leopold, Belgium; 2nd Class Order of St. George, Russia. *Publication*: The Officers' Note-book. *Address:* Army Headquarters, India.

RAWLINSON, HUGH GEORGE; Principal, Deccan College Poona; Fellow, Bombay University; *b.* 12th May 1880; *m.* 1910, to Rose, only *d.* of Lt.-Col. J. F. Fitzpatrick I.M.S. *Educ.*: Market Bosworth Grammar Sch. and Emmanuel Coll., Cambridge; (Exhibitioner and Scholar; B.A., 1st Class; Classical Tripos, 1902; M.A. 1908); Lecturer in English and Classics, Royal College, Colombo, 1903-08; Hare University Prize, 1908. Entered I.E.S. as Professor of English Literature, Deccan Coll., Poona, 1908; Ag. Principal, Gujarat Coll., Ahmedabad, 1914; *ditto*, Deccan College, 1915; Fellow of the Royal Historical Society, 1916; Principal Karnatak Col., Dharwar, 1917-23. *Publications:* Bactria, the History of a Forgotten Empire; Indian Historical Studies; Shivaji, the Maratha; Intercourse between India and the West; The Beginnings of British India, an Account of the Old English Factory at Surat: New Edition of Forbes' Ras Mala. Contributor to Vol. II, Cambridge History of India. *Address:* Deccan College, Poona.

RAY, MAHENDRANATH, C.I.E., M.A., B.L.; Vakil, Calcutta High Court; *ex*-Mem, Bengal Council; *b.* Oct. 1862. *Educ.*: Presidency Coll., Calcutta. Mem. of Syndicate, Calcutta Univ., since 1910. *Address*: 8, Khooroo Road, Howrah, and 2, Boloram Bose's 1st Lane, Bhowanipur, Calcutta.

RAY, PRITHWIS CHANDRA, Editor-in-Chief of the *Bengalee* (Calcutta). *b.* 1870; *m.* 1888, 2nd *d.* of Babu Dwarkanath Roy Choudhury of Santosh (Mymensing). *Educ.*: Mymensingh Zilla School and Presidency College, Calcutta. Editor of the *Indian World* from 1905-1914; Founder of the National Liberal League (the first Indian liberal organisation), Calcutta; Secretary, 21st and 26th Sessions of the Indian National Congress, held in Calcutta in 1906 and 1911; Secretary, Bengal Social Reform Association from 1908 to 1914; Member of the Moderate Deputation to England, 1919, and the Bengal Landholders' Delegate to England in 1920, Donor of a library (in the name of the late Mr. Gokhale) to the Indian Association of Calcutta (1919). *Publications.*; "Poverty Problem in India," "Indian Famines," "Our Demand for

Self-Government," and "A Scheme of Indian Constitutional Reforms." Member, National Liberal Club, London, S.W. *Address:* 174, Lower Circular Road, Calcutta.

RAY, PROFULLA CHANDRA, C.I.E., D.Sc. (Edin.); Ph. D. (Cal.); Sen. Prof. of Chemistry, Univ. Coll. of Sc., Calcutta; *b.* Bengal, 1861. *Educ.:* Calcutta; Edinburgh Univ. Graduated at Edinburgh, D.Sc.; Hon. Ph.D., Calcutta Univ., 1908; Hon. D.Sc., Durham Univ., 1912. Dean of Fac. of Sc. Univ. of Calcutta, 1915. *Address:* College of Science, Calcutta.

READING, 1st EARL OF., *cr.* 1917; RUFUS DANIEL ISAACS, VISCOUNT ERLEIGH, *cr.* 1917; 1st Viscount Reading, *cr.* 1916; Baron, *cr.* 1914; Kt., *cr.* 1910; G.C.B., *cr.* 1915; P.C. 1911, K.C.V.O., *cr.* 1911; G.M.S.I., G.M.I.E. (1921); G.C.V.O. (1922); Viceroy and Governor-General of India since April 1921. Lord Chief Justice of England, 1913-21; President of Anglo-French Loan Mission to U.S.A., 1915; Special Envoy to U.S.A., 1917; High Commissioner and Special Ambassador to U.S.A., 1918; First Attorney-General to become Member of Cabinet, 1912. *b* London, 10 Oct. 1860; 2nd *s.* of late Joseph H. Isaacs, merchant in City of London; *m.* 1887, Alice Edith, C.I., G.B.E., 3rd *d.* of late Albert Cohen, merchant, City of London: one *s. Educ:* University College School; Brussels; Hanover. Bencher of Middle Temple, 1904; Solicitor-General, 1910; Attorney-General, 1910-13; K.C. 1898; M.P. (L.) Reading, 1904-13; *Heir:* *s.* Viscount Erleigh. *Address:* Simla or Delhi.

READYMONEY, SIR JEHANGIR COWASJEE JEHANGIR; *see* Jehangir.

REED, SIR STANLEY, KT., K.B.E., LL.D. (Glasgow); Editor, *The Times of India*, Bombay, 1907-1923; *b.* Bristol, 1872; *m.* 1901, Lilian, *d.* of John Humphrey of Bombay. Joined staff, *Times of India*, 1897; Sp. Correspdt., *Times of India* and *Daily Chronicle* through famine districts of India, 1900; tour of Prince and Princess of Wales in India, 1905-06; Amir's visit to India, 1907, and Persian Gulf, 1907; Jt. Hon. Sec., Bombay Pres., King Edward and Lord Hardinge Memorials; *Ex.* Lt.-Col. Commdg. Bombay, L. H. Represented Western India at Imp. Press Confce., 1909. *Address:* *The Times of India*, 187, Fleet Street, London, E.C.

REID, COLONEL CARTWRIGHT, C.B. (June 1917), M. Inst. C.E., Engineer in Chief, Vizagapatam Harbour. *b.* 7 Nov., 1864. *m.* Julia only *d.* of late Henry Miller. *Educ.:* Kirkby Lonsdale Grammar School. Articled to Thomas Reid, C. E. Wakefield and Normanton. Entered Admiralty Service (1888) as Asstt., Civil Engineer; served at Pembroke, Halifax, Esquimalt and Chattan; was Superintending Civil Engineer Malta, Chattam and Rosyth and Deputy Civil Engineer in Chief Admiralty. Lt.-Col. Royal Marines for reconstruction of Belgian Ports; Acted as a Consultant to Calcutta Port Trust in connection with proposed King George's Dock Scheme and Basra Port re Shatt-el-Arab. Loaned by Admiralty (1921) for construction of Vizagapatam Harbour. *Address:* Vizagapatam Harbour, Vizagapatam.

REID, WILLIAM JAMES, C.S.I., Member and Vice-President, Executive Council, Assam. *b.* 1871. *Educ.*; Glasgow H. S.; Emmanuel Coll., Cambridge; Ent. I.C.S., 1891. *Address*: Shillong, Assam.

RICE, WALTER FRANCIS; C.S.I., Ch. Sec., Burma since 1907; Mem. of Lt.-Gov.'s Council, since 1909; Add. Mem. of Imp. Council. *Educ.:* Morrison's Acad., Crieff; Balliol Coll., Oxford. Ent. I.C.S., 1890; Sec. to Govt., 1905. *Address:* Secretariat, Rangoon.

RICHARDSON, MAJOR-GENERAL CHARLES WILLIAM GRANT, C.B., 1920; C.S.I., 1918; G.O.C., Poona District (1922); *b.* 1868, *m.* 1900; Served Burma, 1888-89; (medal and clasp); N.W.F. 1894-97; (Clasp); South African War 1900-2 (Queen's medal and two clasps) G.O.C., Sind Rajputana District, 1921-22, Great War 1914-1918 (G.S. and Victory Medals: mentioned in despatches); and Afghan War 1919 (Medal and Clasp). *Address:* Poona.

RICHMOND, REAR-ADM. HERBERT W., C.B. (1921); appointed Commandar-in-Chief East Indies Squadron, May 1923; *b.* 15 Sep. 1871; *s.* of Sir William Richmond, R.A., K.C.B. and Clara Jane Richards; *m.* 1907, Florence Elsa, *d.* of Sir Hugh Bell, Bart. three *d.* one *s. Educ.:* H. M. S. Britannia; Lieut. 1893; Commander 1903; Captain, 1909; Assistant Director of Operations, 1913-15; liaison officer with Italian Fleet, 1915; Commanded Commonwealth, Conqueror, and Erin in Grand Fleet; Director of Staff Duties and Training, 1918.; President, R. N. War Coll. Greenwich, 1920-23. *Publications:* Papers relating to the Loss of Minorca; The Navy in the War, 1739-1748. *Address:* Admiral's House, Bombay.

RIEU, JEAN LOUIS, I.C.S., C.S.I. (1920), Commissioner in Sind since 1919; *b.* 23 Nov. 1872, *m.* to Ida Augusta Edwards (deceased). *Educ.:* University Coll. School, London and Balliol Coll., Oxford. Entered I.C.S. in 1893; served as Asstt. Collr. and Collr. in the Bombay Presidency till 1911, when appointed Secry. to Government, General Department; Collr. of Karachi, 1917; Secretary to Govt., Revenue and Financial Departments, 1918. *Address:* Government House, Karachi.

RIVETT-CARNAC, JOHN CLAUDE THURLOW, *b.* 1888, eldest s/o John Thurlow Rivett Carnac, retired Dy I.G. of Police *m.* 1923, Jill, *d.* of S. Wilson, Esq., of New York City. *Educ.:* Eastbourne College. Entered Indian Police, 1909, served during War with 13th Bengal Lancers in Mesopotamia (M.C. and medals), awarded King's Police Medal, 1923, is Supt. of Police, United Provinces, and Captain I.A.R.O. (Cavalry). *Address:* Babraich.

RIVETT-CARNAC, JOHN THURLOW, retired Dy. Inspr.-General of Police, Eastern Bengal and Assam, 2nd s/o late Charles Forbes Rivett-Carnac, Bengal Civil Service and gr. s/o Sir James Rivett-Carnac, Governor of Bombay, 1838-41. *b.* 1856. Entered Indian Police, 1877, retired 1911, served in Burma campaign, 1886-7 (medal), and in Chin Lushai expedition, 1889-90 (clasp). *m.* 1887 Edith Emily *d.* of late H. H. Brownlow, and has issued, four

sons and one daughter, Residence Shillong, Assam.

RIVETT-CARNAC, HERBERT GORDON, *b.* 1892, 3rd son of John Thurlow Rivett-Carnac, retired Dy. I. G. of Police. *Educ*: Bradfield Coll. (Berks.) and R. M. C. Entered Army 1911. Served during War on General Staff in Mesopotamia and as Asstt. Political Officer, Amara; is Captain Indian Army and Offg. Asst. Resident, Kolhapur State. *Address*: Kolhapur.

RIVINGTON, REV. CECIL STANSFELD; Kaiser-i-Hind Gold Medal (1918); Mission Priest in Diocese of Bombay; Supdt. of S.P.G. Missions in Canarese-speaking district of Bombay Diocese; Hon. Canon of St. Thomas Cathedral, Bombay; *b.* London, 1853. *Educ.*: Rugby; Solicitors Examination, London; Cuddesdon College Priest, 1879. *Publications*: Commentaries on the Psalms, St. Luke and St. John, a Manual of Theology (all in Marathi). *Address*: Betgeri-Gadag, Dharwar District, Bombay.

ROBERTS, LT.-COL. SIR JAMES REID, KT., C.I.E., M.B., M.S., F.R.C.S. (Eng.), I.M.S. *b.* 24 Jan. 1861; *m. d.* of Col. W. P. Warburton, C.S.I., late Dir.-Gen., I.M.S. *Educ.*: Dollar; Lausanne; Middlesex Hosp., London; Durham Coll. of Med. Ent. I.M.S., 1888. Agency Surgeon, Gilgit, 1890; Residency Surgeon, Indore, 1901-1912; Administrative Medical Officer for C.I., 1906-12; Surgeon to the Viceroy, 1912-16; served Chin-Lushai Expedition, 1889-90; Humzanagar Expedition, 1891 (despatches, medal two clasps); Kt. of Grace, Order of St. John of Jerusalem; retired in 1919. *Address*: Wilderness Road, Malabar Hill, Bombay; or Messrs. King, King & Co., Bombay.

ROBINSON, SIR SYDNEY MADDOCK, KT., Chief Justice, High Court, Burma (1922). *b.* 3 Dec. 1865. *Educ.*: Hereford Cath. Sch., Brasenose Coll., Oxford, Called to Bar., Middle Temple, 1888; Govt., Adv.-and Leg. Rem. to Punjab Govt., Puisne Judge, Ch. Court of L. Burma, 1908-1920 Chief Judge, 1920-1922. *Address*: I, Leeds Road, Rangoon.

ROGERS, PHILIP GRAHAM, B.A. (Oxon.), C.I.E. (1924), I.C.S., Postmaster General, Bombay. *b.* 3 April 1877. *m.* Eirene O'Connor. *Educ*: Christ's Hospital 1886-1896; Keble Coll., Oxford, 1896-1901. *Address*: U. S. Club, Calcutta.

ROTHFELD, OTTO, I.C.S., B.A. (Oxon.) F.R.G.S.; Registrar of Co-operative Societies, Bombay, since Feb. 1920. *b.* 3 Oct. 1876; *m.* Frances Eleanor, *d.* of Sir Charles Cameron, Bart., of Balclutha. *Educ.*: George Watson's Coll., Edinburgh; Merton Coll., Oxford; 1st class Mods.; 1st class Lit. Hum. Came to India, 1899; Pol. Agent in Kathiawar, 1904; Collector of Broach, 1911-13, and subsequently Collector of East Khandesh, Sukkur and Surat. *Publications*: Indian Dust; Life and Its Puppets. With Pen and Rifle in Kistwar; Impressions of Co-operation in France and Italy; Women of India; Umar Khayyam and His Age., and Waq'ayas. *Address*: North Yeravda, Poona, and The Reform Club, London, S.W.1.

ROUSE, ALEXANDER MACDONALD, *C.I.E.* F.C.H., Superintending Engineer, Delhi; *b.* 14 Sep. 1878; *m.* Jean Louis Jameson, March 1912; two *s.* *Educ.*: St. Paul's Sch.; R.I.E.C. Cooper's Hill. *Address*: Delhi.

ROW, DEWAN BAHADUR CONJEEVERAM KRISHNA-SWAMI, M.L.A. (nominated); Vak., High Court, Madras. *b.* Aug. 12, 1867. *Educ*: Presy. Coll., Madras; *m.* a grand-daughter of the late Raja Sir T. Madhava Row; K.C.S.I., I., Vakil, Madras High Court, 1889. Joined Provincial Judicial Service, 1894. Gave evidence before the Public Services Commission 1913; acted as Judge, High Court, Madras 1921; retired in 1922. *Address*: Masther Baug, St. Georges' Cathedral Road, Madras.

ROW, DIWAN BAHADUR RAGHUNATHA ROW RAMACHANDRA; Secretary to Government of Madras. *b.* 27 September 1871. *Educ.*: Trivandrum and Presidency College, Madras. Statutory Civil Service, 1890-92. Transferred to Provincial Service. Collector, Registrar, Co-op. Credit Societies. *Address*: Madras.

ROY, RT. REV. AUGUSTIN; Bishop of Coimbatore, since 1904; *b.* France, 1863. *Address*: Catholic Cathedral, Coimbatore.

ROY, THE HON. RAJA PROMADA NATH of Dighapatia; Member, Council of State and Zemindar of Bengal. *b.* 29 Jan. 1873. *Educ.* at Raj Shahye College and Presidency College; Member of the Imperial Legislative Council, 1910-12. *Address*: Dighapatia, Rajbari, Dist. Rajshahya or 163, Lower Circular Road, Calcutta.

ROY, SURENDRA NATH, SASTRA VACHASPATI B.A., B.L. (Calcutta Univ.); Vakil, High Court, Calcutta and Landholder. *b.* April 1862. *Educ.*: St. Xavier's College, Hindu School and Presidency College, Calcutta. Enrolled as Vakil of the High Court, 1883; elected Vice-Chairman of the Garden Reach Municipality (first Mill Municipality in Bengal) in 1897; has been elected Chairman South Suburban Municipality since 1900; Commissioner, Calcutta Corporation from 1895-1900; Member Dist. Board of 24 pergunnas from 1916-1922; elected member, Bengal Legis. Council in January 1913 and elected to Council at subsequent elections. Elected first Deputy President of the Reformed Council in Feb. 1921; acted as Presidt. from May 1921 to Nov. 1922. Introduced the Bengal Primary Education Bill in the Bengal Legis. Council and got it passed by the Council in 1919. *Publication*: (1) "A History of the Native States of India; (2) Local Self-Government in Bengal, etc. *Address*: Behala, Calcutta.

ROYAL-DAWSON, FREDERICK GEORGE, M.I.C.E., V.D.; Chief Engineer with the Railway Board, and Chairman, Indian Ry. Bridge Committee, January 1919 to March 1921. *b.* 1 June 1867; *m.* Rose, *d.* of the late Major Lynch. *Educ.*: Elizabeth Coll., Guernsey and Cooper's Hill; Appointed Assistant Engineer, State Railways, 1889; Chief Engineer, N.-W. Railway 1917; Senr. Government Inspector of Railways, Lucknow, June 1918. *Publications*: Technical papers including "Employment of Military Labour on the Agra-Delhi Chord" and "In-flow of water

into wells in the Punjab," "Train Resistances," etc., Papers on "The Indian Railway Gauge Problem" and "The Need for an All-India Gauge Policy" read and discussed at the Inst. Civil Engineers. 1921, and Royal Society of Arts (1922), respectively. *Address:* C/o. India Office, London.

RUNCHORELAL, SIR GIRJAPRASAD CHINUBHAI MADHAVLAL, 2nd Bt.; *b.* 19 Apr. 1906. *s.* of 1st Bt. and Sulochna, *d.* of Chunilal Khushalrai; *S.* father 1916. [Father was first member of Hindu community to receive baronetcy.] *Heir:* none. *Address:* Shahpur House, Ahmedabad.

RUSHBROOK WILLIAMS, LAURENCE FREDERIC, M.A., B. Litt. (Oxon.) 1920, O.B.E., 1920, C.B.E. (1923), Director of Public Information, Government of India; *b.* 10 July 1891, *Educ.:* University College, Oxford, Private Study in Paris, Venice, Rome. Lecturer at Trinity College, Oxford, 1912, travelled Canada and U.S.A., 1913, Fellow of All Souls, 1914. Attached General Staff Army Head Quarters, India, 1916. Professor of Modern Indian History, Allahabad University, 1915-1919. On special duty with the Government of India, 1918-1921 in India, England and America, Official Historian of the Indian Tour of H.R.H. the Prince of Wales, 1921-22. *Publication:* History of the Abbey of St. Albans; Four Lectures on the Handling of Historical Material; Students Supplement to the *Ain-i-Akbari*; A Sixteenth Century Empire Builder: India in 1917-18, India in 1919, India in 1920, India in 1921-22, India in 1922-23. General Editor "India of To-day" and India's Parliament Volumes, 1, 2, 3 *seq. Address:* Home Department, Government of India.

SABNIS, RAO BAHADUR R. V., B.A., C.I.E.; Diwan, Kolhapur State, since 1898; *b.* 1 April 1857. *Educ.:* Rajaram H. S., Kolhapur; Elphinstone Coll., Bombay. Ent. Educ. Dept; held offices of Huzur Chitnis and Ch. Rev. Officer, Kolhapur; Mem. of Royal Soc. of Arts, East India Assoc.; Roy. Asiatic Soc., Bombay Br. *Address:* Kolhapur.

SACHIN, MAJOR H. H. NAWAB SEEDEH IBRAHIM MOHOMMED YAKUT KHAN-MUBARZARUT DAWALA NASRAT JUNG BAHADUR, NAWAB OF; A.D.C.; *b.* 1886, and succeeded as an infant in following year. Installed May 1907; Hon. Captain, 1909, Major 1921. State has area of 49 sq. miles and population of 60,000; salute of 9 guns, personal 2 guns extra, *Educ:* Rajkumar Coll., Rajkote; Mayo Coll., Ajmer; Imp. Cadet Corps. Served G.E.A. in 1914-15. *Address:* Sachin, Surat.

SAGRADA, RT. REV. EMMANUEL; Vicar Apostolic of Eastern Burma and Titular Bishop of Trina, since 1909. *b.* Lodi, 1860. *Address:* Toungoo, Burma.

SAILANA, HIS HIGHNESS RAJA SAHEB DILPEP SINGHJI BAHADUR OF, *b.* 18 March 1891; succeeded the Gadi, 14 July 1919. *m.* first to the daughter of H. H. the Maharawat of Partabgarh and after her death to the daughter of the Rao of Meja in Udaipur *Educ.:* Mayo College, Ajmer, salute 11 guns. *Address:* Sailana C. I.

SAKLATVALA, NOWROJI BAPUJI, C.I.E. (1923), J.P., Director, Tata Sons, Ltd., *b.* 10th Sept. 1875, *m.* Goolbai, *d.* of Mr. Hormasji S. Batlivala. *Educ.:* at St. Xavier's College. Chairman, Bombay Millowners' Association, 1916; Employers' Delegate from India to the International Labour Conference, Geneva, 1921; Member, Legislative Assembly representing Bombay Millowners' Association, 1922. Member, Board of Trustees for the Port of Bombay. *Address:* Navsari Buildings, Fort, Bombay.

ST. JOHN LT.-COLONEL HENRY BEAUCHAMP, C.I.E.; C.B.E., Political Agent, Eastern Rajputana States. *b.* 26 Aug. 1874, *m.* Olive, *d.* of Colonel C. Herbert, C.S.I., 1907. *Educ.:* Sandhurst. Ent. Army, 1893. *Address:* The Agency, Bharatpur.

SAMALDAS, LALUBHAI, *see* MEHTA.

SAMS, HUBERT ARTHUR, C.I.E. (1919). Deputy Director-General, Posts and Telegraphs, April 1922. *b.* 3 May 1875. *m.* Millicent Helen Langford. *Educ.:* St. Paul's School, Peterhouse, Cambridge, B.A. (1897). Entered I.C.S., 1898. Punjab Commission, 1899-1907; P.M.G., 1907; Director of Postal Services, M.E.F., 1917-19; Temp. Lt.-Col., R.E., Aug. 1917—May 1919. Three times mentioned in despatches. Postmaster-General, Bombay Circle, 1920-1922, Offg. D.G., 1922-23. *Publication:* Post Office of India in the Great War. *Address:* c/o Lloyd's Bank, Cox's Branch, Bombay.

SAMTHAR, H. H. MAHARAJA SIR PIR SINGH DEO, MAHARAJA OF, K.C.I.E.; *b.* 8 Nov. 1865; *S.* 1896. *Address:* Samthar Bundelkhand.

SANDBROOK, JOHN ARTHUR; Editor of *The Englishman*, Calcutta, since 1910; *b.* 3 May 1876. *Educ.:* Swansea G. S. Ent. Journalism, 1892; Ch. Asst. Editor, *Western Mail*, Cardiff, 1902-10; served in S. African War. *Address:* 9, Hare Street, Calcutta.

SANDERSON, SIR LANCELOT, KT., K.C.; Ch. Justice of Bengal, since 1915; *b.* 24 Oct. 1863. *Educ.:* Elstree; Harrow; Trin. Coll., Camb. Called to Bar, Inner Temple, 1886. King's Counsel, 1903; M.P. (U.) Appleby Div., Westmorland, 1910-15; Recorder of Wigan, 1901-15. *Address:* 7, Middleton Street, Calcutta.

SANJANA, SHAMS-UL-ULEMA DASTUR DARAB PESHOTAN, B.A., J.P. Senior Head Priest of the Parsis, Bombay; *b.* 18 November 1857. *m.* Shirinbai Rustomji B. Badshah *Educ:* Elphinstone High School, Proprietary School, and Elphinstone College, Hon. Fellow and Examiner in Avesta and Pahlavi; University of Bombay, 1887; awarded Sir Jamsetji Fellowship, 1885; and Sir Jamsetji Gold Medal, 1889; Principal, Sir Jamsetji Zarthosti Madressa; Editor of "Pahlavi Vendidad," "Nirangistan," and "Maino-i-Kherad"; Editor and Translator of "Pahlavi Karname Ardashir," and "Pahlavi Dinkard," of which Vol. 17 was published last year. Has translated into English German works and papers by Geiger, Spegel and Windischmann (Clarendon Press, Oxford). Has preached a number of religious sermons

and published many English and Gujarati essays and papers on Parsi history and religion and on "The Alleged Practice of Consanguinous Marriages in Ancient Iran" and "Dastur Tansar's letter to the "Court of Tabaristan." *Address:* 85, Cumballa Hill, Bombay.

SANKARAN NAIR, SIR CHETTUR, KT. *cr.* 1912; C.I.E., 1904; B.A., B.L., *b.* 11 July 1857. *Educ.:* Madras Presidency College. High Court Vakil; Govt. Pleader and Pub Prosecutor to the Govt. of Madras; Advocate-General for some time acting, then permanent Judge, High Court, Madras; for many years a member of Madras Legis. Council; President of the Indian National Congress at Amraoti; President of the Indian Social Conference at Madras; President of the Indian Industrial Exhibition, Madras; Founder and for some time Editor, Madras Review and Madras Law Journal: Member of Governor-General's Executive Council in India, 1915-1919; Mem. of Council of the Secretary of State for India, 1919-1921. *Address:* Madras.

SAO, SIR MOUNG, K.C.I.E., C.I.E., Sawbwa of Yawng Hwe, Burma; Mem. of Imp. Leg. Council. *Address:* Yawng Hwe, Shan States, Burma.

SAPRU, SIR TEJ BAHADUR, M.A., LL.D., K.C.S.I. (1923) *b.* 8 Dec. 1875. Widower. *Educ.:* Agra College, Agra. Advocate, High Court, Allahabad, 1896-1920; Member, U.P. Leg. Council, 1913-16; Member, Imperial Leg. Council, 1916-20; Member, Lord Southborough's Functions Committee, 1918-1919; Member of Moderate Deputation and appeared as a witness before Lord Selborne's Committee in London, 1919; Member, All-India Congress Committee (1906-1917); Presdt., U.P. Political Confce., 1914; Presdt. U.P. Social Confce. (1913); Presdt. U.P. Liberal League, 1918-20; Fellow, Allahabad Univ., 1910-1920; Member, Benares Hindu University Court and Senate and Syndicate; Law Member of the Governor-General's Executive Council, retired (1922). *Publications:* has contributed frequently to the press on political, social and legal topics; edited the *Allahabad Law Journal*, 1904-1917. *Address:* 19, Albert Road, Allahabad.

SARDAR GHOUS BAKSH KHAN RAISANI, SIR, K.C.I.E., premier Chief of Sarawans, Baluchistan.

SARMA, THE HON. SIR B. NARASIMHA, Member of Governor-General's Executive Council, (for Education, Health and Lands). *b.* Jan. 1867. *Educ.:* Hindu Coll., Vizagapatam; Rajamundry Coll. and Presy. Coll., Madras. Subsequently teacher, Professor, and at the bar in Vizagapatan and Madras. *Address:* Simla.

SARVADHIKARY, SIR DEVA PRASAD, KT., C.I.E.; M.A., B.L. (Calcutta), LL.D. (Aberdeen), LL.D. (St. Andrews), Surlratna (Navadwip), Vidyaratnakar (Dacca), Vidya Sudhakar (Benares), Jnan Sindhu (Puri), Vakeel and Solicitor, Fellow, Calcutta University and Benares University, late Vice-Chan., Calcutta Univ.; Mem. of Indian Legislative Assembly. *b.* 1862. *m.* 1883 Nagendranandini. 2 *s.* and 3 *d. Educ.:* Ramsheshwarpore, Sanskrit College, Hare and Howrah Schools; Presidency College; Calcutta. For several years Mem. of Mun. Corpn. of Calcutta; Mem. of Imp. Lib. Comm.; Trustee, Imp. Museum; Pres., various literary, social and philanthropic societies and Calcutta Licensing Board; Calcutta Temperance Federation Anti-Smoking Society; Calcutta University Corps Committee; Vice-President Indian Association and National Council of Education Sahitya Parishat, *Publication:* "Notes and Extracts," "Three Months in Europe," "Prabach Patra," *Address:* Prasadpur 20, Suri Lane, Calcutta.

SASTRI, SIR CALAMUR VEERAVALLI KUMARASAMI, KT. (1924) *b.* July 1870. *Educ.;* Presy. and Law Colls., Madras: B.A. (1890); B.L. (1893), Vakil, 1894, Judge, Small Causes Court, 1905-06; Judge, Madras City Court, 1906-12; District and Sessions Judge, Ganjam, 1912-14; Member of the Rowlatt Committee, 1918; Chairman, Labour Committee, 1920; Judge, Madras High Court, 1914-20; Member, Criminal Procedure Code Committee, 1917. *Address;* Kalamur House, Madras, N.E.

SASTRI, THE RT. HON. V. S. SRINIVASA, P.C. 1921; *b.* Sept. 22, 1869. *Educn.* at Kumbakonam. Started life as a Schoolmaster; joined the Servants of India Society in 1907; succeeded the late Mr. G. K. Gokhale in its Presidentship in 1915; Member, Madras Legis. Council, 1913-16; elected from Madras Presidency to Imperial Legis. Council, 1916-20. Closely associated with Mr. Montagu during his tour in India in 1918; Member, Southborough Committee; gave evidence before Joint Parliamentary Committee on Indian Reform Bill, 1919; served on Indian Railway Committee; represented India at Imperial Peace Confce., 1921 and at the meeting of the League of Nations at Geneva and the Washington Confce; during the same year. Elected Privy Councillor and received the freedom of the City of London, 1921; undertook a tour in the Dominions as the representative of Government of India, 1922; Member, Council of State, since 1921. *Address:* Servants of India Society, Bombay or Poona.

SAVANTVADI, HIS HIGHNESS CAPTAIN KHEM SAVANT V. *alias* BAPUSAHEB BHONSLE, Raje Bahadur, Sardesai Maharaj of, *b.* Aug. 20, 1897. *m.* Princess Shri Lakshmi Devi of Baroda. *Educ.:* Malvern College, England. Served in the Great War at Mesopotamia from Oct. 1917 to March 1919; attached as Hon. Officer to 116th Mahrattas. *Address:* Savantvadi.

SCOTT, GAVIN, M.A., C.I.E. (1922), I.C.S., Municipal Commissioner for the City of Rangoon. *b.* 10 Aug. 1876, *m.* Eileen Marie, Nolan. *Educ.:* Glasgow University. Joined I.C.S., 1899; posted to Burma, 20 Dec., 1899. *Address:* Kilmanie, 14, Kokine Road, Rangoon.

SCOTT, MAJ.-GEN. THOMAS EDWIN, C.B.(1917), D.S.O. (1897), C.I.E. (1900), Colonel, 57th Wilde's Rifles (Frontier Force), G.O.C. and Political Resident, Aden, since 1920. *b.* 6 March 1867. *m.* Renira Josephine, *d.* of the late Rev. E. M. Chaplain. Entered Army 1888. Served N. W. Frontier, 1891; Waziristan field force, 1894-95; East Africa, 1895-96; Uganda, 1897-98; China, 1900; Mesopotamia and German East Africa; Military Sec. to the C.-in-C. in India (General Sir Charles Monro); G.O.C., Bangalore Bde., 1919-20. G.O.C., Aden Field Force, 1920. *Address:* Aden.

SEAL, BRAJENDRANATH, M.A., Ph.D., D. Sc., Vice-Chancellor, Mysore University, since 1920. George V., Prof. of Mental and Moral Science, Calcutta Univ., 1914-1920. *b.* 3 Sep. 1864. *Educ.:* Gen. Assembly's Institution, Calcutta University: Del., Orientalist Congress, Rome, 1899; opened discussion at 1st Univ. Races Congress, London, 1921; Mem., Simla Committee for drawing up Calcutta Univ. Reg., 1905; Chairman, Mysore Constitutional Reforms Committee, 1922-23; Author of New Essays in Criticism, Memoir on Co-efficients of Numbers; Comparative Study in Vaishnavism and Christianity; Race Origins, etc. *Address:* Mysore, S. India.

SEDDON, CHARLES NORMAN, I.C.S. (retired), *b.* 18 Dec. 1870. *Educ.:* Liverpool College and Balliol College, Oxford; *m.* Helena, *d.* of the late J. F. Braga. Service in I.C.S., in Bombay Presidency. Special Famine Officer in Kathiawar in 1900. Administrator, Nawanagar State; First Assist. Resident, Baroda. Settlement Commr., Amatya and offg. Dewan of Baroda, Settlement Commissioner, Bombay; Commr., Central Division, Bombay; for some years Presdt., Civil and Military Exam. Comttee., Bombay; Reforms Commissioner and temporary Member of Bombay Executive Council, 1920; Member of the Council of State, Feb. 1921; Revenue Minister, Baroda, October 1921. *Address* Baroda.

SELL, REV. CANON E., B.D. (Lambeth), D. D. (Edin.); Ch. Kaisar-i-Hind Gold Medallist, *b.* 1839; *Educ.:* C.M.S. Coll., London. Arr. in India, 1865; Numerous publications on the history of Islam and on Old Testament Literature. *Address:* Vepery, Madras.

SEN, JITENDRANATH, M.A.; Calcutta Univ. Sen. Prof. of Phy. Sc., City Coll., since 1903; *b.* 1875, *m.* 1899, *Educ.* Hindu Sch.; Presidency Coll.; City Coll. and Sc. Assoc., Calcutta. *Publications:* Elementary Wave Theory of Light and other small books. *Address:* 1, Muddun Mohun Sen's Street, Calcutta.

SEN, RAI BAHADUR NISI KANTA, B.A., B.L., M.L.A., General Manager, Estate Nuzurgunj, Purnea City, and Vakil. *b.* 8 March 1868. *m.* Mrs. Sen. *Educ.:* Dacca College. Entered Bar in 1894; was Govt. Pleader up to 1912; nominated member, Behar and Orissa Leg. Council in 1914; renominated in 1916, Elected Member, Legis. Assembly in 1921; acted for 6 months as member, Special Tribunal during Arrah-Gaya Bakrid disturbances; was Vice-Chairman, Purnea Municipality, for 7 years; Vice-Chairman, Purnea Dist. Board, for 12 years up to 1921 when elected Chairman, Purnea District Board. *Address:* Sen Villa, Purnea (Bihar).

SETALVAD, RAO BAHADUR CHUNILAL HARILAL, C.I.E., Bar-at-Law, Ag. Chief Presidency Magistrate, Bombay. *Address:* Bombay.

SETHNA, THE HON. MR. PHIROZE CURSETJEE, B.A., J.P., O.B.E. (1918); Member, Council of State, *b.* 8 Oct. 1866. Manager for India, Sun Life Assurance Co. of Canada; Chairman, Central Bank of India, Ltd.; Member, Bombay Municipal Corporation; Trustee, City of Bombay Improvement Trust; Trustee, Bombay Port Trust. *Address:* Canada Building, Hornby Road, Bombay.

SHADI, LAL, SIR, M.A. (Punjab), 1895, B.A. Honours (Oxford) 1898; B.C.L. Hon. (Oxford), 1899; Boden Sanskrit Scholar, (Oxford), 1896; Arden Law Scholar (Gray's Inn.), 1899; Honoursman of Council of Legal Education, 1899; Special Prizeman in Constitutional Law, 1899; Chief Justice, High Court, Lahore. *b.* May 1874; *Educ.:* at Govt. Coll., Lahore, Balliol Coll., Oxford. Practised at the Bar, 1899-1913; Offg. Judge, Punjab Chief Court, 1913 and 1914; Permanent Judge, 1917; Judge, High Court, Lahore, 1919; Chief Justice, May 1920. Elected by Punjab Univ. to the Leg. Council in 1910 and 1913. Fellow and Syndic, Punjab University. *Publications:* Lectures on Private International Law, Commentaries on the Punjab Alienation of Land Act and Punjab Preemption Act, etc. *Address:* Lahore.

SHAFI, THE HON. MIAN SIR MUHAMMAD, KHAN BAHADUR, K.C.S.I. (1922); C.I.E. (1916); D. Litt. (Aligarh); LL.D. (Delhi); Prochancellor, Delhi University, 1922; Vice-President of the Executive Council and Law Member, Govt. of India (1922) *b.* 10 March 1869. *Educ.* Govt. College and Forman Christian College, Lahore, Scholar and Barrister (Middle Temple); President, All India Urdu Conference, 1911; President, Islamia College Committee, 1907-1919; President, All-India Muslim League, 1913; Trustee, M.A.O. College, Aligarh; President, All-India Mahomedan Educational Conference, 1916; President, High Court Bar Association, 1917-1919; President, Punjab Prov. Bar Confce., 1919; Member, Punjab Legislative Council and Imperial Legislative Council from 1909-1919; Education Member, Government of India, 1919-22. *Publications:* "Punjab Tenancy Act with notes," "Provincial Small Cause Courts Act with notes" and "Law of Compensation for Improvements in British India. *Address:* Simla or Delhi.

SHAH, HON. SIR LALLUBHAI ASHARAM, KT. (1920), M.A., LL.B.; Judge of High Court, Bombay, since 1913; *b.* 1873; *Educ.:* Gujerat Coll., Ahmedabad; Govt., Law Sch., Bombay. *Address:* Cumballa Hill, Bombay.

SHAHANI, SAHIBSING CHANDASING, M.A., Principal, D.J. Sind College, Karachi, Zemindar and Member, Legislative Assembly (1920). *b.* 1869. *m.* Rijhi Tejumal Mansukhani.

Educ.: Bombay and Poona. Professor, Wilson College, Bombay, 1892-96; Prof., D.J. Sind Coll., Karachi, since 1896. *Publications:* Umar Khayyam; Shah-jo-Rasalo; Sind Grasses. *Address:* D. J. Sind College, Karachi.

SHAHPURA, RAJADHIRAJA SIR NAHAR SINGH, K.C.I.E.; 7 Nov. 1855; *s.* Shahpura Gaddi by right of inheritance, 1870. *Address:* Shahpura, Rajputana.

SHAKESPEAR, ALEXANDER BLAKE, C.I.E.; Merchant; partner in firm of Begg, Sutherland & Co.; *b.* 1873. *Educ.:* Berkhampstead. Was Sec., Upper India Chamber of Commerce, 1905-12. *Address:* Cawnpore.

SHAMSHER SINGH, SIR SARDAR, SARDAR BAHADUR, K.C.I.E., C.I.E.; Ch. Min., Jind State; *b.* 1860. *Educ.:* Jullundur and Hoshiarpur H. S. and Govt. Coll., Lahore. Served during Afghan War, 1879-80, with march from Kabul to Kandahar; Ch. Jud. of State, High Court, 1899-1903. *Address:* Sangrur, Jind State.

SHAMS-UL-HUDA, THE HON. MR. JUSTICE (NAWAB SIR SYED) K.C.I.E., M.A., B.L.; Judge, Calcutta High Court, since 1917; *b.* 1864; belongs to well-known family of Syeds in Tippera, East Bengal: *Educ.:* Presidency Coll., Calcutta; Calcutta Univ. Commenced practice as Vakil in High Court at Calcutta; Mem., Bengal Exec. Council, 1912-17; Vice-Pres., Bengal Exec. Council, April-June 1917; held office of Sec. of Bengal Prov. Moslem League and that of Bengal Landholders Assoc. Pres., All-India Moslem League, 1912. *Address:* 220-2, Lower Circular Road, Calcutta.

SHARFUDDIN, HON. MR. JUSTICE SYED; *ex.* Judge of Patna High Court; Mem. of Exec. Council, Lt.-Gov. of Behar, since 1917; *b.* Neora, 10 Sept. 1856; *Educ.:* Patna Coll. Called to Bar. 1880; Puisne Judge, Calcutta, 1907-15; Mem. of Senate of Calcutta Univ., 1904; Bengal Council, 1905; Pres. of All-India Md. Educ. Confee., 1906. *Address:* High Court, Patna.

SHASTRI, PRABHU DUTT, Ph.D. (Kiel), B. Sc. Litt. Hum. (Oxon.), M.A. B.T., Hon. M.O.L. (Punjab); I.E.S.; Sen. Prof. of Mental and Moral Phil. in Presidency Coll., Calcutta, since 1912; *b.* 20 June 1885; *Educ.:* Universities of Lahore, Oxford, Kiel, Bonn and Paris. Del. to and Sectional Pres. at 4th Int. Congress of Philosophy held at Bologna, 1911: Head of Dept. of Philosophy, since 1912, Calcutta Univ. Lect. in Phil. and Sanskrit, 1912-15; invited to lecture in Universities of Geneva, Florence and Rome, 1913-14. Visited the U. S. A. and Canada in 1920-22 and invited to address the Universities of Harvard, Cornell, Princeton, Yale, Johns Hopkins and Toronto. *Publications:* Several works and articles on philosophical, educational, literary, religious and social subjects. *Address:* Presidency College, Calcutta; Bharati-Bhawan, 1, Multan Road, Lahore.

SHEA, LIEUT.-GENERAL, SIR JOHN STUART MACKENZIE, K.C.B. (1923); K.C.M.G. (1919); D.S.O. (1901); Offg. Adjutant General in India; *b.* 17 Jan. 1869; *m.* 1902, Winifred Mary; *d.* of late William Congreve of Burton and Congreve. *Educ.:* Sedberth; Sandhurst, 2nd-Lt., The Royal Irish Regt., 1888; Lt., 15th Lancers 1891; 35th Scinde Horse, 1912. Served Chitral Relief Force, 1895 (medal with clasp); South Africa, 1900-1902; Queen's Medal 4 clasps, King's Medal 2 clasps, dispatches, D.S.O., Brevet of Major, qualified for Staff Brevet Lt.-Col., 1922, European War, 1914-18 (despatches C.B., Bt.-Col. C.M.G., K.C.M.G.) Promoted Maj. Gen., for services in field 1917; Commander Legion *d'* Honneur Order of Nile, 2nd class. *Address:* Simla.

SHEPPARD, SAMUEL TOWNSEND, Editor of *The Times of India* since 1923. *b.* Bath. Jan. 1880 *Educ.:* Bradfield and Trinity Coll., Oxford. *m.* 1921 Anne, *d.* of the late John Carpenter. Joined the staff of *The Times* (London) as Secretary to the Editor in 1902. Assistant Editor, *The Times of India*, 1907-1923. Temporary Capt., in the Army, 1917-18. Employed on the staff of Bombay Brigade. *Publications:* Contributed to *The Times* History of the War in South Africa. "The Byculla Club: a history," "Bombay Place-names and Street-names" "A History of the Bombay Volunteer Rifles." *Address:* *The Times of India*, Bombay.

SHIRRAS, GEORGE FINDLAY, M.A., Director, Labour Office, Government of Bombay, since 1921, formerly Director of Statistics with the Govt. of India, Member, Bombay Legislative Council; Fellow of the University of Calcutta, *b.* Aberdeen. 16 July 1885. *m.* 1911, Amy Zara, *o.d.* of late George McWatters, Madras Civil Service; two *s. Educ.:* Robert Gordon's College, Aberdeen; University of Aberdeen, University Prizeman in Economics. Professor of Dacca College, 1909; on special duty under Government of India, Finance Department, 1919-13; Member, Govt. of India Prices Inquiry Committee; on special duty in office of D.P.I., Bengal, 1913-14; Reader in Currency and Finance in Calcutta University, 1914; Member, Government Bengal Statistics Committee, and of Board of Agriculture, India, 1918; on deputation Imperial Statistical Confee, London, on behalf of Govt. of India, Dec. 1919- Feb. 1920; on special duty India Office in connection with League of Nations work, March 1920; Hon. Fellow, Royal Statistical Socty. 1920; Major, 4th Gordon Highlanders, (1920 despatches); T. A. Reserve Regimental List, 1921. *Publications:* Some Aspects of Indian Commerce and Industry; Indian Finance and Currency 3rd Impression, 1920; Some Effects of the War on Gold and Silver, 1920; articles on finance and Indian trade, etc. *Address:* Labour Office, Secretariat, Bombay.

SHOUBRIDGE, HARRY OLIVER BARON, Associate Coopers Hill and M. Inst. C. E., Chief Engineer in Sind. *b.* 19 Oct. 1872. *m.* E. Z. Mould. *Educ.:* Westminster School and R.I.E.C. Coopers Hill. Civil Engineer in the Bombay Public Works Department. *Address:* Grindlay and Co., London and Bombay.

SIFTON, JAMES DAVID, C.I.E., (1921); I.C.S *b.* 17 April 1878. *Educ.:* St. Paul's School and Magdalen Coll., Oxford. *m.* Harriette May

Shettle of Eye, Suffolk. Joined I.C.S., 1901. Served in Bengal to 1910. Transferred to Bihar and Orissa. Sec. to Govt. in Financial and Municipal Dept., 1917. *Address:* Patna, Bihar and Orissa.

SIKKIM, MAHARAJA OF, H. H. MAHARAJA TASHI NAMGYAL, K.C.I.E. (1923) *b.* 26 Oct. 1893; *s.* of late Maharaja Sir Thutob Namgyal, K.C.I.E. of Sikkim, *m.* grand daughter of Lonchen Sholkhang (Regent of Tibet). *Educ.:* Mayo Coll., Ajmer; St. Paul's Sch., Darjeeling. *Address:* The Palace, Gangtok, Sikkim.

SIM, GEORGE GALL, M.A., C.I.E. (1920), Financial Commissioner (Railways) *b.* 12 Jan. 1878, *m.* Margaret, *d.* of G. Strachen. Aberdeen. *Educ.:* King's Coll., Aberdeen University and Christ Church, Oxford. Entered I.C.S., 1901; served in U.P. as Asstt. Magte. and Collr., Under-Secretary to Govt., Chairman, Cawnpore Municipal Board; Dy. Commissioner; Financial Secretary to Government; U. P., has served under the Government of India since Jan. 1920. Member, Board of Inland Revenue, 1922. *Address:* United Service Club, Simla.

SIMLA, ARCHBISHOP OF, since 1911, MOST REV. ANSELM, E. J. KENEALY; *b.* 1864. Entd. Franciscan Order, 1879; Priest, 1887; Guardian of Franciscans, Crawley, Sussex, 1899; Minister Provincial for England, 1902; first Rector of the Franciscan College, Cowley, Oxford, 1906; elected life member of Oxford Union, 1907; Definitor-General representing English-speaking provinces 1908, Visitator-General, Irish Province, 1910. *Address:* Archbishop's House, Simla E.

SIMONSEN, JOHN LIONEL, F.I.C.; D.Sc. (Manch), F.A.S.B., K.I.H. Silver Medal, 1921. Prof. of Chem. Presidency Coll., Madras, 1910-18; Dy. Controller, Ind. Mun. Board, 1918-19; Forest Chemist. 1919; *b.* 22 Jan. 1884; *m.* 1913, Jannet Dick Hendrie, M.B., Ch. B., L.M. *Educ.:* Manchester G. S. and Univ.; Pres. Chem. Section Ind. Sc. Congress, 1917. *Publication:* Numerous papers on the transaction of Chemical Society of London and Indian Forest Records. *Address:* Forest Research Institute, Dehra Dun.

SINGH, LT.-COL. BAWA JIWAN, C.I.E. (1918); Director, Medical, Sanitation and Jail Departments, H. E. H. The Nizam's Government, Hyderabad. *b.* 6 May 1863. *Educ.:* Government and Medical Colleges, Lahore and St. Thomas' Hospital Medical Schools, London. Joined I.M.S. 1891. Served in Military Department to 1896; Civil Surgeon, Meiktila, 1896. Secretary, I.G Prisons, with Civil Medical Administration, Burma, 1897-1899; Supdt., Central Jail, Insein, Burma, from 1899 to 1909; Inspector-Genl. of Prisons, E. Bengal and Assam, 1910-1912; Inspector-Genl. of Prisons, Behar and Orissa from 1912-1920. *Address:* Hyderabad.

SINGH, SARDAR BAHADUR GAJJAN, O.B.E., Member, Legislative Assembly (1920). *b.* Jan. 1864. *Educ.* Ludhiana and Lahore. Practised at the bar from 1884 to 1920; was leader of Ludhiana District Bar; Member, Senate of the Punjab University; Member, Ludhiana Municipal Committee and Distri Board, Jagir and landholder; an Hon. Extra Asstt. Commissioner, awarded Sword of Honour and seat in Durbar for war services; mentioned in despatches, Author of the Punjab Juvenile Smoking Bill, which was passed. *Address:* Ludhiana.

SINGH, SARDAR GULAB, M.L.A., Managing Director, Punjab Zemindars' Bank, Ltd., Lyallpur, and Landlord. *b.* March 1866. *m. d.* of Dr. Sardar Jawahir Singh Reis of Lyallpur. *Educ.:* Government Coll., Lahore. Headmaster, Govt. Sandeman High School, Quetta, for 10 years; Member, Lyallpur and Quetta Municipalities and Dist. Board, Lyallpur, and Pres. of several co-operative credit societies and associations and elected as member of Legislative Assembly, 1920; Hon. Magte., Lyallpur for 9 years. *Address:* Bhawana Bazar, Lyallpur, Punjab.

SINGH, RAJA SURJ BAKSH, O.B.E. (1919), Member, Leg. Assembly, Taluqdar of Oudh. *b.* 15 Sep. 1868. *m.* grand-daughter of Raja Gangaram Shah of Khairigarh (Oudh). *Educ.:* at Sitapur and Lucknow. Hon. Magte.; Hon. Munsiff.; Vice-President, British Indian Assocn. of Taluqdars of Oudh. *Publication:* "A Taluqdar of the Old School" by "Heliodorus" and "Arbitration." *Address:* Kamalpur P.O., Sitapur Dist. (U.P.)

SINGH, THE HON. SIRDAR JOGENDRA, Member of Council of State. Taluqdar, Aira Estate, Kheri District, *b.* 25 May 1877. Contributes to several papers in India and England. Has been Home Minister, Patiala State. Fellow of the Punjab Univ.; Presdt. of Sikh Educ. Confce., served on Indian Sugar Committee, Editor of *East and West Publication:* Nurjehan; Nasrin, Life of B.M. Malabari. *Address:* Aira Holme, Simla (East.)

SINGH, KUNWAR MAHARAJ, M.A. (Oxford), Barat-Law, C.I.E., Dy. Secry. to Govt. of India, Education Department, 1920. *b.* 17 May 1878, *m.* to Miss Maya Das, *d.* of the late Rai Bahadur Maya Das of Ferozpur (Punjab). *Educ.:* Harrow; Ball. Coll., Oxford; Barat-law, Middle Temple, 1902. Ent. Prov. C.S.U.P. as Dy. Coll., 1904; Sen. Asst. Sec. to Govt. of India, Dept. of Education, 1915; Mag. and Coll. of Hamirpur, U.P., 1917, Dy. Commissioner and Collector, U.P., 1917-19; Secry. to U.P. Govt., 1919. *Publications:* Annual Report on Co-operative Credit Societies in the U.P., 1908-1909. *Address:* The Manor, Simla.

SINGH, SIR RAMESHAR, G.C.I.E., K.B.E., D.Litt., Maharajadhiraja of Darbhanga; Mem., Exc. Council, Bihar and Orissa, since 1912; Mem. of Imp. Council, 1899-1900 *b.* 16 Jan. 1860 twice married; two *s.* one *d. b.* Maharaja Bahadur Sir Lakshmeshwar Singh, G.C.I.E., made hereditary Maharaja Bahadur, 1907; hereditary Maharajadhiraja, 1920; *Educ.* Queen's Coll., Benares; privately; Life Pres., Behar Landholders Assoc., Maithel Mahasabha, Bharat Dharma Mahamandal and also Pres., Hindu Univ. Soc., Behar Panchayat Assoc., etc. A member of the Indian Police Commission

and of Indian Famine Trust; Pres., Prince of Wales Reception Committee for Bengal, 1905; Indian Industrial Conference, 1908; Religious Convention held at Calcutta, 1910 and Allahabad 1911; All-India Hindu Conference, April 1915, All-India Landholders' Assocn. and Bengal Landholders' Assocn., Member, Council of State, since 1920. *Address*: Darbhanga.

SINGH, COL. MAHARAJ, SRI SIR BHAIRUN BAHADUR, K.C.S.I., A.D.C.; Vice-Pres. of State Council; *b.* 1879; *s.* of Maharaj Sri Khet Singhji and *c.* of H. H. the Maharaja of Bikaner. *Educ.*: Mayo Col., Ajmer. *Address*: Bikaner.

SINGH, PRINCE VICTOR D. *see* Duleep Singh.

SINHA, BEOHAR RAGHUBIR, Member, Legislative Assembly; Zamindar and Jagirdar. *Educ.* Government College, Jubbulpore. Hon. Magte., 2nd Class, sitting singly, has been member of the C.P. Council on behalf of Zamindars for two terms; elected Member, Legislative Assembly on behalf of C.P. Zamindars. *Publications*: Hindi Shastra Siddhanta Sar. *Address*: Jubbulpore.

SINHA, THE HON. LALA SUKHBIR, Landholder and Jagirdar. *b.* 5 Jan. 1868. *Educ.* Agra College. Member, U. P. Legislative Council, from 1909-1920 when elected to the Council of State from the four Northern Divisions of the Agra Province; Genl. Secry., All-India Hindu Sabha; Hon. Secretary, Meerut College; Hon. Secry., U.P. Zamindar Association; President, Rishikul Asram and Ayurvedic College, Hardwar. Member (1) Indian Central Cotton Committee, (2) Advisory Committee in the Agriculture and Rev. Dept., Govt. of India, (3) Board of Agriculture, U.P., (4) Board of Management, Agricultural College, Cawnpore, and (5) President, Edmund High School, Muzaffarnagar. *Publications*: Translation of the "Gita" and "Yoga Patanjali" in Hindi. *Address*: "Anandbhuwan," Muzafarnagar, U.P.

SINHA, NARENDRA PRASANNA, Major, I.M.S., retired; Consulting Physician; Mem., Advisory Council, India Office; *b.* 30 Sept. 1858. *Educ.*: Calcutta; Univ. Coll., London. Ent. I.M.S., 1880; retired 1905.

SINHA, THE HON. MR. SACHCHIDANANDA, Barrister, Member, Executive Council, Bihar and Orissa, 1921; also President of Legislative Council 1921-22. *b.* 10 Nov. 1871, *m.* the late Srimati Radhika, *d.* of the late Mr. Sewa Ram, of Lahore. *Educ.*: Patna College and City College, Calcutta. Called to the Bar (Middle Temple), 1893; Advocate, Calcutta High Court, 1893; Allahabad High Court, 1896; Patna High Court, 1916. Founded and since edited *The Hindustan Review*, 1839. Twice Elected Member, Imperial Legislative Council, Elected Legislative Assembly, 1920, also elected its first Deputy President, Feb. 1921. *Publication*: "The Partition of Bengal or the Separation of Behar." *Address*: Patna, Behar and 7, Elgin Road, Allahabad.

SINHA, SATYENDRA PRASANNA, FIRST BARON, P. C., K. C.; raised to Peerage (1st Indian), K.C.S.I. (1921); *b.* 1864; *Educ.*: Birbhoom Zilla Sch.; Presidency Coll., Calcutta; Lincoln's Inn; called to Bar, 1886; Barrister, Calcutta H. C.; Standing Counsel, Govt. of India, 1903; Adv. Gen., Bengal, 1907-9 and 1916-17; Law Member, Viceroy's Executive Council 1909-10; Member, Bengal Executive Council, 1917-18; Representative of India in Imp. War. Confce. 1917 and in 1918; Freeman of City of London, 1917; App. Representative of India at Peace Conference; Under Secretary of State for India, 1919-20; Governor of Behar and Orissa, 1921-22. *Address*: Calcutta.

SIRMOOR, LIEUT.-COL. H. H. MAHARAJA SIR AMAR PRAKASH BAHADUR, K.C.S.I., K.C.I.E., *b.* 27 Jan. 1880. *m. d.* of the late His Excellency Maharaja Deb Shamsher Jung, Rana Bahadur ex-Prime Minister of Nepal in 1910. *Educ.*: under European and Indian Private tutors *Address*: Sirmoor, Nahan.

SIROHI, H. H. MAHARAJA DHIRAJ, MAHARAO SARUP RAM SINGH BAHADUR. *b.* Sept. 27, 1888. *s.* to the gadi, April 29, 1920. *Address*: Sirohi, Rajputana.

SITAMAU, H. H. SIR RAJA RAM SINGH, RAJA OF, K.C.I.E.; *b.* 1880; descended from Rathor House of Kachi Baroda. *m.* thrice. *Educ.*: Daly Coll., Indore, Hindi and Sanskrit poet, and keen student of science and ancient and modern philosophy, is entitled to a salute of 11 guns. S. by selection by Govt. of India in default of direct issue, 1900. *Address*: Ramnivas Palace, Sitamau, C.I.

SIVAGNANAM PILLAI, THE HON. DEWAN BAHADUR TINNEVELLY NELLAIAPPA, B.A., Minister of Development, Madras, *b.* 1 April 1861. *Educ.*: Madras Christian College. Service under Government; Retired as Dy. Collector; President, Dist. Board, Tinnevelly, 1920-1923. *Address*: Renga Vihar, Mowbrays Road, Madras.

SIVASWAMI AYYAR, SIR P. S., K.C.S.I., 1915, C.S.I. (1912); C.I.E. (1908). Retd. Member, Executive Council, Madras; *b.* 7 Feb. 1864. *m.*; no c.; *Educ.*: S. P. G. College, Tanjore; Government College, Kumbakonam; Presidency College, and Law College, Madras; High Court Vakil, 1885; Asstt. Professor, Law College, Madras, 1893-99; Joint Editor, Madras Law Journal, 1893-1907; first Indian Representative of the University of Madras in the Madras Legislative Council, 1904-07; Advocate General, 1907; Member of Executive Council, Madras, 1912-17; Vice-Chancellor, University of Madras, 1916-18; Vice-Chancellor of Benares Hindu University, 1918-19, Elected to the Indian Legislative Assembly by the districts of Tanjore and Trichinopoly, 1920; President of the Second Session of the National Liberal Federation at Calcutta, 1919; Member of the Indian Delegation at the Third Season of the Assembly of the League of Nations at Geneva, 1922; Nominated Member of the Indian Legislative Assembly, 1924. *Address*: Sudharma, Edward Elliot's Road, Mylapore, Madras.

SKEEN, MAJOR-GENERAL SIR ANDREW, K.C. I.E., C.B., C.M.G., G.O.C., Peshawar District; *b.* 1873. Served N.W. Frontier, India, 1897-98 (medal, 2 clasps); China, 1900 (medal); East Africa, 1902-4 (despatches, Bt.-Major,

medal, 2 clasps); European War, 1914-18 (despatches, Bt.-Col. C.M.G.) 3rd Afghan War, 1919. Despatches; Waziristan operations, 1919-1920. *Address*: Peshawar.

SLOCOCK, FRANCIS SAMUEL ALFRED, C.I.E., *Educ.*: Marlborough; Trinity Coll., Oxford, Ent. I.C.S., 1889; served Madras and C.P.. Ch. Sec. Ch. to Commsr. 1906; Inspr.-Genl. of Police, C. P., 1908-14 Sp. duty, Govt. of India, Home Dept., 1914-16; Ch. Sec. to Ch. Commsr., C. P. and Addl. Mem., Imp. Leg. Council. *Address*: Nagpur.

SLY, SIR FRANK GEORGE, K. C. S. I.; Governor of the Central Provinces and Berar. *Educ.*: Balliol Coll., Oxford. Ent. I.C.S., 1885; Insp.-Gen. of Agric., 1904-05; Mem. of Roy. Commsn. on Indian Services, 1912; Mem. of Franchise Committee (Reforms Scheme) 1918-19; Chief Commissioner, Central Provinces and Behar, 1920. *Address*: Nagpur.

SMITH, SIR HENRY MONCRIEFF, KT. (1923), C.I.E. (1920), Sec. to Govt. of India, Leg. Dept. since 1921. *b.* Dec. 23, 1873. *Educ.*: Blundell's School, Tiverton, Sidney, Sussex Coll., Cambridge, I.C.S., 1897. Assist. Commr. in U. P., Dist. and Sessions Judge, 1908; Addl. Sec. to U.P. Govt., 1914; Dy. Sec. to Govt. of India, 1915; Joint Sec., 1919. *Address*: Simla or Delhi.

SMITH, SIR THOMAS, KT. (1921), V. D. (1914) Chevalier of the Order of the Crown (Belgium). (1919), Managing Director Muir Mills, Co., Ltd., Cawnpore, *b.* 28 Aug. 1875. *m.* Elsie Maud. *d.* of Sir Henry Legard in 1907; *2s. 1d.* Member of the Hunter Committee on Punjab disorders, 1919. Presdt., Upper India Chamber of Commerce, 1918-1921; Member, U. P. Leg. Council, 1918-23, Fellow of Allahabad University, 1913-22; Commandant, 16th Cawnpore Rifles, 1913-22. *Address*: Westfield, Cawnpore.

SORABJI, CORNELIA; Kaisar-i-Hind Gold 1st class medal (1909). Legal Adviser to Purdahnishins, Court of Wards, Bengal, Behar and Orissa, and Assam, and Consulting Counsel. *Educ.*: Somerville Coll., Oxford, Lee and Pembertons, Lincoln's Inn Fields, London; Bachelor of Civil Law Examination Oxford, 1893; obtained special privileges, Lincoln's Inn, London, 1903; propounded in 1902 scheme to India Office for connecting Woman Counsel with Prov. Exec. Govts. of India; in 1904 app. by Govt. of Bengal to position she now holds. *Publications*: *Sun-Babies* (1904); *Between the Twilight* (1908); *The Purdanashin* (1916); Sun-Babies (2nd Series Illustrated) 1920; contributions to the *Nineteenth Century*, *Westminster Gazette*. *The Times* and other newspapers and Magazines. *Address*: Board of Revenue, Calcutta.

SPENCER, HON. MR. JUSTICE CHARLES GORDON, I.C.S., Bar-at-Law, Puisne Judge of Madras High Court, since 1914; *b.* 23 Feb. 1869. *Educ.*: Marlborough; Keble Coll., Oxford; Lincoln's Inn. Ent. I.C.S., 1888; *Address*: Weston, Haddows Road, Nungumbaukum, Madras.

SRINIVASA RAO, RAI BAHADUR PATRI VENKATA, B.A., B.L., High Court Vakil, Guntur, and Member, Legis. Assembly. *b.* 1877. *m.* to *d.* of Rao Bahadur Baru Ramanarsa Pantulu Garu. *Educ.*: Town High School and Noble College, Masulipatam, and Christian Coll. and Law Coll., Madras. Joined Cocanada Bar, 1903, and Guntur Bar in 1906. Vice-President, Guntur Dist. Board, for 6 years; was Municipal Councillor for some years; was member, Kistna Flood Committee; Secretary of the First Dt. Congress Committee. *Address*: Guntur.

STANDEN, BERTRAM PRIOR, C.S.I. (1920); C.I.E., Commsr., Berar Div., C.P. since 1915; *b.* 1867. *Educ.*: Uppingham, Trinity Coll., Camb. Ent. I.C.S., 1886, Ch. Sec. to Ch. Commissioner 1908-11; Member, Prov. Leg. Council. *Address*: Amraoti.

STANDLEY, ALFRED WILLIAM EVANS, Associate of Coopers Hill College, Member of Council of the Institution of Engineers (India); Chief Engineer and Secretary, P. W. D., Bikaner State. *b.* 20 Nov. 1866. *m.* Una. *d.* of H. F. D. Bunington, I.C.S. (retd). *Educ.*: Royal College of Mauritius and then at Royal Indian Engineering Coll., Coopers Hill. Joined P. W. D. in U.P., Irrigation Branch, as Asstt. Engineer in 1891; Construction of Gangao Dam, Upper E. J. Canal in 1895; services lent to Benares Municipality in 1896 as Resident Engineer for construction of drainage and sewerage and water-works. Promoted Ex. Engineer in 1899; services lent to Bikaner State, 1903-06, during which several irrigation schemes, water works and central electric power station were designed and constructed; also originated the investigation of the feasibility of irrigating the North tracts of the State from the Sutlej river which has eventually led to Bikaner getting a share of the water in the Sutlej Valley Project now under construction; Sanitary Engr. to Govt., U.P. in 1908 and 1909. Promoted to Superintending Engineer, 1912, and then Chief Engineer and Secretary to Government, P. W. D., Irrigation Branch, U.P. in 1918 and retired in 1921. *Publication*: Papers on "Subsoil Percolation" and "Flood Absorption of Reservoirs" in the Journal of the Institution of Engineers (India), Vol. II. *Address*: Bikaner, Rajputana.

STARR, MRS. VERNON, Honorary Medical Missionary of the C.M.S. at Peshawar. Rescued Miss Mollie Ellis from captivity in the Tirah Country, 1923, and was awarded the gold Kaisar-i-Hind medal. Her husband Dr. V. H. Starr was murdered at Peshawar, March, 1918. *Address*: c/o C. M. S. Hospital, Peshawar.

STEIN, SIR AUREL, K.C.I.E., Ph.D., D. Litt. (Hon. Oxon.), D. Sc. (Hon. Camb.), D. O.L. (Hon. Punjab); Fellow, Brit. Acad., Correspondent de l' Institute de France, Gold Medallist, R. Geo. Soc. etc.; Indian Archæological Survey Officer on special duty; *b.* Budapest, 26 Nov. 1862. *Educ.*: Budapest and Dresden; studied Oriental Languages and Antiquities at Vienna and Tubingen Universities and in England, 1888-99, Principal, Oriental College and Registrar, Punjab University; App. to I. E. S. as Prin. of Calcutta Madrasah, 1899. Inspector-General of Education N. W. F. P.

and Baluchistan, 1904. Carried out archæological explorations for Indian Govt., in Chinese Turkestan, 1900-1, and in C. Asia and W. China, 1906-08; transferred to Archæological Survey 1909; carried out geographical and archæological explorations in C. Asia and Persia, 1913-16. *Publications:* Kalhana's *Chronicale of Kings of Kashmir;* Sanskrit text 1892, trans. with commentary, 2 Vols., 1900; *Sand-buried Ruins of Khotan*, 1903: *Ancient Khotan*, 1908 (2 Vols.); *Ruins of Desert Cathay*, 1912 (2 vols.); *Serindia*, 1921 (5 vols.); *The Thousand Buddhas*; *Memoir on Maps of Chinese Turkistan and Kansu* (2 vols.), and numerous papers on Indian an Central Asian Archæology and Geography. *Address:* Srinagar.

STEPHENSON, HUGH LANSDOWN, C.S.I., C.I.E., I.C.S.; Member, Executive Council, Bengal (1922). *b.* London, 8 Apr. 1871. *Educ.*: Westminster; Christ Church, Oxford. Ent. I.C.S., 1895; Sec. to Board of Rev., Calcutta; Fin. Sec. to Govt. of Bengal.; Addl. Sec., Pol. Dept.; Member of Southborough Reforms Committee; Chief Secretary to Government of Bengal, Decr. 1919. *Address:* Writers' Buildings, Calcutta.

STEVENS, LT.-COL. CECIL ROBERT, I.M.S., M.D., B.S., Lond., F.R.C.S., Eng.; Prof of Clinical and Operative Surgery, Medical Coll., Calcutta; *b.* 14 Mar. 1867. *Educ.*: Malvern; Univ. Coll., London; St. Bartholomew's. *Address:* 5, Middleton Street, Calcutta.

STILL, CHARLES, C.I.F.; Indigo Planter; *b.* 1849. *Educ.*: privately. *Address:* Sathi Factory, Chumparun.

STIRLING, GEORGE CLAUDIUS BERESFORD, C.I.E.; Supdt. and Pol. Officer, S. Shan States, since 1910; *b.* 1861; Ent. Burma Pol. Dept., 1888. *Address:* Taunggyi, S. Shan States, Burma.

STOKES, HOPETOUN GABRIEL, C.I.E., B.A.; Dy. Sec., Govt. of India, Fin. Dept., 1911-13; Fin. Mem., Imp. Delhi Committee, 1913-15; Priv. Sec. to Gov. of Madras, 1915. Pol. Ag., Banganapally, Madras. *Educ.*: Clifton; Oriel Coll., Oxford. Ent. I.C.S., 1895. *Address:* c/o Binny & Co., Madras.

STONEY, EDWARD WALLER, C.I.E., M.E., M.I.C.E.; M.Inst.C.E.; late Ch. Eng. of Madras Ry. (retired), 1904; 4th *s.* of late T.G. Stoney, J.P., of Kyle Park and Arranhill, Co, Tipperary, Ireland; *m.* 1875; Scholar, Gold Medallist and M.E., Queen's University, Ireland; Fellow, Madras University. *Publications:* various engineering papers. *Address:* The Gables, Coonoor.

STUART, THE HON. MR. JUSTICE LOUIS, C.I.E., I.C.S.; Puisne Judge, High Court, Allahabad since 1922. *b.* 12 March 1870. *Educ.*: Charterhouse: Balliol Coll., Oxford, Ent. I.C.S., 1891: Jud. Sec. to Govt. and nom. as Mem. of U.P. Council, 1910-12. Lt.-Col. Commanding Allahabad Auxilliary Force. *Address:* Allahabad.

STUART, CAPT. MURRAY, D.Sc. (Birm.), B.Sc. (Lond.), F.G.S., F.C.S., M. Inst. P.T. Chief Geologist, Indo-Burma oilfields (1920) Ltd. since 1921 *b.* 5 Nov. 1882. *Educ.*: King Edward's H. S. Birmingham and Birmingham Univ., I.E.S., Prof. or Geol. in Poona Coll. of Engineering, in addition to other duties, 1916-17. Attached Waziristan Expedition, 1919-21, attached Mahsud Expedition, 1919-20 (mentioned [despatches), India General Service medal with two clasps. Retired with rank of Captain, 1920; as Prof. of Geol., Presidency Coll., Madras, 1911-14. Ag. Superintendent, Madras Government Museum and Ag. Dir. Madras Govt. Marine Aquarium, 1912; Univ., lecturer in the Madras University, 1913-14. Geo.: Survey of India, 1907-1921. *Address:* Thayetmyo, Burma, and Royal Societies Club, London.

STUART, MAJ.-GEN. SIR ROBERT CHARLES OCHILTREE, K.C.S.I., C.S.I.; Mem., Ind. Munitions Board, 1917-20; *b.* 22 Aug. 1861. *Educ.*: Woolwich. Ent. R. A., 1880; I. O. D., 1889; Dir. Gen. of Ordnance, India. 1911-17. *Address:* Forest Hill, Simla.

STUART-WILLIAMS, SYDNEY CHARLES, M.A. (Cantab); B.A. (London). Acting Chairman, Calcutta Port Commissioners. *b.* 9 May 1878; *m.* Feb. 1903. *Educ.*: Kingswood Sch. Bath; Univ. Coll., Aberystwyth and Trinity College, Cambridge; Private Sec. to Sir Edward Holden, 1900: Junior Sec. to Agent, E. I. Ry., 1900-03; Dy. Sec. to Agent, E. I.R., 1903-06; Secy. to Agent, E. I. R., 1906-14; Sec., Port Commissioners, Calcutta, 1914-16; Vice-Chairman, 1916. Dy. Chairman; 1921, Member, Bengal Legislative Council 1922. Acting Chairman, 1922. *Publications:* The Economics of Railway Transport, 1909; Article on Indian railways in Modern Railway Pratice, 1913. History of the Port of Calcutta, 1870-1920. *Address:* Port Commissioners' House, Calcutta.

SUBRAMANIA IYER, SIR SUBBAYYER, K.C.I.E.; retired Judge of Madras High Court; *b.* 1842. *Address:* Beach House, Mylapur, Madras.

SUBRAHMANYAM, RAO BAHADUR CALAGA SUNDARAYYA, B.A., B.L., M.L.A., Landowner. *b.* Nov. 1862. *Educ.*: Kumbakonam and Madras Presidency Colleges. Practised as Vakil at Bellary; Chairman, Bellary Municipality, 1904-10; Vice-President, District Board, Bellary, 1911-1918: Member, Liberal League, Madras; has taken interest in co-operative work and social and political movements; elected to the Legislative Assembly, 1920. *Publications:* Pamphlets on Bubonic Plague and Irrigation Problems of the Ceded Districts. *Address:* Mayavaram, S. India.

SUDBOROUGH, PROF. JOHN JOSEPH, Ph.D., D.Sc., F.I.C.; Prof. of Org. Chem., Ind. Inst. of Sc.; *b.* Birmingham, 1869. *Educ.*: King Edward's Sch. Camp Hill, Birmingham; Mason Coll., Birmingham; Univ. of Heidelberg; Owen's Coll., Manchester, D.Sc., London; late Prof. of Chem. and Dean of Fac. of Sc., Univ. Coll. of Wales, Aberystwyth. *Publications:* Text-book of Organic Chemistry; joint author of Practical Organic Chemistry and numerous papers in Chemical Journals. *Address:* Bangalore.

SUKHDEO PRASAD, SIR, B.A., Gold Kaiser-i-Hind Medal (1901); C.I.E., 1902. Political and Judicial Member, Regency Council. *b.*

March 1862. *m.* Mohanji, *d.* of Prannath Hukkoo. *Educ.:* at Agra College. Deputy Supdt., Settlement, Ambala, 1885; Judicial Secretary, Marwar, 1886; Member of Council, 1887; Senior Member, 1901; Minister, 1908; Udaipur Minister, 1914-18; now Political and Judicial Member, Regency Council; Officiated as its Vice-President. Is Sardar of first rank with judicial powers. Holds 3 villages in jagir of an annual rental of Rs. 25,000. *Publications:* Famine Report, 1899-1900; Origin of the Rathores; Agricultural Indebtedness. *Address:* Sukh Ashram, Jodhpur, Rajputana.

SUKHIA, DR. NADIRSHAW H. E., L.M. & S. (1883), L.V. Sc. (Spl.); F.R.S.I. (Lond.), Mun. Councillor (1901); J.P. (1911); Hon. Presy. Magte. (1913); Del., the Parsi Chief Matrimonial Court (1916); Member, Schools Committee (1916-1922); Member of the Committee, the Punchayat of the Sir J. J. Parsi Benevolent Institute (1921); Member, Prince of Wales Museum Trust Board (1920-22); Member, Development Committee (1921); Physician and Sanitarian; *b.* 26 May 1860; *married. Educ.:* Graduate, Bombay Univ., 1883; Univ. Medl. Examr., Bombay Univ., 1895; Lecturer in Anatomy and Physiology, Govt. Vety. Coll., 1886-1890; Con. Vety. Surgeon; Assist. Surgn., Indian M. Service, 1884-90; Med. Officer in charge of H. H. ex-King Theebaw of Burma and Suite and Ag. Civil Surgn., Ratnagiri (1886); Mem., Standing Committee, Bombay Mun. Corpn. (1911 to 1918). *Publications:* Persian Translation of Æsop's Fables, Pickings from the Avesta, Juddin controversy, Comparative Anatomy of the Domesticated Quadrupeds and Notes (minutes, etc.) on various Municipal Matters, the Municipal Act and law of Public Meetings. *Address:* Sukhia Buildings, Cowasji Patel Street, Bombay.

SULTAN AHMAD KHAN, Sirdar Sahibzada, Mumtazimuddowlah, M.A., LL.M. (Cantab.), C.I.E. (1924); Bar-at-Law, Senior Member, Gwalior State Council *b.* 1867. *m.* Lucy Pelling Hall of Bristol, England. *Educ:* Mahomedan Anglo-Oriental Coll., Aligarh, and Christ's Coll., Cambridge. Practised at the Bar at Delhi. Appointed Chief Justice, Gwalior State, in 1905; Law Member, 1909; Finance Member, 1912; Army Member, 1917; Appeal Member, 1918; Was a member of the Hunter Commission. Made a First Class Sirdar with Ghashia and Tazim in 1908. *Address:* Gwalior.

SANT, MAHARANA SRI JORAWARSINHJI, RAJA OF; *b.* 24 March 1881; *S.* 1896. *Address:* Santrampur, Rewa Kantha.

SUTHERLAND, LIEUT.-COL. DAVID WATERS, C.I.E., V.H.S., I.M.S.; Prof. of Medicine Med. Coll., Lahore. *b.* Australia, 18 Dec 1871, *m.* 1915, Princess Bamba Duleep Singh, *d.* of late Maharaja Duleep Singh. *Educ.:* Melbourne and Edinburgh Univ. M.D. (Edin.), M. B. C.M. (Edin.), F.R.C.P. (Lond.), F.R.S. (Edin.) Fell. Roy. Soc., Med., London. *Address:* 28, Jail Road, Lahore.

SWAIN, WALTER, C.I.E., (1922). Inspector-General of Police, Behar 1923. *b.* Jan. 17, 1876 *m.* Annie Matilde, sec. *d.* of Chas. Fox, Esq., of Carse-of-Gowrie, Scotland. *Educ.:* Boston Grammar School. Assistant Superintendent of Police, 1895; Supdt. of Police, 1906; Dy. Inspector-General of Police, 1919; Offg. Inspr.-Genl. of Police, 1920; Delhi Durbar Medal, 1912; Volunteer Long Service Medal, 1919, King's Police Medal, 1918. *Publications:* "Instructions for Constables" (1901) in English, Kaithi and Bengali; "Advice on the Construction of Police Buildings" (1921). *Address:* The Imperial Bank of India, Patna, E.I.R.

SYED MOHAMMED FAKHRUDDIN, The HON. KHAN BAHADUR, B.A., B.L., Minister of Education, Bihar and Orissa. *b.* 1870. Musammat Kaniz Banoo of Shaikhpur. *Educ.:* at Patna. Practised as a vakil in the mofussil courts and then in the Patna High Court. *Address:* Muradpur, Patna.

SYED, SIR ALI IMAM, K.C.S.I. (1914), C.S.I. (1911). Law Member of Governor-General's Council, 1910-16; *b.* Neora (Patna), 11 Feb. 1869; *s.* of Nawab Syed Imdad Imam, Shamsululama: *m.* 1891; five *s.* four *d.* Called to bar, Middle Temple, 1890; Standing Council, Calcutta High Court; President, 1st Session of the All-India Moslem League held at Amritsar, 1908; Mem., Moslem League Depn. to England, 1909; member of Governor's Legislative Council, Bengal, 1910; Fellow of Calcutta University, 1908-12; Puisne Judge of Patna High Court, 1917; Member, Executive Council of Behar and Orissa, 1918; President, Executive Council of the Government of the Nizam of Hyderabad, 1919; First Indian Representative to sit at the first meeting of the League of Nations, Nov. 1920. *Address:* Mariam Munzil, Patna also Bella Vista, Hyderabad (Deccan).

TAGORE, ABANINDRA NATH, C.I.E.; Vice-Prin., Govt. Sch. of Art, Calcutta, since 1905; Zemindar of Shazadpur, Bengal; *b.* 1871, *Educ.:* Sanskrit Coll., Calcutta, and at home. Designed Memorial Address to Lady Curzon. Casket presented to King by Corp. of Calcutta, 1911; principal work consists in reviving School of Indian Art. *Address:* 5, Dwarkanath Tagore's Lane, Calcutta.

TAGORE, MAHARAJA BAHADUR SIR PRODYOT COOMAR, KT.; *b.* 17 September 1873. *Educ.:* Hindu Sch., Calcutta; afterwards privately: Sheriff of Calcutta, 1909; Trustee, Victoria Mem. Hall; Trustee, Indian Museum; Mem. of Asiatic Soc. of Bengal; formerly Mem., Bengal Council. *Address:* Calcutta.

TAGORE, SIR RABINDRANATH, KT., D.Lit. (Calcutta Univ.); *b.* 1861. *Educ.:* privately. Lived at Calcutta first; went to country at age of 24 to take charge of his father's estates; there he wrote many of his works; at age of 40 founded school at Shantiniketan, Bolpur; this has been his life-work ever since; visited England, 1912, and translated some of his Bengali works into English; Nobel Prize for Literature, 1913. *Publications:* In Bengali—about 30 poetical works, and 28 prose works, including novels, short stories, essays, sermons, dramas, etc. In English—Gitanjali, The Gardener, Sadhana, The Crescent Moon, Chitra, The King of the Dark Chamber; The Post Office, a Play, 1914; Fruit Gathering; Nationalism,

1917; Personality, 1918; Stray Birds, 1919; Sacrifice, 1919; Lover's Gift, 1919; Reminiscences, 1919; The Wreck, 1921; Creative Unity: The Fugitive, 1922. *Address:* Shantiniketan, Bolpur.

TASADDUK RASUL KHAN, RAJA SIR, K.C.S.I.; Taluqdar of Jehangirabad, Mem. of U.P. Council; Mem. B. I. Assoc., Oudh. awarded Sword of Honour for war services 1919. *Address:* Jehangirabad Raj, Dist. Bara Banki.

TATA, SIR DORABJI JAMSETJI, KT., J.P., senr. partner, Tata Sons, Ld. *b.* 27 Aug. 1859; *s.* of late Jamsetji Nusservanji Tata, *m.* 1898, Meherbai, *d.* of H. J. Bhabha. *Educ.* Calus Coll. (Hon. Fellow), Camb.; Bombay Univ. *Address:* "Esplanade House," Waudby Road, Bombay.

TAVEGGIA, RT. REV. SANTINO; Bishop of Krishnagar, since 1906; *b.* Italy, 1855. Went to India, 1879. *Address:* Krishnagar.

TAW SEIN KO, C.I.E., I.S.O.; Examiner in Chinese, Burma, since 1906; *b.* 7 Dec. 1864. *Educ.:* Christ's Coll., Camb.; Burmese and Pali Lecturer, Rangoon Coll., 1882-85; Asst. Sec. to Govt. of Burma, 1889-01; Burmese Lecturer Cambridge, 1892-93.; Supdt., Archæological Survey, Burma Circle, 1899-1919. *Publications:* Burmese Sketches, Vols. I and II; Selections from the Records of the Hluttaw; Translation of Maha Janaka Jataka; Elementary Handbook of the Burmese Language. *Address:* Peking Lodge, Mandalay.

TEGART, CHARLES AUGUSTUS, C.I.E., M.V.O., Indian Police; officiated as Dy. Insp.-Gen. of Police, Calcutta; *b.* 1881. *Educ.:* Portora Royal Sch., Enniskillen; Trinity Coll., Dublin. Joined Indian Police, 1901.

TEHRI, CAPTAIN H.H.RAJA NARENDRA SHAH SAHEB BAHADUR, C.S.I., of Tehri-Garhwal State. *b.* 3 Aug. 1898. Succeeded 1913. *Educ:* Mayo Coll., Ajmer. *Address:* Tehri, Garhwal State.

THAKUR, RAO BAHADUR KASHINATH KESHAV, I.S.O.; Sen. Div. and Sess. Judge, Nagpur, since 1911; *b.* 15 Feb. 1860. *Educ.:* Saugor and Jubbulpore H. S.; Muir Central Coll., Allahabad. *Address:* Nagpur.

THOMPSON, JOHN PERRONET, C.S.I. (1919); Political Secretary, Foreign and Political Department, *b.* 8 March 1873, *m.* Ada Lucia, *d.* of the late R. Y. Tyrrell, Litt. D. Senr. Fellow, Trinity Coll., Dublin. *Educ.:* Leeds Gr. Sch. and Trin. Coll., Cambridge. 1st Class Classical Tripos. President of the Union (1895). Entered I.C.S., 1897. Revenue Sec. to Punjab Govt., 1913. Ch. Sec. 1916. Mem. of Indian Leg. Council, 1918-19. Member of Reforms Committee, 1918-19. President, Railway Police Committee, 1921; Member of Council of State and Secretary of the Chamber of Princes, 1922, formerly President, Punjab Historical Society and Fellow and Syndic of the Punjab University. *Address:* Delhi or U. S. Club, Simla.

THORNTON, HUGH AYLMER, C.I.E., B.A., I.C.S.; Commissioner. *Educ.:* Cheltenham, Christ Church, Oxford (B.A.). Ent. I.C.S. 1895. *Address:* Fernside, Maymyo.

THULRAI, TALUQDAR OF, RANA SIR SHEORAJ SINGH BAHADUR OF KHAJURGAON, K.C.I.E.; Rai Bareli District; *b.* 1865; *m.* 1st, *d.* of Babu Amarjit Singh, *y. b.* of the Raja of Majhouli; 2nd, *d.* of Raja Somesurdatt Singh, a Raja of Kundwar; 3rd, *d.* of the Raja of Bijapur District. *Educ.:* Govt. H. S., Rai Bareli. *S.* father, 1897; descended from King Sahvahan, whose Sumvat Era is current in India. *Heir:* Kunwar Lal Elma Natti Singh Bahadur. *Address:* Thulrai, Khajurgaon.

TODHUNTER, SIR CHARLES GEORGE, K.C.S.I. (1921), O.B.E., K.-i-H. Member of Executive Council, Madras, *b.* 16 Feb. 1869. *Educ.:* Aldenham Sch., and King's Coll., Cambridge, Member's prizeman, Cambridge University, 1888; *m.* Alice, *d.* of Captain C. Losack, 93rd Highlanders. Served in I.C.S., Madras; also conducted special inquiries into Customs and Excise matters in Kashmir, the C. P. and C. I. States. Sec., India Excise Committee, 1906. I.G. of Excise and Salt to the Govt. of India, 1909-12. President, Life Saving Appliances Committee, 1913; Secretary to Govt. of Madras, 1915; Member of Board of Revenue, 1916; Member of Council, 1919. *Address:* The Hermitage, Mylapore, Madras.

TOFT, COMMISSIONER JAMES, Salvation Army, Northern Territory. Has served in all Scandinavian Countries and U.S.A. *Address:* Ferozepare Road, Lahore.

TOLLINTON, HENRY PHILLIPS, C.I.E., I.C.S.; Commissioner, Lahore. *Educ.:* Lamington Coll., Balliol Coll., Oxford. Ent. I.C.S., 1893. *Address:* Lahore.

TOMKINS, LIONEL LINTON, C.I.E.; Inspector-Genl. of Police, Punjab, since 1922; Ent. India Police Dept. in 1891: Dy. Inspr.-Genl. of Police, Punjab, 1914-1922. *Address:* Lahore.

TONK, H. H. AMIN-UD-DAULA WAZIRUL MULK, NAWAB SIR HAFIZ MUHAMMAD IBRAHIM ALI KHAN BAHADUR SAULAT JANG, G.C.I.E., G.C.S.I.; *b.* 1848; 1847. S. State has area of 2,559 sq. miles and population of over 287,898. *Address:* Tonk.

TRAVANCORE, H. H. SIR BALA RAMA VARMA, MAHARAJAH OF, G.C.I.E., G.C.S.I., M.R.A.S., Officer de l'Instruction Publique; *b.* 25 Sept. 1857; *S.* 1885. State has area of 7,600 sq. miles and population of 4,000,000. *Address:* Travancore.

TRAVANCORE AND COCHIN, SOUTH INDIA, BISHOP OF, since 1905, RT. REV. CHARLES HOPE GILL, M.A., D.D.; *b.* 11 Feb. 1861. *Educ.:* St. Edmund's Sch., Canterbury; King William's Coll., Isle of Man; Queen's Coll. and Ridley Hall, Cambridge. *Address:* Kottayam.

TROTTER, HON. JUSTICE VICTOR MURRAY COUTTS, M.A.; Puisne Judge of Madras High Court, since 1915; *b.* 12 May 1874. *Educ.:* St. Paul's Sch.; Balliol Coll., Oxford; called to Bar (Inner Temple), 1901; joined N. E. Circuit, 1902. *Address:* High Court, Madras.

TUDBALL. The Hon. Sir WILLIAM, KT. (1921), Puisne Judge, Allahabad High Court, since 1909; *b.* 15 Mar. 1866, *m.* Katie, *d.*

of Charles John Sheen. *Educ.:* Bedford. Mod. Sch.; Christ Church, Oxford. I. C. S., 1887; Addl. Jud. Commsr., Oudh, 1908. *Address:* 27, Stanley Road, Allahabad and 10, Palace Road, Kingston-on-Thames.

TYABJI, HUSAIN BADRUDDIN, M.A. (Honours), LL.M. (Honours), Cantab. 1896; Bar-at-Law. Second Judge, Presidency Court of Small Causes, Bombay. *b.* 11 October 1873; *m.* Miss Nazar Mohammad Fatehally. *Educ.:* Anjuman-e-Islam, Bombay; St. Xavier's School and College; Downing College, Cambridge. Practised in the Bombay High Court. *Address:* Almanzil, Walkeshwar Road, Malabar Hill, Bombay.

UDAIPUR, H. H. Maharajadhiraj MAHARANA SIR FATEH SINGHJI BAHADUR OF, G.C.S.I., G.C.I.E., G.C.V.O. Maharana of Udaipur, Mewar. *b.* 1848. *Address:* Udaipur.

UDAIPUR, H. H. THE RAJA OF, CHANDRASHEKAR PRASAD SINGH DEO, CHIEF OF. *Address:* Udaipur.

ULLAH, VEN. IHSAN; Archdeacon of Delhi; Achdeacon in Lahore Diocese, since 1910, and Supdtg. Missionary of Toba Tek Singh Mission; *b.* 1857. *Educ.:* Baring H. S. Batala; Lahore Div. Coll. *Address:* Holy Trinity Church, Lahore.

UNIACKE, MAJOR-GENERAL SIR HERBERT CROFTON CAMPBELL, K.C.M.G., *cr.* 1919; C.B., 1918; C.M.G., 1916; G.O.C., Rawalpindi District; *b.* 4 Dec. 1866. *m.* Minnie Mary, *d.* of late Thomas Wild of Thorner, Yorkshire, 25. *Educ.:* Woolwich. Commissioned Royal Artillery, 1885. Served three terms as Adjutant; Chief Instructor, Royal Horse and Royal Field Artillery; Commandant, School of Instruction, Shoeburyness; served European War, 1914-18 (despatches ten times, K.C.M.G., promoted Maj.-General, C.B., Commander Legion of Honour), Commander Order of Savoy (Italy), Grand Officer Order of Avis (Portugal); 1st class order of St. Anne (Russia), Croix-de-guerre (Belgium); *Address:* Park House, Rawalpindi.

VAUGHAN, MAJ.-GEN., SIR LOUIS RIDLEY, D.S.O., (1915): C.B., (1918); K.B.E. (1923), Officer of the Legion d'Honneur (1919). Commanding Central Provinces District; *b.* 7 August 1875. *Educ.:* Uppingham and R.M.C., Sandhurst *m.* Emille, *d.* of J. P. Egan of St. Stephen's Cork. Served with 25th Madras Infantry, 78th Moplah Rifles, 13th Infantry, 7th Gurkhas Rifles, and on the Staff in France 1914-19. Served in the Afghan War, 1919, in command of 4th War Division. Commandant, Staff College, 1919-22. *Address:* Flagstaff House, Mhow, C.I.

VENKATASWETA CHALAPATI RUNGA-RAO BAHADUR, MAHARAJAH SIR RAVU, MAHARAJAH OF BOBBILI, G.C.I.E., C.B.E., Maharajah, 1900; Ancient Zemindar of Bobbili; *b.* 28 Aug. 1862. *Educ.:* Bobbili, privately. Ascended Gadi in 1881; Pres. of Madras Landholders' Assocn.; Life Mem., Royal Asiatic Soc.; Mem. of Madras Council, 1896, 1898, 1900, and 1902; First Native Mem. of Madras Exec. Council, 1910-11. *Publications:* Advice to the Indian Aristocracy, Hindu Religion, Diaries in Europe, Criticism on the *Ramayana* and the *Mahabharata. Address:* Bobbili, Madras Presidency.

VERRIERES, ALBERT CLAUDE, C.I.E.; Joint Chief Engineer (1920), P. W. D. *m.* 1899 Mabel Blanche, *d* of the late Francis Moore. *Educ.:* St. Peter's Coll. Agra; Thomason Civil Engineering Coll., Roorkee. Ent. P. W. D. 1893, Under Secy. to Govt., P. W. D., Naini Tal, 1911-14; Exe. Eng., Dehra Dun 1915-16; Supdtg. Eng. 1916-18; Sanitary Eng. 1918-19; Offg. Chief Engineer, United Provinces, 1920-21. *Address:* "Dar-ul-Shafa", Lucknow.

VIEIRA DE CASTRO, RT. REV. THEOTONIUS MANOEL RIBEIRO, D.D., D.C.L.; R. C. Bishop of San Thomé de Mylapore, since 1899; *b.* Oporto, 1859, *Educ.:* Gregorian Uni., Rome. *Address.:* San Thome, Madras.

VIJAYARAGHAVA CHARYA, DIWAN BAHADUR, M.B.E. (1919); Commissioner for India, British Empire, Exhibition. August 1875. *Educ.:* Presidency College Madras. Joined Provincial service, 1898 Revenue Officer, Madras Corpn., 1912-17, Secretary to Board of Revenue, 1917-18; Dewan of Cochin, 1919-22; Collector and Magistrate, 1920. *Address:* Simla.

VIRA VALA, DURBAR SHRI, Dewan, Porbandar State. *b.* 31 Jan. 1888. *Educ.:* at Rajkumar College, Rajkot. Wing Master, Rajkumar College; Adviser to the Thakore Saheb, Chuda; Deputy Political Agent, Palanpur; Manager, Lathi State. *Address:* Porbandar, Kathiawar.

VISVESVARAYA, MOKSHAGUNDUM, SIR, K.C.I.E., M.I.C.E., D.Sc., late Dewan of Mysore. *b.* 15 Sept. 1861. *Educ.:* Central Coll., Bangalore, and Coll. of Science, Poona. Asst. Engineer, P.W.D., Bombay, 1884; Supdt. Eng., 1904; retired, 1908. Apptd. Sp. Consulting Eng. to Nizam's Govt., 1909; Ch. Eng. and Sec., P.W. and R. Depts., Govt. of Mysore, 1909; App. Dewan of Mysore, Nov. 1912—1918; has visited Europe, America and Japan twice, the last tour being in 1919 and 1920. *Publication:* "Reconstructing India" (P. S. King and Son, Ltd., London). *Address:* High Ground, Bangalore.

VOLKERS, ROBERT CHARLES FRANCIS, C.I.E.; Sec., Railway Board, 1907-13; Accountant, P. W. D., since 1878; Examiner, 1894. *Address:* Calcutta.

WACHA, SIR DINSHA EDULJI, KT.; a Governor of the Imperial Bank of India (1920) and Member, Council of State (1920); Director, The Central Bank of India and the Scindia Navigation Company. *b.* 2 Aug. 1844. *Educ.:* Elphinstone Coll., Bombay; in Cotton Industry, since 1874; for 30 years Bombay Mun. Corpn. (President, 1901-02); for 33 years, Mem., Bombay Millowners' Association Committee since 1889 and President in 1917 and Member, Bombay Imp. Trust since its formation in 1898 up to 1919; Pres. of 17th National Congress, Calcutta, 1901; and of Belgaum Prov. Conference, 1894; gave evidence before Royal Commission on Indian expenditure in 1897; Trustee of Elphinstone Coll.; also Chairman, Indian Merchants' Chamber and Bureau; was Gen. Sec., Indian National Congress for 18 years

from 1894; Trustee of Vic. Jubilee Technical Institute from 1902 and Hon. Sec. from 1909 to 1923; Member, Bombay Legislative Council (1915-16); President, Western India Liberal Association since 1919. Was Secretary, Bombay Presidency Association from 1885 to 1915 and President from 1915 to 1918. Was President of the First Bombay Provincial Liberal Conference in 1922. *Publications:* pamphlets on Indian Finance, Currency and Economics, Agricultural Condition of India, Railways, Currency, Temperance Military Expenditure, etc.; large contributor to leading Indian newspapers and journals for the last 40 years; also had published History of Share Speculation 1863-64; Life of Premchand Roychand; Life of J. N. Tata; the Rise and Growth of the Bombay Municipal Government, four papers on Indian Commerce and Statistics and My Recollections of Bombay (1860-75). *Address:* Jiji House, Ravelin Street, Fort, Bombay.

WADIA, C. N, C.I.E. (1919): Millowner. *b.* 1869. *Educ.:* King's Coll., London. Joined his father's firm, 1888. Chairman, Bombay Millowners' Association (1918). *Address:* Pedder House, Cumballa Hill, Bombay.

WADIA, JAMSETJI ARDASEER, J. P., 1900; Merchant. *b.* 31 Oct. 1857. *Educ.:* Elphinstone Sch. and Coll. and served apprenticeship in Dickinson Akroid & Co. of London; Promoter and Director of Cotton and other industrial concerns; Member of Bombay Mun. Corpn., since 1901. *Publications:* Writer on Industrial and Economic subjects: published two pamphlets against closing of the Mints. *Address:* Wilderness Road, Malabar Hill, Bombay.

WADYA, SIR HORMASJI ARDESAR, Kt. (1918), Bar.-at-Law. *b.* 2 January, 1849. *Educ.:* Elphinstone College, Bombay, and University College, London. *m.* Aimai, *d.* of the late Mr. Ardesar Hormasji of Lowji Castle, Parel. Called to the Bar, 1871. Personal Assistant to Mr. Dadabhai Naoroji, Dewan of Baroda, February 1874 to January 1875. Practised in Kathiawar since 1875. Trustee, Parsi Panchayat, 1912. Trustee of the late Mr. N. M. Wadia under his will, 1909. Recd. Kaiser-i-Hind Gold Medal, 1918. *Address:* 37, Marine Lines, Bombay.

WALI MAHOMED HUSSANALLY, B.A., LL.B., Member, Legislative Assembly; Retired Dpty. Collector and Special First Class Magistrate and Landed Proprietor, Karachi. *b.* 5 Dec. 1860. Widower. *Educ.:* Elphinstone College and Govt. Law School, Bombay. Served Govt. in various departments for 33 years; retired in 1915. *Address:* 'Khurshed Lodge', Rambagh Road, Karachi.

WALKER, COLONEL GEORGE KEMP, C.I.E., O.B.E., Fell. of Royal Coll. of Vet. Surgs.; Principal, Punjab Veterinary College, Lahore. Commandant, Punjab Light Horse. *b.* 20 March 1872; *m.* Jan. 10, 1899, *Educ.:* Warwick Sch.; R. V. C., London. Commission A. V. D., 1894; transferred to Civil Employ, 1897. *Address:* Lahore.

WALKER, GILBERT THOMAS, C.S.I., M.A., F.R.A.S., Sc.D., Ph.D., F.R.S.; Dir. Gen. of Observatories, since 1904. *b.* 1868. *Educ.:* St. Paul's Sch.; Trinity Coll., Camb. (Senior Wrangler, 1889): Fell., 1891; Math. Lecturer, 1895. *Publications:* "Aberration," 1900; "Theory of electro-magnetism," 1910; and various papers on mathematical physics and meteorology. *Address:* Meteorological Office, Simla.

WALKER, MAJ.-GEN. SIR HAROLD BRIDGWOOD, K.C.B., cr. 1918; K.C.M.G., cr. 1919; C.B. 1915; D.S.O., 1902; D.C.L.I. and Border Regt., G.O.C., Southern Command, 1923. *b.* Apr. 1863; *s.* of late Rev. James H. Walker; *m.* 1887, Harriet Edith Coulthard, Plymstock; two *s.* *Educ.:* Shrewsbury School; Jesus College, Cambridge. Entered Army, 1884; Capt. 1891; Major 1902; Lt.-Col. 1908; served Nile Expedition, 1884-85 (Medal with clasp), (Khedive Star); Egyptian Frontier, 1885-86; N. W. Frontier, India, 1897-98 (Medal with 2 clasps); South Africa, 1899-1902 (Queen's medal, 2 clasps) (King's medal, 5 clasps) (Brev. Major D.S.O.); served with Mediterranean Expeditionary Force, 1914-1918 (despatches seven times, wounded twice, C.B., promoted Maj.-Gen., K.C.B., K.C.M.G.), with B.E.F. France, Commanding South Midland Division, *Address:* Headquarters, Southern Command, Poona.

WALKER, SIR JAMES, K.C.I.E., C.I.E., Commsr., Nagpur; Add. Mem., Imp. Council, 1913. *b.* 1864. *Educ.:* Aberdeen Univ.; Balliol Coll., Oxford. Served in executive branch of I.C.S., in Madras and C.P. *Address:* Nagpur.

WALLACE, THE HON. MR. JUSTICE EDWARD HAMILTON, M.A. (Glas.), B.A. (Oxon.) Offg. Judge, High Court, Madras. *b.* 13 May 1873. *m.* Anna Richmond Miller. *Educ.:* High School, Glasgow; Glasgow Univ.; Balliol. Coll., Oxford. Passed I.C.S., 1895. Served in Madras Presidency since 1896 Judge of Chief Court, Mysore State, 1912-14. *Address:* Cathedral Gardens, Madras.

WALMSLEY, SIR HUGH, KT., (1923), M.A., *Educ.:* Judge, Calcutta High Court, since 1915; I.C.S. Merton Coll., Oxford. Ent. I.C.S., 1893. *Address:* High Court, Calcutta.

WANKANER, CAPTAIN HIS HIGHNESS MAHARANA SIR AMARSINHJI, RAJ SAHEB OF, K.C.I.E.; *b.* 4 Jan. 1879; *s.* 1881. *Educ.:* Rajkumar Coll. State has area of 425 sq. miles, and population of 36,824. Salute, 11 guns. *Address:* Wankaner, Kathiawar.

WARBURTON, JOHN PAUL, C.I.E. *b.* 28 Aug. 1840. Joined Pol. Dept., Punjab, 1864; Asst. Insp. Gen., Railway Police, 1894; retired, 1900. *Address:* Gilbert House, Kasauli.

WARNE, RT. REV. FRANCIS WESLEY, Bishop of the Methodist Episcopal Church since 1900. *b.* 30 Dec. 1854. *Address:* Inayat Bagh, Lucknow.

WATHEN, GERARD ANSTRUTHER, M.A., C.I.E., I.E.S; Prin., Khalsa Coll., Amritsar, since 1915. *b.* 28 Dec. 1878. *m.* 1909 Malicent, *d.* of the late C. L. Buxton. *Educ.:* St. Paul's Sch.; Peterhouse, Camb.; Asstt. Master, Tonbridge School, 1903-05; Prof. of Govt. Coll., Lahore, 1905-1914; Inspector of Schools, Jullunder, 1914-15. *Address:* Khalsa College, Amritsar,

WATT, REV. JOHN, M.A., D.D., F.C.S.; Prin., Scottish Churches Coll., Calcutta. *b.* 1862. *Educ.:* Parish Sch., Methlick; Gram. Sch., Old Aberdeen; Aberdeen Univ.; New Coll., Edinburgh. Joined Duff Coll., Calcutta, 1888. *Address:* 4, Cornwallis Square, Calcutta.

WEBB, CHARLES MORGAN, M.A. (Cambridge), C.I.E. (1921); Chairman, Rangoon Development Trust. *b.* 30th June 1872. *m.* to Lilian Elizabeth Griffiths. *Educ:* Masons College, Birmingham, St. John's, Cambridge. Entered I.C.S., 1894; Deputy Commissioner, 1901; Settlement Officer, 1903; Supdt., Census Operations, Burma, 1909; Secry., Govt. of Burma, 1914; Chief Secry., Govt. of Burma, 1918; First Vice-Chancellor, Rangoon University, 1920, Chairman, Rangoon Development Trust, 1921. *Publications:* Census Reports, Burma, 1911. *Address:* Lorrento Villa, Prome Road, Rangoon.

WEBB, SIR MONTAGU DE P., KT. (1921); C.I.E., C.B.E., M.L.A.; of Messrs. Forbes, Forbes, Campbell & Co., Ltd. *b.* Clifton, 1869. *Educ.:* privately. *m.* Catherine Frances, *d.* of Col. F. C. W. Rideout. *Hobbies:* Finance, Music. *Address:* Karachi.

WEBSTER, JOHN EDWARD, C.S.I., C.I.E., I.C.S., Commsr., Surma Valley, Assam, since 1912. *b.* Ranchi, 3 Sept. 1871. *Educ.:* Charterhouse; Trinity Hall, Cam. Ent. I.C.S., 1891. *Address:* Silchar.

WESTCOTT, Rt. REV. F., *see* Calcutta, Bishop of.

WESTCOTT, RT. REV. G. H., *see* Lucknow Bishop.

WHEELER, SIR HENRY, K.C.S.I. (1921). K.C.I.E., I.C.S.; Governor of Bihar and Orissa (1922). *Educ.:* Christ's Coll., Cam. Ent. I.C.S., 1891; Dy. Sec., Govt. of India, Fin. Dept., 1907-08; Sec., Royal Commission on Decentralisation, 1908-09; Fin. Sec., Govt. of Bengal, 1909-12; Home Sec., Govt. of India, 1912-16; Member, Executive Council, Bengal, 1917-22. *Address:* Government House, Patna.

WHEELER, THE VENERABLE HUGH TREVOR, M.A. (Dublin), Archdeacon of Lahore, 1919. *b.* 27 September 1874. *m.* Kathleen Gunning *Educ.:* Trinity College, Dublin. Chaplain, to the Forces, M.E.F., 1915. *Address:* The Parsonage, Karachi.

WHITE, MAJOR FREDERICK NORMAN, C.I.E., M.D.; Asst. Dir.-Gen., I.M.S. (Sanitary) 1914; Sanitary Commsr., Govt. of India, Simla. *Address:* c/o Grindlay, Groom & Co., Bombay.

WHITTY, JOHN TARLTON, C.I.E.; Deputy Commissioner, Ranchi. *Educ:* Clifton Coll.; New Coll., Oxford; Univ. Coll., London. Ent. I.C.S., 1898; *Address:* Ranchi.

WHYTE, THE HON. SIR ALEXANDER FREDERICK, Kt. (1922); Presdt., Indian Legisl. Assembly. *b.* 30 September 1883. *Educ.:* Edinburgh Academy: Abbotsholme; Jena Univ.; Edinburgh Univ.; Grenoble Univ. *m.* Margaret Emily, *d.* of the Rev. W. Fairweather, D.D., two *d.*, one *s.* Lecteur d'Anglais at the Sorbonne, 1905-1906. Industrial Insurance Comr., Vienna and Budapest, 1908. Pol. Sec. to Lord Lucas (Under Sec. for War) 1908-10. M.P. for Perth, 1910-18. Parl, Pte. Sec. to Mr. Churchill, 1910-15. One of the founders of *The New Europe* and joint Editor, 1917-20. Lt. T. R. N. V. R. 1914-18. Chairman, Indian Red Cross Society, 1923. *Address:* Legislative Assembly, Delhi.

WILLIAMS, GEORGE BRANSBY, M. INST. C. E., M. I. MECH. E., T. R. SAN. I., T.R.G.S., M.I.E. (Ind.); Chief Engineer, Public Health Department, Calcutta. *b.* 7 April 1872; *m.* Dorothy Maud, *d.* of G. Thoys of Cheshire. *Educ.* Clifton Coll. Articles to Mr. James Manseigh, F.R.S., 1891; Asst. on York Main Drainage Works, Birmingham waterworks; Resident Engineer-in-charge, Whitly Waterworks; Served S. Africa, 1900-01, Railway Staff Officer; Asst. District Engineer; Imperial Military Railways; Pers. Asstt. to Mr. G. R. Strachan, M. Inst. C.E., 1902-06; Coryden Waterworks, Shrewsbury Waterworks; Consulting Engineer to Col. Officer, 1906-08; Nairobi Drainage and Water, works. Nalvasha, Nakuru and Zanzibar sanitation; designed Skelly Sewerage Works, &c., Sanitary Engineer, Bengal (1909); designed nearly 200 schemes of water supply, drainage and sewerage of which about 60 have been carried out including Jheria, Gaya, Hooghly, Chinsurah, Kalimpong, Serampore, Monghyr, Comilla waterworks, Gaya, Burdwan, Dano, Kurseong and Tiltaghut main drainage schemes. *Publications:* Elementary Sanitary Engineering (1st and 2nd editions); Practical Sanitary Engineering; Modern Sewage Disposal. R. E. Journal, 1909, "Rainfall of Wales", Geographical Journal, 1909; Engineer 1922; Recent Progress in Sanitary Engineering in Bengal, &c. *Address:* 3, Charnock Palace, Calcutta and 2, Marjorie Villas, Darjeeling.

WILLIAMS, CAPT. HERBERT ARMSTRONG, D.S.O., I.M.S.; Resident Medical Officer, Rangoon General Hospital, since 1907. *b.* 11 Feb. 1875. *Address:* General Hospital, Rangoon.

WILLINGDON, 1st Baron, of Ratton, *cr.* 1910; FREEMAN FREEMAN-THOMAS; Governor of Madras, 1919. *b.* 12 Sep. 1866; *m.* 1892, Hon. Marie Adelaide, *d.* of 1st Baron Brassey. A.D.C. to Lord Brassey when Gov. of Victoria; 1895; M.P. (L.) Hastings, 1900-1906; Bodmin, Div. of Cornwall, 1906-10; Jun. Lord of Treasury, 1906; Lord-in-Waiting to H. M., 1910-13. Governor of Bombay, 1913-19. *Heir.:* Hon. Inigo Brassey Freeman-Thomas, *b.* 25 July 1899. *Address:* Government House, Madras.

WILLIS, GEORGE HENRY, C.I.E., 1918; M.V.O (4th) 1911, Lt.-Col., R.E., M.I. Mech. E., M.I.E. (Ind.), J.P.; Master of Mint, Bombay. *b.* 21 Oct. 1875; *m.* 3. *d. Educ.:* St Paul's Sch., London; R. M. A., Woolwich. R. E., 1895; Major, 1914. Arrived India, 1900; Deputy Mint Master, 1907; officiated as Mint Master till October, 1915; Past President of Council, Institution of Engineers (Ind.). *Address:* H. M. Mint, Bombay.

WILSON, HIS EXCELLENCY THE RT. HON. SIR LESLIE ORME, P.C. 1922; G. C. I. E; (1923), C. M. G. (1916); D. S. O. (1900) Governor of Bombay. *b.* 1 Aug. 1876, *s. s.*

of late H. Wilson. *m.* 1909, Winifred, *e. d.* of late Captain Charles Smith of Goderich, Sydney. *Educ.* St. Michael's, Westgate; St. Paul's School. Apptd. 2nd Lt. R.M.L.I., 1895; Lieut. 1898; Captain 1901. Served South Africa. 1899-1901 (severely wounded, despatches Queen's Medal. 5 Clasps, D.S.O.); A.D.C. to Governor of N.S.W. Capt. in Berkshire Royal Horse Artillery (Territorials); promoted Temp. Lt.-Col. R. M. and appointed to command Hawke Batt, R.N.D.; served through operations in Gallipoli, 1914-15 (despatches, C.M.G.); served in France, 1915-16 (several times wounded); Parliamentary Ass't. Secry. to the War Cabinet, 1918; Chairman, National Maritime Board, 1919; Parliamentary Secretary to the Ministry of Shipping, 1919; Jt. Parliamentary Secretary to the Treasury and Chief Unionist Whip, 1921-1923; M.P. (C.U.) Reading, 1913-1923. *Address*: Government House, Malabar Hill, Bombay.

WINN, GILBERT FRANKLYN, I.S.O.; Assistant Secretary to the Govt. of India, Home Department, since 1921. *b.* 1866, *m.* 1898, Isabel Maud, *e.d.* of John Burgess of Tullow, Co. Carlow. *Educ.*: Muir Central Coll., Allahabad. Entered the Service of the Govt. of India in 1890; Registrar, Home Deptt., Govt. of India, 1912-1921. *Address:* C/o King, King & Co.

WITHERS, LIEUT. EDGAR CLEMENT, C.I.E., R.I.M.; Intelligence Officer, Persian Gulf. *Address:* Intelligence Department, Basra.

WITTET, GEORGE, F.R.I.B.A., Director, Tata Engineering Co., Ltd. *b.* 26 November 1878; Consulting Architect to the Govt. of Bombay, 1908-1919. *Address:* Dongarsi Road, Malabar Hill, Bombay.

WOOD, SIR JOHN BARRY, K.C.I.E., K.C.V.O., C.S.I., Resident in Kashmir. *b.* 1870; *m.* 1896; Ada Elizabeth, *d.* of G.A. Stack, I.E.S. *Educ.*: Marlborough; Balliol Coll., Oxford. Ent. I.C.S., 1894, Under-Sec. to Govt. of India, Foreign Dept., 1899-1903; 1st Assist. in Baluchistan, 1903; Dy. Sec., Foreign Dept., 1906-10; Resident, Indore, 1912; Pol. Sec., Government of India, 1914-22. *Address*: Srinagar.

WOODROFFE, SIR JOHN GEORGE, Kt., Puisne Judge, Calcutta High Court since 1904. *b.* 15 Dec. 1865. *Educ.*: Woburn Park. Univ. Coll., Oxford (B.C.L., M.A.). Barr., Inner Temple, 1889; Advocate, Calcutta H. C., 1890; Standing Counsel, Government of India, 1903. Judge, 1904; Offg. Ch. Justice, Bengal, Nov. 1915. *Address:* Bengal Club, Calcutta.

WOOLACOTT, JOHN EVANS, Editor of *The Pioneer*. *b.* 1862. *Educ.*: Milford Haven Sch., and Gr. Sch. Menaibridge. *m.* Anjoulina, *d.* of the late A. Seneca. On staff of *Central News*: Correspondent of *The Daily Mail* in Cairo and Paris. Assistant Editor, *The Economist*: City Ed. *The Tribune*: has edited *The Statesman* and *The Bombay Gazette*. President, Institute of Journalists, 1908. Parliamentary Candidate, Glasgow, 1895. *Address:* Allahabad.

WYNDHAM, PERCY, C.I.E., C.B.E., R.G.S., Commsr., Kumaon, since 1913. *b.* 13 Dec. 1867. *Educ.*: Giggleswick Sch.; Queen's Coll., Oxford, M.A., Joined I.C.S., 1899, Magte. and Collector, Mirzapur, 1900-1913. *Address.*: Naini Tal.

YAIN, LEE AH, K.-i-H. (Gold), Bar-at-Law, M. L.C. Councillor, Rangoon Corporation; Fellow of Rangoon University; *b.* April 1874, *Educ.*: Rangoon College and Cambridge. *Address:* 67, Merchant Street, Rangoon.

YULE, SIR DAVID, Bart. (1922), Managing Director, Messrs. Andrew Yule & Co., Ltd. *b.* 4 Aug. 1858. *m.* Annie Henrietta Yule, *d.* of late Andrew Yule. *Educ.*: R. High School, Edinburgh. Joined firm of Andrew Yule & Co., Calcutta, 1875; Director of London Joint City and Midland Bank, Ltd., Mercantile Bank of India, Ltd., Royal Exchange Assurance Corporation, Magadi Soda Co. Ltd., Chairman of Alliance Bank of Simla, Ltd. *Address:* 8, Clive Row, Calcutta.

Assam.

The Province of Assam, 61,471 square miles in area, includes the Assam Valley Division, the Surma Valley and Hill Division and the State of Manipur. It owes its importance to its situation on the north-east frontier of India. It is surrounded by mountainous ranges on three sides while on the fourth (the west) lies the Province of Bengal on to the plains of which debouch the two valleys of the Brahmaputra and the Surma which form the plains of Assam. These two valleys are separated from each other by the Assafn Range, which projects westward from the hills on the eastern border.

Population.

The total population of the Province in 1921 was 7,990,246, of whom only 384,016 were in Manipur. Of the population in 1921, 2¼ millions were Mahomedans, 4½ millions Hindus and 1¼ millions Animists. 44 per cent. of the population speak Bengali, 22 per cent. speak Assamese: other languages spoken in the province are Hindi, Uriya and a great variety of languages classified under the general heading of the Tibeto-Chinese languages. Owing to the great areas of waste and rivers the density of the province is only 130, which compared with that of most other parts of India is low, but is more than double that of Burma.

Agricultural Products.

It has agricultural advantages for which it would be difficult to find a parallel in any part of India, climate, soil, rainfall and river systems all being alike favourable to cultivation. Rice is the staple food crop, nearly 5 million acres being devoted to this crop. Except in the Himalayan Terai irrigation is unnecessary. Jute and tea are the most important crops grown for export. Wheat and tobacco are also grown and about 66 square miles are devoted to sugarcane. The total area of 'reserved' forest is about 5,601 square miles and the unclassified state forests cover about 15,630 square miles.

Meteorological Conditions.

Rainfall is everywhere abundant, and ranges from 67 to 229 inches. The maximum is reached at Cherrapunji in the Khasi Hills, which is one of the wettest places in the world, having a rainfall of 458 inches. The temperature ranges from 59 at Sibsagar in January to 848 in July. Earthquakes of considerable severity have taken place, by far the worst being that which occurred in 1897.

Land Tenures.

Most of the actual cultivators of the soil hold direct from the State. A large part of Goalpara and of the more densely populated portions of Sylhet was however included in the permanent settlement of Bengal; and the system of land tenure in Cachar, and the existence of large estates on privileged rates of revenue in Kamrup have tended to produce a large tenant class in those districts also. At the 1901 census the tenant class amounted to more than one-third of the total number of persons supported by agriculture. In the 1911 census a very marked increase in tenancy throughout the Province was shown.

Mines and Minerals.

The only minerals in Assam worked on a commercial scale are coal, limestone and petroleum oil. The most extensive coal measures are in the Naga Hills and the Lakhimpur district, where about 350,000 tons are raised annually. Limestone is quarried in the Khasi and Jaintia Hills, in Sylhet, and in the Garo hills. Petroleum is worked only in Lakimpur and Cachar.

An account of the petroleum occurrences in Assam was recently published in the memoirs of the Geological Survey of India. It states that the petroleum localities in this province are confined to a curved belt of country along the basins of the Brahmaputra and Surma. This belt is traceable over a distance of some 800 miles from N. E. Assam through Kachar and Chittagong to the Arakan coast, where it has a S.S.E. trend. It is roughly concentric with the trend of the Burmese oil belt, the distance between the two varying from 70 to 150 miles.

Manufactures and Trade.

Silk is manufactured in the Assam Valley, the weaving being done by the women. Cotton weaving is also largely practised by the women, and almost every house contains a loom; the cloth is being gradually displaced by imported goods of finer texture and colour. Boat building, brass and metal and earthenwares, tea manufacture and limestone burning are the other industries apart from agriculture, which itself employs about 89 per cent. of the population. Assam carries on a considerable trade with the adjoining foreign tribes and countries.

Communications.

The trade of Assam is chiefly carried by river, but increasing use is being made of the Assam Bengal Railway which runs from the port of Chittagong to Silchar at the eastern end of the Surma Valley. A branch of that line runs along the south of the Assam Valley from Gauhati to Tinsukia, a station on the Dibru Sadiya Railway, and is connected with the Surma Valley branch by a line that pierces the North Cachar Hills, the points of junction bring Lumding in the northern and Badarpur in the southern valley. The Eastern Bengal Railway connects Assam with the Bengal system *via* the valley of the Brahmaputra. The excellence of its water communication makes Assam less dependent upon roads than other parts of India; but in recent years the road system has been developed and there is an unmetalled trunk road through the whole length of the Brahmaputra Valley and an excellent road from Gauhati to Shillong. A large fleet of steamers maintained by the India General Steam Navigation Company and the Rivers Steam Navigation Company plies on the rivers of both valleys. An alternate day service of passenger boats runs between Goalundo and Dibrugarh.

THE FINANCES OF ASSAM.

In common with the other Provinces of India, Assam secured substantial financial autonomy under the Reform Act of 1919. The present financial position is set out in some detail in the following table:—

Estimated Revenue in 1923-24

(In Thousands of Rupees.)

Taxes on Income	50
Land Revenue	98,02
Excise	60,00
Stamps	19,95
Forest	16,25
Registration	1,67
TOTAL	1,96,39
Administration of Justice	1,54
Jails and Convict Settlements	1,32
Police	1,45
Ports and Pilotage	.....
Education	2,02
Medical	14
Public Health	1,22
Agriculture	14
Industries	6
Miscellaneous Departments	1
TOTAL	7,90
Civil Works	5,27
Waterworks and Embankments	.....
TOTAL	5,27
Provincial loan account (net)	2,70
Total Receipts	2,16,41
Opening Balance	—7,28
Grand Total	2,09,13

Estimated Expenditure on Reserved Subjects.

Taxes on Income	.....
Land Revenue	14,25
Excise	2,03
Stamps	71
Forest	11,33
TOTAL	28,32

Estimated Expenditure on Reserved Subjects—(contd.)

	(In Thousands of Rupees.)
General Administration	27,08
Administration of Justice	8,48
Jails and Convict Settlements	4,83
Police	21,99
Police (Assam Rifles)	4,62
Ports and Pilotage	63
Political	.....
Scientific Departments	14
Education (European)	70
Miscellaneous Departments	18
TOTAL	68,65
Exchange on transactions with London	.....
Civil Works	35,95
Waterways and Embankments	73
TOTAL	36,68

Estimated Expenditure on Transferred Subjects.

General Administration	84
Education (other than European)	23,05
Medical	10,02
Public Health	5,30
Agriculture	4,80
Industries	99
Miscellaneous Departments	5
TOTAL	45,05

Administration.

The province of Assam was originally formed in 1874 in order to relieve the Lieutenant-Governor of Bengal of part of the administration of the huge territory then under him. In 1903, as the result of further deliberations, it was decided to add to the small Province of Assam the eastern portion of its unwieldy neighbour and to consolidate those territories under a Lieutenant-Governor. The Province of Eastern Bengal and Assam as then constituted was again broken up on the 1st of April, 1912: the Eastern Bengal Districts were united with the Bengal Commissionerships of Burdwan and the Presidency to form the Presidency of Bengal under a Governor-in-Council, Bihar, Chota Nagpur and Orissa were formed into a separate province, while the old Province of Assam was re-constituted under a Chief Commissioner.

Under the Indian Reforms Act of 1919 the Province was raised in status to that of administration by a Governor-in-Council and was thereby ranked, with certain minor provisions to suit its undeveloped character with the older major provinces of India. The exact nature of this change in its constitution, with the powers of the Governor, the Council, the Ministers and the Legislative Council is indicated in the general section. The Provincial Governments (*q.v.*). There is also set out the financial arrangement between the Government and the Provinces. The new constitution came into force in January 1923.

The capital is Shillong, a town laid out with great taste and judgment among the pine woods on the slopes of the Shillong Range which rises to a height of 6,450 feet above the sea. It was destroyed in the earthquake of 1897 and has been rebuilt in a way more likely to withstand the shocks of earthquake.

GOVERNOR.

Sir John Kerr, K.C.S.I., K.C.I.E.

EXECUTIVE COUNCIL.

William James Reid, C.S.I.
Khan Bahadur Kutabbuddin Ahmed.

MINISTER.

Rai Bahadur Pramod Chandra Datta, B.L.
Moulvie Saiyad Muhammad Saadullah.

SECRETARIAT.

Private Secretary, Captain C. B. Lyon.

Chief Secretary, A. W. Botham.

Second Secretary, G. E. Soames.

Secretary, Public Works Department, O. H. Desenno.

Inspector General of Registration, W. L. Scott, M.A., I.C.S.

Director of Public Instruction, J. R. Cunningham.

Inspector-General of Police, W. C. M. Dundas, C.I.E.

Director of Public Health, Lt.-Col. T. C. M. Young, M.D., I.M.S.

Comptroller, Financial Department, C. A. G. Rivaz, B.A.

Director of Land Records and Agriculture, W. L. Scott, M.A., B.Sc., I.C.S.

Conservators of Forests, F. Trafford and F. H. Todd.

Senior Inspector of Factories, R. P. Adams.

Chief Commissioners of Assam.

Colonel R. H. Keatinge, C.S.I.	**1874**
Sir S. C. Bayley, K.C.S.I.	1878
C. A. Elliot, C.S.I.	1881
W. E. Ward	1883
Dennis Fitzpatrick, C.S.I.	1887
J. Westland, C.S.I.	1889
J. W. Quinton, C.S.I.	1889
Brig.-General Sir H. Collett, K. C. B. ..	1891
W. E. Ward, C.S.I	1891
C. J. Lyall, C.S.I	1894
H. J. S. Cotton, C.S.I	1896
J. B. Fuller, C.I.E.	1900
J. B. Fuller, C.I.E.	1902
C. W. Bolton, C.S.I.	1903

Note.—The Chief Commissionership of Assam was revived 1st April 1912

Sir Archdale Earle, K.C.I.E.	1912
Sir Nicholas Dodd Beatson Bell, K.C.I.E., C.S.I.	1918

GOVERNORS OF ASSAM.

Sir Nicholas Dodd Beatson Bell, 1920.

Sir William Marris, 1921.

Sir John Kerr, K.C.I.E., C.S.I., 1922.

ASSAM LEGISLATIVE COUNCIL.

Names.	Constituency.
ELECTED MEMBERS.	
Rev. James Joy Mohan Nicholas-Roy	Shillong (General Urban).
Rai Bahadur Bipin Chandra Deb Laskar ..	Silchar (Non-Muhammadan Rural).
Rai Sahib Har Kishore Chakrabatti	Hailakandi Ditto.
Babu Basanta Kumar Das	Sylhet Sadr Ditto.
Babu Brajendra Narayen Chaudhuri	Sunamganj Ditto.
Babu Upendra Lal Das Chaudhuri	Habiganj North Ditto.
The Hon'ble Rai Bahadur Pramod Chandra Datta.	Habiganj South Ditto.
Babu Krishna Sundar Dam	South Sylhet Ditto.
Babu Khirod Chandra Deb	Karimganj Ditto.
Babu Biraj Mohan Datta	Dhubri Ditto.
Srijut Bipin Chandra Ghosh	Goalpara Ditto.
Srijut Kamakhyaram Barua	Gauhati Ditto.
Srijut Kamala Kanta Das	Barpeta Ditto.
Srijut Mahadeva Sharma	Tezpur Ditto.
Srijut Padmanath Sharma	Mangaldai Ditto.
Srijut Bishnu Charan Borah	Nowgong Ditto.
Mr. Taraprasad Chaliha	Sibsagar Ditto.
Srijut Rohini Kanta Hati Barua	Jorhat Ditto.
Rai Bahadur Debi Charan Barua	Golaghat Ditto.
Srijut Sadananda Dowerah	Dibrugarh Ditto.
Srijut Sarveswar Barua	North Lakhimpur Ditto.
Maulavi Rashid Ali Laskar	Cachar (Muhammadan Rural).
Maulavi Abdul Hamid Main	Sylhat Sadr, North Ditto.
Maulavi Dewan Abdul Rahim Chaudhuri ..	Sylhet Sadr, South Ditto.
Maulavi Abdul Hannan Chaudhuri ..	Sunamganj Ditto.
Maulavi Muhammad Mudabbir Hussain Chaudhauri.	Habiganj North Ditto.
Maulavi Saiyid Abdul Mannan	Habiganj South Ditto.
Khan Bahadur Alauddin Ahmad Chaudhuri ..	South Sylhet Ditto.
Maulavi Najmul Islam Chaudhuri	Karimganj Ditto.
Maulavi Abual Mazid Ziaosshams	Dhubri excluding South Salmara Thana (Mulhhamadan Rural).
Maulavi Mafizuddin Ahmad	Goalpara cum South Salmara Thana (Muhammadan Rural).
Maulavi Saiyid Muhammad Seadullah ..	Kamrup and Darrang cum Nowgong (Muhammadan Rural).
Maulavi Faiznur Ali	Sibsagar cum Lakhimpur (Muhammadan Rural).
Edgar Stuart Roffey	Assam Valley Planting.
Walter Dorling Smiles, D.S.O.	Ditto.
David M. Somerville	Ditto.
E. W. Hobson	Surma Valley Planting.
J. C. Dawson	Ditto.
John Alexander Fraser	Commerce and Industry.

ASSAM REPRESENTATIVE TO THE COUNCIL OF STATE.

Elected.

The Hon'ble Srijut Chandra Dhar Barua ..	Assam (Non-Muhammadan).

ASSAM REPRESENTATIVE TO THE LEGISLATIVE ASSEMBLY.

Elected.

Srijut Tarun Ram Phukan	Assam Valley (Non-Muhammadan).
Mr. Kamini Kumar Chanda	Surma Valley cum Shillong (Non-Muhammadan).
Maulavi Ahmad Ali Khan	Assam (Muhammadan).
Mr. Eustace Joseph	Assam (European).

Baluchistan.

Baluchistan is an oblong stretch of country occupying the extreme western corner of the Indian Empire. It is divided into three main divisions: (1) British Baluchistan with an area of 9,476 square miles consisting of tracts assigned to the British Government by treaty in 1879; (2) Agency Territories with an area of 44,345 square miles composed of tracts which have, from time to time, been acquired by lease or otherwise brought under control and placed directly under British officers; and (3) the Native States of Kalat and Las Bela with an area of 78,434 square miles. The Province embraces an area of 134,638 square miles and according to the census of 1921 it contains 799,625 inhabitants.

The country, which is almost wholly mountainous, lies on a great belt of ranges connecting the Safed Koh with the hill system of Southern Persia. It thus forms a watershed the drainage of which enters the Indus on the east and the Arabian Sea on the south while on the north and west it makes its way to the inland lakes which form so large a feature of Central Asia. Rugged, barren, sun-burnt mountains, rent by high chasms and gorges, alternate with arid deserts and stony plains, the prevailing colour of which is a monotonous sight. But this is redeemed in places by level valleys of considerable size in which irrigation enables much cultivation to be carried on and rich crops of all kinds to be raised.

The political connection of the British Government with Baluchistan commenced from the outbreak of the First Afghan War in 1839; it was traversed by the Army of the Indus and was afterwards occupied until 1842 to protect the British lines of communication. The districts of Kachi, Quetta and Mastung were handed over to the Amir of Afghanistan and Political Officers were appointed to administer the country. At the close of the First Afghan War, the British withdrew and these districts were assigned to the Khan of Kalat. The founder of the Baluchistan Province as it now exists was Sir Robert Sandeman who broke down the close border system and welded the Baluch and Brahui Chiefs into a close confederacy. In the Afghan War of 1879 Pishin, Shorarud, Sibi, Zawara Valley and Thal-Chotiali were handed over by Yakub Khan to the British Government and retained at Sir Robert Sandeman's strenuous insistence.

Industries.

Baluchistan lies outside the monsoon area and its rainfall is exceedingly irregular and scanty. Shahrig which has the heaviest rainfall, records no more than 11¾ inches in a year. In the highlands few places receive more than 10 inches and in the plains the average rainfall is about 5 inches, decreasing in some cases to 3. The majority of the indigenous population are dependent for their livelihood on agriculture, provision and care of animals and transport. The majority of the Afghan and the Baluch, as a rule, cultivate their own lands. The Brahuis dislike agriculture and prefer a pastoral life. Previous to the advent of the British life and property were so insecure that the cultivator was fortunate if he reaped his harvest. The establishment of peace and security has been accompanied by a marked extension of agriculture which accounts for the increase in the numbers of the purely cultivating classes. The Mekran Coast is famous for the quantity and quality of its fish and the industry is constantly developing. Fruit is extensively grown in the highlands and the export is increasing.

Education is imparted in 82 public schools of all kinds, with 4,149 scholars. There is a distinct desire for education amongst the more enlightened headmen round about Quetta-Pishin and other centres where the Local Government with its officers stays at certain seasons, such as Sibi and Ziarat; but on the whole education or the desire of it has made little or no advance in the outlying districts. The mineral wealth of the Province is believed to be considerable, but cannot be exploited until railways are developed. Coal is mined at Khost on the Sind-Pishin railway and in the Bolan Pass. The output of coal in 1921 was 5,151 tons and of coal dust 37,004 tons. Chromite is extracted in the Zhob District near Hindu-bagh. Owing to an increased demand for chromite ore in Europe the output in recent years has increased, being 502,435 tons in 1921. Lime-stone is quarried in small quantities.

Administration.

The head of the local administration is the officer styled Agent to the Governor-General and Chief Commissioner. Next in rank comes the Revenue Commissioner who advises the Agent to the Governor-General in financial matters and generally controls the revenue administration and exercises the functions of a High Court as Judicial Commissioner of the Province. The keynote of administration in Baluchistan is self-government by the tribesmen, as far as may be, by means of their Jirgas or Councils of Elders along the ancient customary lines of tribal law, the essence of which is the satisfaction of the aggrieved and the settlement of the feud, not retaliation on the aggressor or the vindictive punishment of a crime. The district levies which normally numbered 2,300 odd play an unobtrusive but invaluable part in the work of the Civil administration not only in watch and ward and the investigation of crime, but also in the carrying of the mails, the serving of processes and other miscellaneous work. In addition to these district levies there are ordinarily two irregular Corps in the Province; the Zhob Levy Corps and the Mekran Levy Corps. Their combined strength in the latest returns was 953 cavalry and 892 infantry. The Province does not pay for itself and receives large subsidies from the Imperial Government.

Agent to the Governor-General and Chief Commissioner, The Hon'ble Mr. F. W. Johnston, C.S.I., C.I.E., I.C.S.

Revenue and Judicial Commissioner, Lt.-Col. A. D. G. Ramsay, C.I.E., O.B.E.

Secretary, Public Works Department, Col. L. H. Close, C.M.G.

Secretary to the Agent to the Governor-General and Chief Commissioner, Major H. V. Biscoe, I.A.

Political Agent, Zhob, Lt.-Col. R. H. C. Trench.

Political Agent, Kalat and Bolan Pass, Lt.-Col. T. H. Keyes, C.M.G., C.I.E., I.A.

Political Agent and Deputy Commissioner, Quetta, Lt.-Col. F. McConaghey, C.I.E.

Assistant Political Agent and Assistant Commissioner, Quetta, E. W. Hollands.

Political Agent, Chagai, Khan Bahadur Sharbat Khan, C.I.E.

Political Agent, Sibi, Major G. F. W. Anson, O.B.E.

Assistant Political Agent, Sibi, Rai Sahib Hakim Rattan Chand

Political Agent, Loralai, Major C. T. Daukes.

Residency Surgeon and Chief Medical Officer, Lt.-Col. D. J. M. Deas, I.M.S.

Civil Surgeon, Sibi, Major J. Anderson.

Assistant Political Agent, Zhob, Khan Bahadur K. P. Kaikobad.

Assistant Political Agent, Kalat, (Vacant).

Civil Surgeon, Quetta, Major H. H. Thorburn, C.I.E., M.B., I.M.S.

ANDAMAN AND NICOBAR ISLANDS.

This is a group of islands in the Bay of Bengal of which the headquarters are at Port Blair, by sea 780 miles from Calcutta, 740 miles from Madras and 360 miles from Rangoon, with which ports there is regular communication.

The land area of the islands under the administration is 3,143 square miles, namely, 2,508 square miles in the Andamans and 635 square miles in the Nicobars. The total population is 26,459. The Islands are administered by the Chief Commissioner of the Andaman and Nicobar Islands who is also the Superintendent of the Penal Settlement. The penal settlement, which was established in 1858, is the most important in India.

Chief Commissioner of Port Blair, Lieut.-Col. M. L. Ferrar, C.I.E., O.B.E., I.A.

Commandant and District Superintendent of Police, Major E. J. E. Poole, M.C.

Senior Medical Officer and Civil Surgeon, Major F. A. Barker, I.M.S.

COORG.

Coorg is a small petty Province in Southern India, west of the State of Mysore. Its area is 1,582 square miles and its population 174,976. Coorg came under the direct protection of the British Government during the war with Sultan Tippu of Seringapatam. In May 1834, owing to misgovernment, it was annexed. The Province is directly under the Government of India and administered by the Chief Commissioner of Coorg who is the Resident in Mysore with his headquarters at Bangalore. In him are combined all the functions of a local government and a High Court. The Secretariat is at Bangalore where the Assistant Resident is styled Secretary to the Chief Commissioner of Coorg. In Coorg his chief authority is the Commissioner whose headquarters are at Mercara and whose duties extend to every branch of the administration. A Legislative Council consisting of 15 elected members and five nominated members was created in 1923. The chief wealth of the country is agriculture and especially the growth of coffee. Although owing to overproduction and insect pests coffee no longer commands the profits it once enjoyed, the Indian output still holds its own against the severe competition of Brazil. The bulk of the output is exported to France.

Resident and Chief Commissioner, Coorg, C. A. Souter, I.C.S.

AJMER-MERWARA.

Ajmer-Merwara is an isolated British Province in Rajputana. The Agent to the Governor General in Rajputana administers it as Chief Commissioner. The Province consists of two small separate districts, Ajmer and Merwara, with a total area of 2,711 square miles and a population of 501,395. At the close of the Pindari war Daulat Rao Scindia, by a treaty, dated June 25, 1818, ceded the district to the British. Fifty-five per cent. of the population are supported by agriculture, the industrial population being principally employed in the cotton and other industries. The principal crops are maize, millet, barley, cotton, oilseeds and wheat.

Agent to the Governor-General in Rajputana and Chief Commissioner of Ajmer Merwara, The Hon. Mr. R. E. Holland, C.S.I., C.I.E. C.V.O.

The Central Legislature.

A Great Record of Three Years.

"To-day you have beginnings of Swaraj within my Empire; and widest scope and ample opportunity of progress to the liberty which my other Dominions enjoy."

With the King-Emperor's message containing this sentence H. R. H. the Duke of Connaught inaugurated the new bicameral Legislature of India called the Council of State and the Legislative Assembly, on the 9th February at Delhi.

For the first time, said Lord Chelmsford, the Viceroy of India, in requesting His Royal Highness to begin the auspicious function, the principle of autocracy which had not been all wholly discarded in all earlier reforms was definitely abandoned; the conception of British Government as a benevolent despotism was finally renounced; and in its place was substituted that of a guiding authority whose role it would be to assist the steps of India along the road that in the fulness of time would lead to complete self-government within the Empire.

"You have made the Indian Legislature the mirror of events in India. All matters of importance to India are reflected in your questions and resolutions. Those who were opposed to the true interests of India and were blind to her position in the British Empire, and to the mutual protection and strength those ties assured, had not been slow to allege in respect of the reform that they had neither substance nor permanency and that their supporters lived in a fool's paradise whose palaces and gardens would vanish in the twinkling of an eye like the passing of a mirage."—Lord Reading while proroguing the Legislature in September 1923.

Though it was born amidst strife and the contumely of its opponents, the Gandhi Party, the bicameral Legislature under the Government of India Act of 1919 began to function under the best of omens. Inaugurated by H.R.H. the Duke of Connaught in 1920, it worked for three years when the Legislative Assembly was dissolved after expiry of its legal term of existence and fresh elections ordered, while the Council of State (the Upper House) had still two years to run. The pages that follow give an account of the work done during the last three years by these bodies, special details being given of the work in 1923. As the Viceroy said in September 1923 in proroguing the Legislature it did a good deal of useful work, and loyally co-operated with the Government while enforcing its will where it thought necessary. As again the Viceroy himself said, it was unfortunate the last years of the Legislature were overclouded by the question of Indians overseas (the Kenya decision of the Imperial Cabinet, and the Reciprocity Bill). The certifications three in number no doubt show the Executive asserting itself against the Legislature, but they are largely explained by the transitional nature of the Constitution under the Government of India Act.

1921—Perfect Cordiality.

The keynote of amity and friendliness towards the Executive was struck for the whole year by the Legislative Assembly when it unanimously passed, omitting the portions bracketted, a resolution moved on the 15th February by Mr. Jamnadas Dwarkadas recommending the Governor-General to declare the firm resolve of the Government of India to maintain the connection of India with the British Empire on the principle of perfect equality; to express regret that the martial law administration in the Punjab (1919) departed from this principle (and to mete out deterrent punishment to officers who had been guilty); and to satisfy himself that adequate compensation was awarded to the families of those killed or injured in the Jallianwalla Bagh.

Two committees, with non-official majorities, were appointed to examine press and "repressive" legislation. A committee to enquire into the causes of the non-co-operation movement and to suggest remedial measures was refused as likely to serve no useful purpose. Thus the Legislature practically supported the Executive in its attempt to maintain law and order. The policy was affirmed, as against a statement in the Esher Committee Report, that the Indian Army existed for the purposes of legitimate Indian defence and should be controlled by the Government of India and no one else. Towards the end of the session, Sir Sivaswami Iyer successfully moved fifteen resolutions arising out of the same Committee's report in regard to the administration and organisation of the Army in India on a national basis. Later on a Committee was appointed to consider the future military requirements of India. In addition to this, assurances were obtained as to the early constitution of a Military College and a Territorial Force for India, in which the educated classes should be admitted. By a resolution a Fiscal Commission was appointed to inquire into the possibilities of protecting Indian industries by tariff changes.

In proroguing the Legislature after the Delhi session, Lord Chelmsford, the retiring Viceroy, expressed his appreciation of its worth and its co-operation with the Government. "It is the first step," said His Excellency, "which counts, and this the first session should go far to dispel the doubts of those who have looked upon our new constitutional departure with gloomy forebodings. It should go far to hearten those who are pledged to fight the constitutional cause against the forces of disorder and anarchy."

The Second Session.

Lord Reading, the new Viceroy, opened the second session of the Central Legislature at Simla in September. His Excellency announced the impending visit of the Prince of Wales and hoped a right royal welcome would be extended to His Royal Highness. Referring to the resignation of Sir Thomas Holland, the Member for Industries, His Excellency remarked, that "he had to ask for it as the fundamental principles

of administration and justice had been violated," the charge laid at the door of the Member being that he had ordered the withdrawal of several prosecutions in what were known as "Munitions Fraud Cases" without consulting the Governor-General. The speech then dwelt at length on external affairs; the unsettled relations with Afghanistan; the operations in Waziristan; the Graeco-Turkish hostilities, so distressing to Indian Muslims; the representation of India at the League of Nations and at the Imperial Conference. The terrible Moplah outbreak was next referred to, for which "the ground had been carefully prepared for the purpose of creating an atmosphere favourable to violence and no effort had been spared to rouse the passions and fury of the Moplahs." Alluding to non-co-operation and civil disobedience, His Excellency observed: "As head of the Government however I need not assure you that we shall not be deterred one hair's breadth from doing our duty." The speech concluded that the two questions of the moment, namely the well-being of the Indian Labour and the tension which unhappily existed between Englishmen and Indians would be considered.

At the Simla Session the Assembly, along with the Council of State, offered its welcome to the Prince of Wales and the new Viceroy, the Earl of Reading. A committee was appointed to suggest changes in the Criminal Procedure Code in order to do away with the distinctions in trials between Indians and non-Indians. A resolution was carried against the oppostion of the Government for the appointment of a committee to prepare a scheme for the separation of judicial and executive functions. The most important resolution of the session was that which requested the Government of India to convey to the Secretary of State for India the view of the Assembly that the progress made by India on the path to responsible government warranted a re-examination and revision of the constitution at an earlier date than 1930.

Among other resolutions debated by the Legislature in the course of the session were the reconstitution of the provinces of India on a linguistic basis, the equalisation of the number of Indians and Europeans in certain posts, specially in the Secretariat, and recruitment for the All-India Services; all but the first were to appear in one form or another in the succeeding years. A number of resolutions based on the recommendations of the Geneva Labour Conference and relating to the welfare of workmen and labourers were carried. Nor did the hardy annual of a capital for India in a salubrious climate fail to be in the picture. Social reforms touching temperance and religious and moral education were not left out.

Resolutions dealing with the purchase of Government materials, the encouragement of sugar industry and the Railway Committee Report were also fully debated. The principle was asserted, and Government accepted, that Indians overseas should be treated as equal citizens with other races. The one important motion of adjournment concerned the Moplah rising, and the discussion largely favoured the pacificatory measures taken by the Government.

As regards legislation, six Bills were passed mostly of a financial nature.

At the beginning of the year, Standing Committees for Public Accounts and for Finance were appointed in the Assembly, the functions of which were extended to the sanction and control of expenditure for which the House voted "block grants," in addition to the duty of scrutinising the Budget proposals, examining supplementary votes and dealing with major schemes involving fresh expenditure.

In the Council of State, at the Delhi Session, Mr. Srinivasa Sastri moved a resolution regarding the use of fire arms for the purpose of suppressing disturbances. Mr. Lallubhai Samaldas demanded through a resolution that the Home Government be addressed with a view to fiscal autonomy for India "with due regard to their responsibilities under the Government of India Act." Improvement of the existing Government stocks, removal of the embargo on export of food grains, the tense exchange situation and an adequate share for India of the indemnities and reparations to be obtained from Germany formed other subjects of debate. A resolution demanding the release of the Punjab martial law prisoners was withdrawn. Another suggesting that full consideration be given to the public in India before any matters affecting the religious susceptibilities of Indians (the Khilafat question was in view) were decided, was carried A promise was drawn out from Government that the question of Indians overseas would be considered in connection with the forthcoming amendment of the Emigration Act.

At the Simla Session Sir Maneckji Dadabhoy withdrew his resolution that the Council of State be authorised to receive from the public petitions relating to public grievances and disabilities after an official assurance was given for the examination of the constitutional position. Syed Rizali's resolution recommending "the removal of centralisation in administration in India under which many classes of officials have great powers" was rejected. Standardisation of weights and measures throughout India was adopted. Overseas Indians including those in South Africa, and the retention of Aden under the Indian Government engaged attention.

Appalling Deficit.

The first Legislative Assembly was faced with the appalling deficit of Rs. 18½ crores in the Budget, necessitating the imposition of increased taxation, a task which was as hateful as it was burdensome, but realising its new responsibilities it hastened to help the Executive. The new taxes included enhanced custom duties surcharge on railway rates, increased income-tax and higher passenger rates, and they were expected to yield a small surplus of 84 lakhs. The non-officials continued the tradition of the old Imperial Legislative Council in attacking the immense growth of military expenditure and they continuously impressed upon the Government the need of reduced cost of administration. The request of the Assembly that there should be no differentiation between the votable and non-votable items in the budget

was granted by the Viceroy, who ignored that specific distinction of the Constitution as a generous gesture and as a recognition of the very high sense of responsibility the legislators showed in their very first session.

There could in these circumstances be no hope of the provincial contribution being reduced or abolished as the Central Government was utterly unable to balance its own budget. All requests in this direction were therefore turned down.

It is worth noting here that the Council made fifteen amendments to the Finance Bill as passed by the Assembly and thus gained a right to interfere with money bills. At the Simla session the Council passed fourteen Bills.

In the Supplementary Grants, in Simla, all demands were passed save that which was proposed to meet the expenses of the projected Indian tour of Lord Lytton's Committee dealing with the grievances of Indian students in England.

The most remarkable feature of the year was the thorough cordiality between the Legislature and the Executive. The former cheerfully co-operated with the Executive in voting new taxes, and the latter co-operated with the Legislature in the general enunciation of its policies, particularly in the fiscal and military fields.

1922—Continued Cordiality.

The year began very well. The admiration and gratitude of the Indian educated classes for the work of one of the joint founders of the present constitution, Mr. E. S. Montagu, found two opportunities of expression once on the eve of a censure debate in the Commons and again when he was virtually dismissed by Mr. Lloyd George from his Cabinet under circumstances too well-known to need recapitulation. The fear was expressed that Mr. Montagu had been sacrificed for the anti-Turkish policy of the Government as well as for the anti-Indian prejudices of the Tory Party, which dominated the Cabinet. The Assembly and later on the Council, passed a resolution recording its appreciation of his great work at the India Office and its regret at his departure from it. A motion on the "political" strike on the E. I. R. was talked out in the Council.

Much attention was again paid to constitutional advance. A well calculated step was taken by the Assembly when it passed a motion recommending to the Governor-General the immediate abolition of the distinction between votable and non-votable items in the Budget. The Law Officers of the Crown, however, declared that the Viceroy had no such power to do, and this announcement caused a great deal of disappointment in the Assembly. Another attempt to forge ahead met with failure, which was the proposal to leave the matter of choosing India's delegates to the Imperial and such other Conferences in the hands of the Legislature. The Assembly even went further in September at Simla when it was proposed by certain members to consider the Near Eastern crisis which was gradually rising into what seemed an inevitable clash between the British forces stationed at Chanak and the Turks advancing from their Asiatic homeland. This excursion into the region of foreign politics was promptly given up as the Viceroy had consented to receive a deputation. And yet another attempt which failed was Sir M. Dadabhoy's request that the legislature should have the opportunity of pronouncing on any treaty arrangements involving fiscal obligations and international trade relations.

The Council of State witnessed an infructuous debate on the subject of introducing the constitutional practice of voting an Address after the "Speech from the Throne"—after the Viceroy's speech at the opening of each session of the Indian Legislature. Dr. Gour had to withdraw his motion, which was opposed by the non-officials, for the establishment of a Privy Council in India.

In other respects some progress was registered. Standing Committees of the Legislature were attached to the various departments so as to provide an opportunity for the non-officials to pick up a knowledge of the working of the administrative machine. The cry of Indianisation of the Services on financial, political and administrative grounds grew insistent and was intensified later on by the "Steel Frame Speech" of Mr. Lloyd George, against which in the form of a resolution the Assembly protested as the very negation of the growth of responsible government in India.

Government achieved a complete victory when the Assembly decisively rejected a resolution demanding the abandonment of its "repressive" policy against the non-co-operation movement and the Council threw out a proposal for a round table conference. Its measures were supported. The success was overwhelming when later on the House unanimously rejected another resolution demanding the release of the Ali Brothers.

Full appreciation of the manner in which the authorities were dealing with the Moplah outbreak in Malabar was expressed by the withdrawal of two motions urging withdrawal of martial law and the appointment of a committee to report on the disturbed condition. The Moplah Train Tragedy was debated, the occasion of which was taken by Government to express their regret at the incident. A motion of adjournment over the Gurukabagh affair offered an opportunity to Government to explain their position. The treatment of political prisoners as first class misdemeanants was urged and by way of reply, Government announced an all-India policy which should be based on the status, character and education of the prisoner.

Among other things reform of the railway administration and industrial development were very ably pressed on the attention of the Government. A committee was appointed to study the possibility of creating a mercantile marine for India.

The Legislative record was again pretty heavy. The press and "repressive" laws were repealed while an amended Official Secrets Act was passed, and also a Bill to punish the spreading of disaffection among the police. A University was established at the Imperial Capital by the passage of a Bill. The Benares

Hindu University Act was amended. Some labour laws were enacted. Finally, Dr. Gour's Civil Marriage Act Amendment Bill was introduced. Very numerous were the other Bills which were either rejected or still-born.

The one inauspicious feature of the year was the certification by the Viceroy, as essential in the interests of British India, of the Indian States (Protection against Disaffection) Bill, when the Assembly refused leave to introduce it. For the moment, the crisis was tided over but, as it seemed at the expense of the popularity of the Viceroy and his advisers.

In matters financial the same old distressful tale was repeated. The deficit in the Budget amounted to 34 crores, and it was proposed to meet it by an increase in railway passenger fares, by enhanced postage rates, by an increase of the general customs duty from 11 to 15 per cent.; of the cotton excise duty from 3½ to 7½ per cent; and of the duty on sugar from 15 to 25 per cent; while further increases were to be placed on imported yarns, machinery, iron and steel, railway material and alcoholic liquors, on matches and salt and articles of luxury. It was also proposed to raise the income tax and the super-tax and to double the duty on salt and matches. In the discussions of the demand for grants, the Assembly made a five per cent. all round reduction amounting to Rs. 95 lakhs. It also refused to raise the salt duty, the cotton excise duty, and the existing duty on machinery and on cotton goods. The result was a total increased deficit of about nine crores. Thus the Assembly forced a Retrenchment Committee on the Government.

In the course of the year a few financial resolutions were moved in the Legislature dealing with questions of currency and exchange, retrenchment, loans, reverse councils and contributions from the provinces to the Central Government.

A Bill consolidating the law relating to income-tax and super-tax was passed after a compromise between the two Houses. A grant of 150 crores of rupees was voted for capital expenditure on the Indian railways for the next five years. By a resolution, Sir V. Thackersey demanded a committee to consider and report at an early date on the steps to be taken to encourage the establishment of necessary industries so that a large part of the sum of 150 crores be spent in India.

For the present, the question of separating railway from the general finance was postponed, while by a resolution in the Council it was demanded that in future separate revenue and expenditure accounts should be kept of the working of the military and strategic railway lines. Finally the Assembly voted a grant of fifteen lakhs for the British Empire Exhibition.

The Supplementary Grants were passed as demanded in the September Session to the tune of Rs. 13,09,000.

Equality of status for Indians in East Africa was again urged, the opportunity being utilised to protest against the pronouncement of the Colonial Secretary, Mr. Churchill, to make Kenya a "characteristically British Colony." A foretaste of the future was revealed in Mr. Khaparde's resolution, which was withdrawn in the Council of the State, asking for reciprocal legislation in British India on the lines of colonial measures imposing disabilities on Indians.

The Assembly thus justified the tribute paid by the Viceroy in his opening speech at the Simla session that there was reason to be satisfied with the success the Legislature had already achieved during the short term of its existence, and that it had created an atmosphere favourable to the development of the constitution. In the same speech, His Excellency once again stated with reference to the Non-co-operation movement: "There must be respect for law and order and support for constituted authority and for established Government." Other remarks in the speech relating to retrenchment in the cost of administration, creation of Standing Committees, general legislation, and Mr. Lloyd George's speech found their responsive echo in the proceedings of the Legislature at the session.

As the Assembly could not interfere in foreign affairs, the Viceroy felt it his duty to reassure the people of India in his opening speech at Simla in September that his Government were still making representations regarding the need of radical changes in the Treaty of Sevres with the Turks.

1923—The Decline of Amity.

The Legislative Assembly opened for the first time in 1923 on the 15th January. The year was the least harmonious of the three, so far as the relations between the Executive and the Legislature were concerned. The idea had got into the minds of the legislators that the new Secretary of State, Viscount Peel, was less progressive than his predecessor, Mr. Montagu, and the Government of India did not have their former freedom of movement. A Royal Commission had been appointed to inquire into the grievances, the conditions of service and organisation of the Superior Services against the general wishes of political India, and, it was believed, against the wishes of the Government of India themselves. There was then the new Secretary of State's despatch on the demand of the Assembly for further constitutional advance in which for the present any such hope was put off as impracticable. The Assembly with considerable force had to reassert its right to move nominal reductions in non-votable items in the Budget with a view to raising questions of policy. It refused to vote money for the Royal Commissions but the item was restored by the Governor-General; so also an item concerning the transfer of railway annuities from the revenue to the capital side. On top of this came the certification of the salt tax. That is to say, within a week or two the extraordinary powers vested in him were thrice exercised by the Viceroy. The barometer now indicated "foul," the weather was stormy. It was now for the Assembly to endeavour to circumscribe the use of such powers, as also the powers of the Upper Chamber to interfere with its decisions. The demand for constitutional conventions within the structure of the Government of India Act was increasingly pressed.

Next in importance came the question of Indianisation of the Military and Civil Services, on which the debates were long and frequent. A policy of Indianising eight units of the Army was announced, but it did not prove satisfactory, and the complaint was loudly made that the Government were going back on the proposals previously moved in 1921 by Sir Sivaswami Aiyer and accepted by them. The Assembly here again detected the "hidden hand" of the Secretary of State. The Civil Services attracted hardly less importance. Though not complete yet substantial Indianisation was demanded, the communalists asking for the representation of minorities.

The problem of State versus Company management was finally settled in favour of the former, while a policy of protection of the discriminating variety was accepted for the first time by the Government as a goal to be pursued for industrialising India. The decision was come to after a long searching of hearts, as Mr. Innes, the Commerce Member, put it. Industrial finance was on the tapis. Statistical accounts in better form, indicating the industrial potentialities of the country, were asked to be published. Irrigation was in the picture but being a provincial subject was only kept in the background. Rural reconstruction engaged a few hours' academic debate in the Council of State. The mercantile section of the legislators paid a good deal of attention to the policy of stores purchase, insisting that the State should take the opportunity to make its purchase to assist Indian industries and, also, that it should buy in the cheapest market. A heated debate on Government intervention in the Alliance Bank affair elucidated the views of the legislators as to the extent to which they expected the State to intervene in such matters. In the midst of the constitutional activity the fate of the political prisoners who had, on account of the Non-co-operation creed, courted jail was not forgotten, and attempts were made to get the leaders released and the electoral ban on them lifted.

Besides this great activity, the enactments of the Legislature deserve mention, chief of which was the monumental recodification of the Criminal Procedure Code. The Racial Distinctions Act sought to remedy grievances of long standing with respect to the status of European and Indian accused in criminal cases. Social legislation was passed to better the condition of the worker and elevate the status of women.

The question of Indians overseas always stalked the stage throughout the year. The problem of Indians in Kenya followed the Legislature like a shadow. Early in the year, a series of questions were put regarding the franchise of Indians domiciled there and the alleged threat to their lives by a section of the people on the 23rd January, and the last performance of the Assembly was to pass a Reciprocity Bill to which reference will shortly be made. The last days of the first Legislature were thus, as His Excellency the Viceroy regretted in his valedictory address, "overclouded by events regarding the treatment of Indians overseas."

The Viceroy made up for his omission to address the Legislature at the opening of the January session by a lengthy speech at the end of the Simla session, which also saw the end of the life of the first Legislative Assembly. His Excellency highly appreciated the spirit in which co-operation had been offered by those on whom new opportunities of service had been conferred, and advised the legislators not to mind their detractors. He referred to the steady influence the Legislature had exerted on the Executive and the co-operation it had given in times of trouble and agitation. His Excellency alluded to the Kenya decision, and expressed his regret that the Indian view could not have been more completely met. The Reciprocity Bill could not reach, he said, the other Chamber that session and "meanwhile there will be opportunity for further information and reflection." "You know the port to which your ship is sailing; you have set your course; the star by which you steer shines bright before you," thus concluded the memorable address.

The Assembly, after the Viceroy's address, was prorogued to be subsequently dissolved.

Fresh elections were ordered, in which the pro-Council section of the Congress Party took part and won a fairly good number of seats in the Assembly and the provinces except in Madras and the Punjab.

CONSTITUTIONAL DEMANDS.

In 1923 the Legislature followed three plain courses for pressing forward with constitutional changes in popular interests: (1) Direct requests for the amendment of the Government of India Act of 1919; (2) establishment of conventions within the structure of the Act; and (3) modifications of the rules made under the Act. The prominence given to the constitutional problem could be seen from the six or seven major debates that took place in the year in both Houses as occasion arose. The ball was set rolling on the 22nd February when Mr. T. Rangachariar, a prominent member of the Assembly, moved a resolution recommending to the Governor-General in Council to convey to the Secretary of State the Assembly's feeling of extreme dissatisfaction at the despatch, dated the 2nd November 1922. In a speech which he prefaced with the remark that he did not expect anything better from Viscount Peel, Mr. Rangachariar attempted to rebutt the assumptions of the Secretary of State in his despatch. He criticised the view that there was enough room within the structure of the Government of India Act to expand the constitution, and asked why the despatch did not explain how it could be done. The Secretary of State himself, it was added, was not allowing that freedom and liberty of movement to the Government of India which was theirs by right. If the "merits and capabilities" of the electorate were to be tested till another advance could be made, the speaker said, they would have to wait till doomsday, and when the next Statutory Com-

mission met, it would not at that rate find the country fit. Mr. Rangachariar added that if they were to "work the present constitution for a hundred years, they would never evolve anything out of it.". Munshi Ishwar Saran, Sir D. Sarvadhikary, Dr. Gour, and Dr. Nandlal supported the motion. Mr. Moir and Mr. Allen spoke in support of the Secretary of State. The debate had to be adjourned *sine die* owing to the late hour, the Home Member reserving the right of reply if the debate came up again. The significant interjection by Sir Malcolm Hailey of the remark that the Government of India were not a party to the resolution of the 22nd September, 1921, asking for further reforms evoked contradiction from the non-official benches.

Logically speaking, the counterpart of the incomplete debate was taken up so late as July 18, in connection with the resolution of Dr. Gour, who moved that "the Secretary of State be requested to carry out his suggestion contained in his despatch on the subject of further reforms possible under the existing constitution." Taking his stand on Section 19A, 96B (2) and 45A (*a*) of the Government of India Act, Dr. Gour urged that the Secretary of State should relax his superintendence, direction and control over the Government of India, give power to the Governor-General in Council to make rules regulating the public services, and make provision by rules for transfer from among the provincial subjects to the Governor acting with the Ministers. He complained that the Act had not been fully explored and exploited in these respects. The official spokesman challenged the interpretation of Dr. Gour that the despatch referred to any action that was to be taken by the Secretary of State. What the Secretary of State, according to him, meant was that the Legislature should consolidate its position in the country by its own work and substantiate its claim for advance. The Home Member next proceeded to show, with reference to the section singled out by the mover, that even if the changes could be effected, they would not necessarily amount to any increase in the powers of the Legislature. Mr. Rangachariar warned the Government that the co-operation of the non-officials had till then found no responsive echo from the official benches and they were losing faith in the Government. The motion was carried.

Certification Powers.

In September the Assembly once more interested itself in the matter of constitutional progress by supporting Dr. Nandlal's motion that changes shall be so made in the present Government of India Act that the Governor-General in Council shall not use his special emergency powers under Section 67B to overrule the decision of the Indian Legislative Assembly. The speaker referred to the effect of the certification of the Salt Tax on the country and demanded a guarantee that the Act would not be misused and there would be no more "political jugglery." The Home Member, opposing, acknowledged the resentment aroused in the country by the certification of the Salt Tax, but asserted that even on the assumption of misapplication in an instance, a law justifiable in itself, need not be abolished. After quoting precedents, he reminded the House that the necessity of such reserve power for the executive to secure essential legislation had been admitted everywhere, also in India, and that the existence of these powers was the condition precedent when the Government of India Act was passed. "If the resolution were acted up to it would be equivalent to the grant of full control to the Indian Legislature limited only by the power of veto", and it would involve "a radical reversal of the system of transitional Government which has been sanctioned by the Government of India Act." He added that full responsibility could be given only to a legislature under certain conditions, such as an intelligent electorate, which did not exist to-day in India.

That section of the Assembly which refused assent to the "sweeping changes" proposed by Dr. Nandlal's resolution moved a parallel resolution by which it was sought that the words "or interests" occurring between the word "tranquility" and the words "of British India" be deleted, and any certification should be confined only to an emergency imperilling tranquility. The resolution was carried at the adjourned debate the next day, the 10th July, in spite of the official warning that the House was playing into the hands of Non-co-operators. What would happen, in the future, it was asked if the majority in the Assembly consisted of persons who would not be prepared to vote supplies for carrying on the administration?

"A True Second Chamber."

Echoes of the Salt Tax certification were again heard on the 17th July when Mr. Samarth proposed in the Assembly that effect be given, by an amendment of the Government of India Act, if necessary, to the statement of the Joint Parliamentary Committee that they "have so constituted the Council of State as to be a true second Chamber." It was demanded that it should be made obligatory that no money bill originated in the Upper House, or amended in a manner to increase any proposed charge or burden on the people as voted by the Legislative Assembly. Pleading for the proposed restriction, the mover said that the House, *i.e.*, the Assembly, which was more popular and voted the supplies, should have the final voice and the Council of State should have no powers to interfere with taxation proposals as it did in connection with the passing of the Salt Tax. Sir Malcolm Hailey took the opposite view, that the Upper House had never been intended to be excluded from the power of controlling Money Bills, as it also contained an elected majority. He would not accept all the parallels drawn by Mr. Samarth from foreign countries. The House was reminded by another speaker that the Assembly was not yet a House of Commons to claim so many privileges, and the motion would have an undesirable effect on the relation of the Assembly with the other House. A number of non-officials supported the motion, stating that the second Chamber should only be of a revising nature and all trouble should be avoided in the future over the question of money power. After the Home Member, in his reply, repeated his opinion that "the existence

of full powers on the part of the Council of State was justified in the interests of the early divestment of its powers of control in regard to India by the British Parliament and of the harmonious development of India," the House divided, and the motion was lost by a majority of five votes (35 to 30).

Constitutional Conventions.

The second method followed by the Legislature in setting the pace of constitutional progress was, as pointed out at the beginning, the establishment of conventions, which, when once grown, it carefully guards against assaults, real or imaginary. In two previous budget sessions, opportunities had been given to non-officials of raising points of importance under non-voted heads by moving nominal reductions on voted heads. When the new Finance Member on March 13, raised objection to a motion to cut a rupee out of the provisions for annuities and sinking funds under Railways as the item under discussion was a non-voted one, and the President upheld his point, there was quite a commotion in the House that a privilege and a convention was being assailed, and strong remarks about a policy of reaction in the Government of India was made. Sir Malcolm Hailey came to the rescue by announcing an *ad interim* arrangement openly and without prejudice to the future, to discuss on nominal cuts relating to votable expenditure general question relating to non-voted expenditure. For the present the trouble was tided over.

The Assembly lost rather than gained a point on the 19th March, when the President ruled that proposals for taxation, even when brought up in the form of amendments to the Finance Bill, could not be made effective except when moved from the Government Benches.

Sir Sivaswami Aiyar took things further on July 17, when he moved that the Secretary of State should accept a convention of non-interference "in a matter of purely Indian interest where the Government of India and the Indian Legislature are in agreement." He explained his object to be to strengthen the hands of the Indian Government, obviously hinting at the non-official suspicion that the Government was not a free agent in making many important decisions, and the Secretary of State had been interfering too much to the detriment of Indian welfare. The debate had to be adjourned.

Sir Purshottamdas Thakordas, in the Council of State, on the 16th July, moved a resolution for the establishment of a convention by which in case of a financial dispute, the Government of India should not compromise with the Secretary of State without the previous consent of the Legislature in India, and in any such case where arbitration was resorted to the arbitrators of such disputed items shall be the Premiers of the Empire in Conference assembled and nobody else. The resolution was defeated on constitutional and administrative grounds.

The third method followed by the Legislature was that of pressing for modification of rules under the Government of India Act. A gentle stretch for the acquisition of further powers for the people's representative was made in the Council of State by Mr. Phiroze Sethna, then he moved on 21st February that steps be taken to modify Rules 23 (1) of the Rules of Business for the Council of State and the Legislative Assembly and the corresponding question Rule so as to permit the Indian Legislature to take cognisance by resolutions and questions of matters, as for example, the Princes Protection Bill, on which the Government of India had undertaken legislation. Mr. Sethna's main contention was that if they could legislate on a topic they could also interpellate on the same which freedom, he complained, was denied under the present rules. The official spokesman saw no real occasion for the change urged since the relations were guided by treaties and no legislation affecting them would be introduced into either Chamber. They, however, gave an assurance that at the proper moment Government would be prepared to give their most careful consideration to the desirability of modifying the rule on the lines suggested. The resolution was withdrawn.

Several debates were raised and questions put frequently to ascertain the intention of the Government of India. For instance, it was asked whether Lord Reading had forwarded any despatch to the Home Government urging the need of further constitutional reforms. But the questions were not answered in the positive.

Indianisation of the Army.

Next in importance to the question of constitutional advance, the Legislature paid attention to the subject of Indianisation of the Services, both civil and military. The conviction found lodgment in its mind that if the Indian demanded self-government, he must be also prepared for defending his country himself, and to have a foreign civil service under an indigenous Government, it believed, would look anamalous. The necessity, therefore, arose for avoiding a lop-sided development of the Indian polity. Throughout the year the legislators hammered that belief of theirs on the Government of India and Whitehall.

Early in January, the suspicion was voiced that the scheme of early Indianisation of the Army, previously accepted by the Indian Government, had been hamstrung by the new Secretary of State, and it was feared that the question had been shelved for a long time to come. To overcome the suspected reaction and to urge clear steps forward was, therefore, the first task of the Legislature. It would be easy if the work done in Simla and Delhi in this connection were analytically explained. The methods followed were: (1) to suggest changes in the existing recruiting arrangements; (2) to criticise the heavy army expenditure; (3) to ask for the diminution of the European element, correspondingly increasing the Indian if necessary; (4) to urge the grant of King's Commissions to Indian youths of ability and status; and generally (5) to reawaken the martial spirit in the people.

The "unwise, expensive and inequitable" Army Amalgamation Scheme of 1859 came in for a very powerful and learned attack at the hands of Sir Dinshaw Wacha in the Council of State. The speaker traced the "intolerable burden" of the present military expenditure to the Army Amalgamation Scheme, as also the several financial misfortunes of India, and demanded that the dictation of the British War Office should be put an end to. India, he

urged and he was supported by several speakers who followed, should have a European force of her own under the control of her own Government. The Commander-in-Chief, who opposed the resolution, denied the need of a separate force and emphasised it would be more costly and less efficient both as regards its maintenance and recruiting. India, on the other hand, would benefit by having at her service a portion of the British Regular Army. Finally His Excellency denied the dictation of the British War Office, and held that in their army relations with Great Britain, they followed business lines and made no surrender. The motion was lost.

The Indian Budget.

The occasion of the Indian Budget releases an enormous volume of criticism of military expenditure. Nor was the year 1923 an exception. Both in the Assembly and the Council of State, the elected members levelled strong criticisms against the proposed expenditure of 62 crores of rupees, in spite of the fact that it indicated a cut of 5½ crores less than the previous budget owing to reductions, immediate and prospective, in the strength of the Army and in spite of the promise of further cuts as soon as possible. The Assembly expressed the fear that the budget would never balance with the military expenditure growing at that pace. Immediate curtailment of the obligation in Waziristan and on the Frontier was pointed out to be the best way out of the bad job. It was freely asserted that the Indian Army was too numerous and too well-trained for Indian purposes, and the real object of maintaining so much efficiency and strength was to utilize it for extra-Indian purposes. Allegations were made that enormous retrenchment could be done in the non-fighting sections of the Army, where waste was pronounced to be prevalent. An equitable and just adjustment of the capitation grants was also urged so as to minimise the drain of money to the British War Office. A plea for the bettering of the lot of the Indian sepoy was advanced by Sir Sivaswami Aiyar, perhaps the most prominent member of the Assembly who patiently studied the Indian military problem. The Commander-in-Chief rather added to the unpleasant impression of the Army about the ever-rising army expenditure by withholding his support to the Inchcape Committee's recommendation that Indian military expenditure should, when normal conditions prevailed, be standardised at 50 crores of rupees per year. He had taken several purely military risks, His Excellency said because there was the greater financial disaster yawning before them. He had accepted the Inchcape "cuts" as the external and internal conditions of India were such as to justify them. He denied that the Army was either too efficient or too strong. Lord Rawlinson held out the hope that the frontier commitments might diminish with the growth of tranquillity in that area. Military expenditure being a Reserved subject, the Assembly could not vote upon it, though several members wished it should be made votable.

Supply of Indian Officers.

The Legislature was alive to the future anomaly of running an Indian or Indianising army with the British officers, and attempts were made by it to pave the way for the advent of Indian officers. It was demanded by a resolution in the Assembly on the 24th January that all vacancies in the Indian regiments be in future filled by Indian Commissioned officers directly recruited and promoted from the rank of Viceroy's Commissioned Indian officers. The Commander-in-Chief while opposing any violent departures from the traditional efficiency of the Indian Army and regretting the possibility of the ultimate elimination of the British officer, welcomed the new position of things they were turning round to, and accepted the view that self-defence should follow self-government in its path. "To progress surely and safely without undue risk or danger to the community at large," was to be the keynote of the Army policy, he added. And this characterised the great announcement Lord Rawlinson made at the adjourned debate on February 17, the object of which was "to give Indians a fair opportunity of proving that units officered by Indians will be efficient in every way."

It has been decided," said Lord Rawlinson, "that eight units of cavalry or infantry be selected to be officered by Indians. This scheme will be put into force immediately. The eight units to be wholly Indianised will be mainly infantry units, but there will be a proportion of cavalry. They will be chosen judiciously to include as many representative types as possible of Indian battalions and cavalry regiments of the Indian Army. Indian officers holding commissions in the Indian Army will be gradually transferred to the Indianising units so as to fill up the appointment for which they are qualified by their rank and by their length of service, and then the process of Indianising the units will continue uninterruptedly as the officers gain seniority and fitness in other respects which will qualify them for the senior posts." "Simultaneously with the Indianisation of these selected eight units," the Commander-in-Chief added, "Indians who qualify for King's Commission will continue, as at present, to be posted to the other units of the Indian Army. The number of Indian cadets now sent to Sandhurst each year, if all pass out successfully, is more sufficient to replace the normal wastage in the eight units alone." Lord Rawlinson next appealed to the people of India to support the Indian officers of these Indianised regiments "with living and with practical encouragement for by this means only can Indianisation hope to deserve and command success."

The announcement was welcomed and stopped the debate abruptly. The scheme was criticised in some quarters as halting, half-hearted and very limited in scope. The original motion as well as several other amendments fell through.

"Progress not Satisfactory".

But the atmosphere created by the announcement seemed to be only temporary and soon the dissatisfaction at the halting nature of the scheme grew more articulate till on 4th July Sir Sivaswami Aiyar called the attention of the Assembly to express its opinion on the "unsatisfactory nature of the progress made with regard to the Indianisation of the Army." He referred to the big batch of resolutions

previously passed by the Assembly in concurrence with the Government, which he complained had been either scotched or killed. He further complained—and the Government spokesman immediately admitted—that some of the most important recommendations had remained unfulfilled—those relating to the admission of Indians to the commissioned ranks of the Royal Army Medical Corps, the Royal Engineers and the Royal Air Force, the increase to 25 per cent. of the annual total of the number of commissions granted to Indians, and the establishment of an Indian Sandhurst. The changes were put down as large and revolutionary by His Majesty's Government and the view was expressed 'that the proposed reforms would be either unsuitable or impracticable. Sir Sivaswami Aiyar's suggestion of confining the Territorials to Indian Service alone was condemned as ruinous by the Commander-in-Chief, who also added that he could not get Indians into the essentially British units of the Royal Air Force, the Artillery and the Royal Engineers. It was stated that the question of introduction of the economic system of short colour service was still under consideration. The official amendment enabling the Government of India to choose an auspicious moment to reopen the question with the Home Government was defeated and the Assembly adopted Sir Sivaswami Aiyar's resolution.

The Arms Act.

The liberalisation of the rules under the Indian Arms Act so as to allow a large number of qualified citizens to buy and keep arms for self-protection and to give them chances of cultivating a martial spirit has been a constant theme with Indian publicists. A Committee was appointed to go into the question in 1922. It was divided and Lala Sukhbir Sinha proposed in the Council of State, on February 26, that immediate effect be given to the recommendations of the majority. He proposed several alterations which were all rejected by the Council of State.

Compulsory national military training for Indians, the object of which was to revive and broaden the martial spirit in the people and to enable the Empire to draw upon the vast resources of India's manpower, was moved by Mr. Phiroze Sethna in the Council of State on February 16. The official criticism was to the effect that the scheme was unpractical and unnecessary that militarism would be incompatible with the pacific ideals of the League of Nations of which India was a member, and that combined with the mechanical difficulties, the expenditure would be grotesquely intolerable. The resolution was lost.

Indianisation and the Civil Services.

Throughout the period of its existence the Legislature devoted a good deal of its attention to the Indianisation of the Services. As the character of the Government changed, it was held, so should that of the administration. There could not be an Indian Government and a British Civil Service. So immediate stoppage of recruitment, partially at first and completely later on, continued to be urged. The financial difficulties of the Government of India and the other provincial Governments provided a strong argument to the non-official members to urge the replacement of the present "costly European Services" by the cheaper Indian agency. It was feared by some that the fixing of any proportion between Europeans and Indians would only postpone the grant of self-government. The suspicion had got hold of the public mind only in the year in India that "an ultra-conservative Government and a reactionary Secretary of State" were trying to retard the process of Indianisation and the Government of India, it was believed, were bound hand and foot by the dictator at Whitehall. On the other hand, owing to the high cost of living, the changed political circumstances, and the constitutional reforms, the Services were agitating for better pay and prospects and guarantees. Indian politicians believed that in spite of the financial stringency, the demand of the Services would be satisfied and an attempt would be made to perpetuate the existence of the British element in the Services. The Press in England and in India was full of rumours of the appointment of a Royal Commission.

All these suspicions found vent in the course of the discussion of a resolution in the Council of State on 25th January, when Professor Kale moved for the production of the correspondence between the Government of India and the Secretary of State on the question of the improvement of the conditions and prospects of the Indian Civil Service and other Imperial Services, "especially in connection with the appointment of a commission to inquire into the matter." The resolution was defeated at the instance of Sir Malcolm Hailey, who urged that he could not break the traditional confidence which had always been preserved between the authorities at Simla and Whitehall. The Rt. Hon'ble Srinivasa Sastri in the course of the debate put in the plea that the differences alleged to exist between the two authorities should be ascertained in day light, and that the hands of the Indian Government should be strengthened in a matter in which it was at variance with the Home Government, the importance of which action, he said, could not be overrated.

A Royal Commission.

It was in the course of this discussion that the appointment of a Royal Commission was announced. The announcement was a signal for an outburst of criticism in the Council and later on in the Assembly. The terms of reference were not precisely settled but, broadly speaking, it was contemplated that the Commission would be required "having general regard to the necessity of maintaining a standard of administration in conformity with the responsibilities of the crown for the Government of India, and the declared policy of Paliament in respect of the increasing association of Indians in every branch of administration, and having particular regard to the experience now gained by the operation of the Government of India Act, to inquire into the organisation and general conditions of service, financial and otherwise, of the superior Civil Services in India and the best methods of ensuring and maintaining the satisfactory recruitment of such numbers of Indians and Europeans respectively as may be decided to be necessary in the light of the considerations above referred to."

The Home Member, who made the announcement before Prof. Kale's resolution could be moved, had to defend the appointment of the Commission as the resolution was not withdrawn. He advised Indians to take advantage of the liberal scope of the Commission's terms of reference and press their views on Indianisation before it. He endeavoured to disabuse the popular mind of the suspicion that the Commission had been appointed merely to increase the emoluments of the Services and get round the reforms. The non-official opposition, the chief characteristic of which was the unanimity of opinion between Europeans and Indians, opposed the Commission on the grounds of its cost at a time of financial stringency, and of the occasion it would create for increased racial bitterness; It was urged that the motives in appointing this body were other than those officially mentioned, and if the grievances of the Services required to be redressed, it was for a small expert committee of the Government of India to do it and not for a Royal Commission. It was further contended that in opposing the appointment of the Commission by the adjournment debate, the non-officials were really helping the constitutional position of the Government of India on whom, it was repeatedly alleged, the Commission had been forced by the Secretary of State. The Assembly avenged the defeat in the Council of State by carrying the adjournment motion.

Later, the provision in the budget of three lakhs of rupees for the cost of the Commission was successfully opposed in the Assembly on the same grounds and was restored by the Viceroy who exercised his special powers.

A Drastic Suggestion.

On the 24th March, Mr. Venkatapathi Razu, a member from Madras, moved in the Assembly a resolution recommending that with a view to "effecting substantial reduction in expenditure under Service heads, necessary steps be taken for stopping further recruitment for services outside India, excepting the employment of foreign experts on special terms when necessity arises." This whole-hogging resolution was opposed by the Home Member, who pleaded the Royal Commission would handle the task much better than any one of themselves in the Assembly, and it would consider the solution of an Indian standard of pay for the Indian members of the Services now and hereafter as the way out of the financial difficulties. The debate had to be adjourned without much discussion, which, however, ensued on two occasions again.

Mr. Agnihotri (C. P.) moved in the July Session of the Assembly that no alteration in the pay, pensions or other service conditions of the Imperial Indian Services be made before giving the Indian Legislature an opportunity for an expression of their opinion thereon." The mover claimed for his resolution the character of a compromise inasmuch as it did not take away the constitutional right of the Secretary of State to deal with the Services, but at the same time provided that the people's representative should have a say in the matter, particularly (it was alleged) when the emoluments of the Services were being rapidly increased despite the present financial stringency. Dr. Gour moved an amendment that before taking any action on the recommendations of the Royal Commission, an opportunity be given to the Assembly to express its views on the recommendations. Sir Malcolm Hailey denied that Indianisation was being retarded or the Services' pay and pension scales were being disproportionately raised. Leaving a wide margin of freedom for the Government of India to carry out any immediate orders of the Secretary of State based on the recommendations of the Royal Commission, the Home Member gave an assurance that its recommendations would be duly laid before the Assembly. Both the resolution and the amendment, however, were negatived.

Personnel of the Lee Commission.

An opportunity to express dissatisfaction at the composition and personnel of the Royal Commission was taken on the 23rd July when Syed Raza Ali moved in the Council of State that "in order to allay the apprehensions produced in India, it is absolutely necessary to add to the Commission two non-official representatives of Indian public life." The Commission is composed of Lord Lee of Fareham (President Sir Reginald Craddock, Sir Cyril Jackson, Prof. Petrie, Prof. Coupland, Mr. Bhupendranath Basu, Mr. Kaul, Sir Habibullah Khan and Mr. Samarth (in place of Sir Chimanlal Setalvad who was at first appointed but resigned). Mr. Raza Ali complained that the Indian members were in a minority, and that no member of the Legislatures was appointed by the Commission, and of the four Indians two belonged to the provincial service and were never in public life before. The official spokesman said that the composition could not be criticised by any House of Legislature and that place could not be found on it for all sections and interests. Without a division the resolution was negatived.

If the legislators made attempts at Delhi and Simla for increasing the association of Indians with the Services so that in course of time they may acquire the practice of administering India through an Indian agency, they also endeavoured to see that Indians got the best of experience in the most important aspects of the Service—the Secretariat. For this purpose, Mr. Srinivasa Sastri moved in the Council of State, on the 28th February, that "in order to give the Indian members an insight into the larger problems of Imperial administration and policy" at least one such officer should be appointed as Secretary, Joint Secretary or Deputy Secretary in every department of the Secretariat of the Government of India, Mr. Raza Ali subsequently substituted the word "Indians" for the word "Indian members of the Indian Civil Service". Mr. Sastri's contention was that unless a large number of Indians were admitted into the Imperial Secretariat, it would not be possible to prepare Indians as rapidly as possible to sustain their own self-government. Mr. Crerar for the Government held that the criterion of selection by proved merit and ability could not be departed from, and the rights of the European I.C.S. members for secretaryships could not justly be ignored, and he moved an amendment that "Indians should be afforded wider opportunities to become qualified for appointment for the posts of secretary, etc," The amendment was lost and the resolution carried. The popular victory

was hailed with delight on the non-official benches.

At the same place, on the same day, an official amendment was carried as against the original resolution which recommended that a larger number of Indians be employed in the cadre of traffic inspectors in the Transportation Branch of the State Railway in India than is the case at present.

Communal Representation.

Closely associated with the problem of Indianisation of the Services is the problem of communal representation therein. That the services are at present overweighted with particular classes and communities is admitted, such as Brahmins in Madras and Hindus all over the country generally. Representatives of Musalmmans and non-Brahmins, also Anglo-Indians, were always found to be urging the even distribution of the fishes and loaves of office. On the 24th January, Colonel Gidney moved in the Assembly "that the present system of conducting simultaneous examinations for the recruitment to the I. C. S. be changed and a different method so as to give a fair chance to candidates belonging to different communities and different provinces be devised, if necessary, by a limited form of competition. The debate grew hot on the subject and Sir Malcolm Hailey put the lid on the cauldron by making a very much appreciated announcement of Government's policy as follows:—

"The Public Services should be recruited on the principle that they should be filled by the most competent men available. This principle is, however, subject to modification in the interest of the training of Indians in the administration of their own affairs. Full opportunities should be afforded to Indians to qualify themselves for the more important posts in the public services and to demonstrate their fitness for responsible duties. It must, however, be recognised that intellectual qualifications combined with physical capacity should not be the sole test for admission to important posts in the public services. Due regard must also be given to such considerations as character and hereditary connections of candidates both with the Government and with the people with whom their work will mostly lie; while in the present conditions of India, it is essential that there should not be an undue predominence of any one class or caste".

The Home Member affirmed that nomination would be made only in order to secure to some extent the representation of provinces and communities which could not be secured through the open door of competition. The test of character, intelligence and efficiency must always continue in the matter of selection. The motion was negatived.

Provincial Jealousy.

The same plea of communal representation took an unedifying turn on the debate, on the 10th March in the Assembly, for communal and provincial representation on appointments directly under the Government of India. Sir D. Sarvadhikari moved an amendment that "steps should be taken to secure that the services are not unduly overweighted with representatives of any community or province". Chaudhri Shahabuddhaj added at the end of the amendment "and that as far as possible claims of all provinces and communities are considered". The sole arguments of the opponents of the original resolution was that nothing should be sacrificed for efficiency while the supporters retorted that in that case, no objection should be taken to the introduction into the Indian services of those Europeans and foreigners who were more efficient than Indians and that the various parts of the Indian nation should be offered their respective shares for the sake of communal peace and solidarity, provided the minimum of qualifications was satisfied. Sir Malcolm Hailey, who supported the amendments, reiterated the Government's policy and clearly demonstrated how impossible it was to frame any proper regulations to meet the wishes of the framers of the resolution. At the same time, he added that he was aware that if their administration were overweighted by any one community, then there would be an administrative loss. Sir Devaprasad Sarvadhikari's amendment was carried.

Economic Problems.

The Legislature displayed enormous interest in the economic welfare of the country. More than a dozen important resolutions, apart from innumerable questions, were moved in both Houses touching vital matters. The subjects dealt with may be roughly classified into trade and tariffs, industry and agriculture, transport and taxation.

Following, as it did, a series of questions in both the Assembly and the Council of State, it did not come as a surprise when on 25th January, Mr. Lallubhai Samaldas moved in the Council of State for the publication of the correspondence which has passed between the Government of India and the Secretary of State relating to the resolution passed by the Council on the 29th September 1921 with regard to the purchase of stores in England on behalf of India. The mover, who had made the subject his own, like many other Bombay members of the Legislature, gave vent to the suspicion that in spite of the demands of the non-official public of India that stores should be purchased in the cheapest market, in practice it was not the case, and that the Secretary of State being under the undue inducence of English manufacturers bought from them even at higher prices. Finally he reiterated his conviction that orders for the purchase of stores should be placed direct from India if the Indian taxpayers' money was not to be thrown away. Mr. Chadwick, representing the Industries Department, affirmed that the Council's wishes in the matter were being scrupulously carried out and the resolution was withdrawn. But that much remained still to satisfy the mind of the non-officials became clear again when on the 14th March, Professor Kale re-introduced the subject in the Council of State by moving a resolution that effect be given to the recommendation of the Stores Purchase Committee which had reported in 1920, suggesting the gradual reduction and reconstitution of the Stores Department in India with a view to expanding the scope of the work of the latter and to rendering it thoroughly efficient. Mr. Chadwick moved the adjournment of the debate on the plea that

Government had to consider the recommendation of the Inchcape Committee, that in the financial circumstances of the hour, the expansion of the Indian Stores Department be postponed. Sir D. Wacha, opposing the adjournment, forcibly asserted that the High Commissioner in India had to give preference to British goods owing to pressure from the Secretary of State. It was now the turn of Mr. Chatterjee Member for Industries, to deny the statement Sir D. E. Wacha challenging again, re-asserted that the stores purchase policy whether in India or England, was entirely within the discretion of the Government of India whose servant the High Commissioner was. The adjournment was carried.

Indian Fiscal Policy.

Though for years a subject of persistent discussion, the subject of a definite Indian fiscal policy for the rapid industrialisation of the country had been left over by the Industrial Commission owing to several considerations, and a Committee was appointed in 1921 by the Government of India to go into the matter. It reported, by a majority, in favour of "protection with discrimination."

Mr. Jamnadas Dwarkdas, who was a member of that body, accordingly proposed in the Assembly on the 16th February, a number of resolutions on the subject of Indian fiscal policy solely based on the recommendations of the minority. the chief of which was that "a policy of protection be adopted as the one best suited to the interests of India, its application being regulated from time to time by such discrimination as may be considered necessary by the Government of India, with the consent and approval of the Indian Legislature." The Member for Commerce in moving and explaining a parallel resolution as a substitute, laid down that for the first time the Government of India would accept a policy of tariff reform with the sole view of developing Indian industries, but he insisted upon protection being of a discriminatory kind in view of the multiplicity of interests involved, the financial exigencies of the State which depended on import, export and excise duties; the agricultural exporter, and the poor consumer who would be affected by high prices and must be protected against political corruption and the formation of trusts usual behind a tariff wall. The Finance Member, later speaking, claimed that, contrary to what had been originally proposed, the Tariff Board which was to examine the need and extent of protection for any industry, should only be an advisory and investigating body and should not be allowed to usurp the functions of the Executive by changing the tariffs on its own initiative. A number of speakers participated in the debate inevitably bringing in their various views on this comprehensive subject—the retarding effect of export duties on agriculture and the loss to several provinces of their revenue. Sound labour regulations and an equitable distribution of burdens was demanded by Mr. Joshi before industriallsm was allowed to grow under a protection wall. Mr. Seshagiri Iyer, also a member of the minority of the fiscal commission, moved several amendments which covered aspects of protection left out in the original and parallel resolutions. Eventually the resolution of Mr. Innes was carried. A Tariff Board was subsequently appointed to make an inquiry into the need of protecting the iron and steel industry of India.

No noteworthy fiscal changes were made in the Budget for 1923-24. A proposal to levy a duty of benzine and petrol was rejected as impracticable and ruinous to the trade of Burma.

Industrial Development.

Hand in hand with trade and tariffs went the question of the industrial development of India. Any intelligent understanding of the industrial position and potentialities of the country would require a careful study of the census of production, the financial and economic importance of which cannot be overestimated. The statistical publications of the Government of India require a good deal of reform before the public can accept them as readable. Sir Dinshaw Wacha therefore moved a resolution in the Council of State on the 19th February for a census of production of India, suggesting several lines of reform in statistical publications, and he was assured by the Government that a review in the manner required would be undertaken.

Another resolution was accepted at the same place by the Government, which was moved by Prof. Kale and related to industrial finance. The mover wanted a committee of experts to investigate the possibility of State aid to industries, especially by the establishment of banks for the purpose. And yet another resolution was accepted by Government, subject to the financial demands on the Government, which recommended that 25 scholarships tenable for five years at about Rs. 4,000 per head per annum, eventually costing not more than five lakhs annually, be given year after year from the Imperial revenues to Indians of great promise, specially for research work in any part of the world and in any branch of knowledge approved by the Central Legislature. The mover, Mr. Venkatapathi Razu, emphasised the importance of research in securing industrial development.

The Alliance Bank Failure.

The question whether, and if so to what extent, Government should intervene in matters of finance and trade was the subject of a heated debate in the Legislative Assembly in the closing days of that body's existence. The Alliance Bank of Simla had recently failed and the Government had immediately come to its rescue by undertaking a present or contingent liability to the Imperial Bank for losses consequent on the failure of the Alliance Bank. The Imperial Bank was to pay fifty per cent. of their money to the depositors straightaway. A section of the Indian public specially, who indignantly remembered the failure of Indian Banks in 1913 owing, they alleged, partly to the indifferent attitude of the Government of India and the Presidency Banks, now expressed the view that the Alliance Bank had been rescued because it was a European managed Bank. They were incensed that no Indian auditor had been associated in the examination of the accounts of the Bank. They proclaimed that the Government's transaction was illegal and *ultra vires*, and it had no business to pledge the taxpayer's money in the interests of a private institute. Sir Sivaswami Iyer

tabled a resolution in the Assembly censuring the move of the Finance Department in helping the Alliance Bank in the manner stated. His chief argument was that the Government was not justified in taking the step at all as such false moves would land them in bankruptcy. He doubted whether there would have been such a universal failure of credit as Government alleged as the cause of its intervention. Two non-official members differed from the speaker and maintained the view that there should be no objection to Government intervention in industry and commerce at a time of financial stringency. The main official contention was that in truth no risk had been taken and that the intervention had been justified by the results. A panic and a general run on Banks had been avoided. One of the lessons of the crisis, it was argued, was that the Imperial Bank ought to be in a position to come to help in a situation of the sort created by the Alliance Bank failure. But obviously the majority of the House thought the other way and the motion of censure was carried. The next day, the Home Member, owing to the peculiar phrasing of Sir Sivaswami Aiyar's resolution, had to explain that the decision to help the Alliance Bank had been taken by the Government of India as whole, and not by the Finance Department alone.

Agriculture.

Though most of the legislators were from town and few from country, they showed, wherever possible, a fairly good interest in agriculture. Being a provincial subject, it did not engage that attention which it would otherwise have, regard being paid to the fact that nine-tenths of India depends on agriculture. The Upper House represented the cultivator better than the lower, as the former contained members from the landed aristocracy. The subject of rural reconstruction was broached in a characteristically weighty speech by Sardar Jogendra Singh in the Council of State on the 18th July. The resolution had for its object the organisation of agriculture and the formulation of an agricultural policy to include land revenue, village education, co-operative credit and other allied matters. Sir Jogendra Singh mainly contended that agriculture was being taxed being a chief source of revenue to the State, and relief to the ryot necessary. He emphasised that the progress of agriculture should be assessed from time to time, and improvements should be carried by the ryot being taught the benefits of co-operative credit and allied matters. Finally he asked for a committee to investigate the matter. Sir B. N. Sarma made a lengthy argumentative speech in which he maintained that if there had been one subject which had received the constant attention of the Government of India, it was agriculture and irrigation. He did not believe that the rate of land revenue was excessive. He further stated that much was being done to spread the co-operative movement in all its aspects. The technical argument was advanced that under the reforms scheme agriculture was a provincial subject which, however, the speaker followed up with the advice that no single committee could study the varying conditions of the seven and a half lakhs of Indian villages, and it was up to the provincial Legislatures to undertake the agricultural reforms asked for. The resolution was easily defeated.

Previous to this, an occasion to vindicate the irrigation policy of Government and meet the popular fallacy that railways were as a rule given preference over irrigation, had been afforded to Sir B. N. Sarma when in the same place on January 30, the same non-official member complained in moving a resolution that funds be provided for irrigation projects on the same scale as for railways, and a proper expert board be constituted at the central headquarters to prevent delay in decision. The Government member not satisfied with the argument that irrigation was a provincial subject, went to give an assurance that the Central Government would do all it could to expedite schemes where under the rules its sanction was necessary; and the Financial Secretary also promised that Government would find funds to the utmost extent of its borrowing capacity for any well considered scheme of development, particularly of irrigation. The resolution was negatived.

Railway Management.

It caused no surprise when there was a very good attendance in the Assembly to watch and take part in the debate on the 27th February on the highly contentious subject of State *vs.* Company management. Every member seemed to have made up his mind to end the subject once for all, it for a time having been a handy animal. Indian and European opinion in the country was accurately reflected in the House, for the Europeans opposed State management on the plea that it had succeeded nowhere in the world, while the Indian standpoint was the whole railway policy of the Government of India had for years been directed in the interests of Great Britain and her manufacturers, and Indianisation of the service could not proceed under the present company management system. The view was also expressed that the railways should not be considered as a purely commercial proposition if in other respects they served national ends. They could do a good deal to develop indigenous industries by developing communications. The Government of India hardly required any argument to prove that the present system should go out, but they differed from the majority of the non-officials, as the division result showed, in one important particular. Mr. Innes, the Member for Commerce, accepted the amendment of Dr. Gour (the first being Mr. Neogy's which aimed at direct State management, as when the existing railway contracts with them expired) that on the expiration of the East India Railway contract (1924) and the G. I. P. Railway contract (1925) their management should be taken over by the State. He admitted the need of giving a trial to State management in a limited sphere and of utilising the experience thus gained before the other railways were acquired between 1928 and 1950. But he did not like to "bang the door" against any scheme of a well managed Indian domiciled company at a future date, and therefore he moved an amendment to Dr. Gour's "that efforts should be continued to concert measures with the object of handing over one or other of the two railways, after such grouping as may be

necessary, to calculated to give India the benefits of real company management." The non-official majority did not like this "absolutely obscure" scheme. At any rate, they desired that a fair trial should be given to State management, and they carried the day, Dr. Gour's views prevailing in the end.

The present system of Indian taxation offered a good subject for debate in the Council of State on the 23rd July, when Sir M. Dadabhoy moved an inquiry be made into it with a view to its thorough revision "on an economic, scientific and equitable basis, with special regard to the taxable capacity of the people." He characterised the growth of the Indian system of taxation as haphazard. While capable of being expanded in certain ways, he at the same time insisted on the removal of several duties which hindered industrial development. Sir Purshottamdas Thakurdas called the resolution inopportune. Mr. Lallubhai Samaldas held it was not advisable and not practicable. Mr. McWaters on behalf of Government was willing to accept the resolution, in supporting which he laid stress on the need for finding money for the national services, and referred the change in the fiscal policy from revenue to protectionist. Further consideration of the resolution was postponed till the replies stated by Mr. McWaters to have been asked for from the Local Governments had been received and were circulated to the members of the Council.

Indians Overseas.

India has a long time been the chief supplier of manual labour to several British colonies in the East. Coolies have gone out at one time under an indenture, and at another time as free men. There were no doubt many cases in which it was agreed that better treatment should have been accorded to them. As the self-respect of the nation grew within its borders, it was inevitable that the Indian people should also seek to protect the dignity and economic interests of the nationals abroad. Of all such colonies that attracted the attention of the Assembly during the year 1923, the most persistent was Kenya. Almost every time it put in its appearance in the anxious questions of the members. The year started under a cloud. Elections were impending in Kenya to the local Legislative Council. The Indian residents strongly expressed the view that they could not take part in them until the nature of the franchise whether it was a communal or common—they insisted on the latter—was settled. The European residents, so it went, had threatened violence if the claim of Indians were conceded. Indian feeling ran high at this, and was given expression to in the Assembly through the medium of questions put by Mr. T. V. Seshagiri Iyer, leader of the Democratic Party. The Government of India undertook to do all that could be done to prevent any mishap. The general elections in Kenya were accordingly for the time being postponed.

A debate was conducted in a tone of studied moderation in the Council of State on the 5th March on the same subject. Mr. Srinivasa Sastri moved a resolution that the view of the Council should be conveyed to His Majesty's Government by telegram, "that no settlement regarding the political rights and status of settlers in the Crown Colony of Kenya would satisfy the people of India unless the Indians in Kenya were granted full and equal rights of citizenship with the European settlers." The resolution also protested indignantly against the reported threats of violence on the part of the Europeans and hoped effective steps would be taken to prevent any such outbreak and necessary protection would be afforded. Finally it recorded the emphatic conviction of the Council that no restrictions on new immigration from India would be acceptable to public opinion in India. The Revenue Member accepted the resolution and said negotiations were still proceeding on the subject of Indian franchise in Kenya.

Ominous Reports.

By the beginning of July, ominous reports began pouring in from England, where three deputations, one from India led by Mr. Sastri, and two from Kenya, one of the European settlers and the other of the Indian residents were at work going about the India Office and the Colonial Office discussing the Kenya question. Constantly plied with telegrams from London that the Indian case was in danger, the Assembly was having very anxious moments. A resolution was therefore moved on the 21st July by Mr. Seshagiri Iyer, with the help of Government who specially set apart a day for it, which ran as follows:—"That this Assembly being in full accord with the claims advanced by the Indian residents in Kenya in respect of franchise, immigration, segregation, and the Uplands and similar matters, recommends the Governor-General in Council to be pleased to move the Home Government to concede those claims." A large number of Indian members took part in the debate. They said the Empire was in danger if Indians in Kenya were to be treated as outcastes, hoped justice would prevail and not the narrow considerations of race and colour, and wished that a long view would be taken of the whole matter. Some talked of taking retaliatory measures, which were deprecated by others.

Just a few days before its dissolution and after a few days of the unanimous acceptance of this resolution, came the news of the decision by the British Cabinet. The Indian case, it was held here, had been lost on the major issues of franchise and the Uplands. Indignation rose to a pitch, which was reflected in the Assembly passing on the 27th July the Reciprocity Bill of Dr. Gour in less than five hours. The Bill was aimed against the inhabitants of the Colonies which discriminated against Indians. Government attempted to get it circulated, but they failed. But they succeeded to the extent of making its original mandatory character changed into permissive. Several other material alterations were made.

Motion for Adjournment.

A motion of adjournment was moved in the Council of State on the 27th July to discuss the Kenya decision. The mover, Sir M. Dadabhoy, said the Indian cause had been lost on almost all the important points, and desired the Government of India to convey to the Imperial Government their deep sorrow and profound disappointment at the decision. Stout support was lent

to the mover by many Indian speakers. The member in charge of the subject, while identifying the Government with the country in its disappointment and sorrow, held that there was still no ground for alarm or pessimism, and hoped that immigration into Kenya would not be directed against Indians in particular. Here the curtain was rung for the year on the unfortunate subject.

Indian labour being required in Ceylon and Malay States and Mauritius, the Government, under certain conditions, proposed to facilitate emigration. Two resolutions were accordingly moved and passed in both Houses. Several amendments of non-officials to alter the conditions in the contracts proposed were not accepted, while a motion to appoint a committee of inquiry to measure the effect of fresh Indian immigration on the condition of Indians already settled in Mauritius was withdrawn after Government's assurance that they would look into the matter.

Pressure on League of Nations.

On 12th July Sir D. P. Sarvadhikary called the Assembly to accept in resolution recommending the appointment of a committee with a non-official majority "to consider the question of continuing the existing financial and other support by the Government of India to the League of Nations, specially in the light of the grievances of Indians in the Mandated Territories of Tanganyika and the ex-German Islands of the Pacific Ocean." Frankly did the member for Calcutta confess that his object was to put Imperial pressure and the pressure of the League of Nations on the offending units in order to secure justice for Indians. But the opposition became general in the non-official benches and the remedy was held worse than the disease. Sir B. N. Sarma stated that the Government of India were busy making representations on subjects similar to those maintained in the resolution, which was withdrawn.

Political Offenders.

The release of political offenders who had recently courted jail figures a good deal in the questions and debates of the legislature, specially in their latter days. After his resolution "that early steps be taken to amend the electoral laws so as to enable a member of the Council of State to seek election to other legislative bodies constituted under the Government of India Act of 1919" was withdrawn on the 12th March, two days later Mr. Syed Raza Ali moved in the same place that the electoral rule laid down that a person convicted of a "political offence involving a sentence of six months was ineligible for election to any legislative body be modified". Non-official opinion was divided on the subject, while Government opposed it as a gratuitous concession to unwilling persons who had no respect for the legislatures. It was, however, announced that the question of making more elastic the rules relating to the removal of disqualifications arising out of criminal convictions on a comprehensive basis without any reference to particular categories was engaging the attention of Government.

An attempt was made on the 11th July by the Democratic Party of the Assembly through its President Mr. Seshagiri Iyer, to raise the question of the release of political prisoners. He moved "that at an early date Mr. Gandhi, Hasrat Mohani and Mr. Mahomed Ali and others who were convicted at the Karachi trial, be released." Conciliatory methods, said Mr. Aiyar, would pacify the situation aroused by the arrest and incarcerations of the Non-co-operation leaders, specially that of Mr. Gandhi, whom he called "a great asset in favour of peace and tranquillity, law and order". Sir Malcolm Hailey, in opposing the resolution, denied that Mr. Gandhi's release would ever make for peace, or it would be in the interests of the country. He was still a danger. The Home Member described the Ali Brothers as advocates of violence. He concluded by saying that the present situation did not justify the step proposed. On the point of the release of Lala Lajpatrai, which was subsequently added to the resolution he said it was a purely local question. The words "Maulana Mahomed Ali and others" were omitted in the resolution by an amendment. The resolution itself was defeated after a fairly full debate.

Miscellaneous Subjects.

The subject of stopping traffic in women and children raised a gentle-heat-wave at the Delhi session of the Assembly when Government succeeded in carrying a motion, the object of which was to get re-considered by the local Governments and the public amendments which had been made by the Assembly in sections 362 and 368 of the Indian Penal Code by which the age of consent was raised from 16 to 18. Government were warned not to go against public opinion on a delicate social subject like the one under consideration.

The ever-green of Indian politics, reservation of compartments in railways for Europeans and Anglo-Indians, once again appeared on the 10th March when a member from Sind moved for its abolition. On behalf of the Railways it was submitted that the question, little as it was, should not be made a racial one, and it hoped time would set everything right. The motion was withdrawn.

On the undertaking of Mr. Hindley, the representative of the Railway Board, that the effect of the last increase in third class passenger fares would be carefully watched and the Railway administration would be advised to reduce them if experience showed that they were greater than the traffic could bear, a resolution that on all State railways return tickets for first, second and inter. class passengers be issued at a fare and a third during the Puja, Christmas and Easter holidays and fares for third class passengers be reduced by one-fourth immediately, was withdrawn.

The minor administration of Ajmere-Merwar figured in the Council of State on the 21st February when Mr. Syed Raza Ali demanded by a resolution that if there was no scope for the realisation of the political aspirations of the people of that tract under the present administration, it should be amalgamated with the United Provinces or any major province. At any rate, the Hon'ble member wanted an inquiry. The Government of India announced that the U. P. Government were not willing to have the area under them and further consideration was proceeding. The subject was dropped.

Legislative Work.

No one can accuse the last Legislative Assembly and the Council of State of want of patience, industry and capacity with regard to legislative work. Containing a strong legal element, the Legislature always interested itself in the reform of the law in all its aspects, political, social and economic and general. In the Delhi session, 24 Bills were passed, and in the Simla session 19; 29 Bills were pending before the Legislature when the Delhi session closed and when the Simla session closed. But for the very very large time that that monumental piece of legislation, the Criminal Law Amendment Act took up, some of the Bills finally pending would have been disposed of.

In the domain of law proper, the important Acts passed were:—The Malabar (Completion of Trials) Act, the Repealing and Amending Act, the Indian Official Secrets Act, the Indian Penal Code (Amendment Act), the Code of Criminal Procedure Amendment Act, and the Land Acquisition (Amendment) Act.

In the domain of general (official) legislation the following Acts were passed:—The Indian Lunacy Act, the Indian Boilers Act, the Indian Ports (Amendment) Act, the Cantonments (House Accommodation) Amendment Act, the Indian Naval Amendment Act, the Prisoners Amendment Act, the Indian Territorial and Auxiliary Forces (Amendment) Act, the Indian Army (Amendment) Act, the Indian Electricity (Amendment) Act, and the Code of Civil Procedure (Amendment) Act.

In the domain of financial legislation, the laws passed were:—The Cotton Transport Act, the Indian Paper Currency Acts, The Indian Cotton Cess Act, the Indian Income-tax (Amendment) Acts, the Government Savings Banks (Amendment) Act, the Indian Merchants Shipping Act, the Indigo Cess (Repealing) Act, and the Annual Finance Act (Budget).

In the domain of social legislation, the laws enacted were:—The Criminal Tribes Act, the Indian Mines Act, the Workmen's Compensation Act, the Married Women's Property (Amendment) Act, the Special Marriage (Amendment) Act, the Kutchi Memons (Amendment Act, the Charitable and Religious Trust (Amendment) Act, the Mussalman Wakf Act the Legal Practitioners (Women) Act, and the Code of Civil Procedure (Amendment) Act.

It should be remembered that in all these domains several Bills were introduced which were rejected by the Houses, and which, however, should be remembered along with the Acts that were passed in estimating the work of legislation done by them.

Criminal Law Amendment.

Only a brief survey is possible of all this work The *Magnum opus* of the Legislature was undoubtedly the Criminal Procedure Code (Amendment) Act. After a long and searching debate in which the proposal to postpone the consideration of the Bill, as it had been passed by the Council of State in September 1922, on various grounds, it was taken in hand and dragged its weary length into March. Several clauses evoked strong opposition and many amendments were made. The officials opposed them whenever they thought the interests of justice would be in peril if they were accepted; the non-officials while expressing the same views aimed at reducing the 'zoolum' of the police. The recent abuse of certain section of the Code for political purposes such as 108 and 144 Cr. P.C. encouraged the non-officials to put forward several restrictive changes, which, however, did not succeed. The Assembly made quite a number of amendments to the Bill as passed by the Council of State of which all were accepted by the Council when the Bill was referred back to it except four. These four were finally accepted by that body before the Bill was passed into Law.

It took nearly a decade to have the Criminal Procedure Code amended and the work engaged the minds of some of the best judicial and legal elements of the country. While the changes in individual sections like 162, 195 and 406 require attention, the Code on the whole was considerably improved.

Racial Distinctions Act.

The next Act in importance was what popularly is known as the Racial Distinctions Act the Criminal Law Amendment Act), which ought to put an end to several claims which Indian public opinion thought Europeans in India had enjoyed to the detriment of the interests of justice. It was essentially a piece of compromise legislation and proceeded to level up the Indian to the special position of the European while it also reduced or abolish some of the latter's privileges. Under the new law, Indian magistrates (first class) can try Europeans and *vice versa*. The death penalty can be imposed on an European by a Sessions Court. In a jury case involving racial considerations, the accused can claim a majority of his own countrymen to be empanelled, and an appeal lies to the High Court. Provisions are added by which the right of *Habeas Corpus* is extended to all persons including Indians. The Assembly succeeded in providing appeals against sentences of whipping. But for the fear of the Bill being wrecked, the Assembly had to accept two reservations made by the Secretary of State in the Racial Distinctions Committee's Report (on which the Bill was based) in respect of the definition of a "European British subject" so as to include the Colonials, and a provision to the effect that in the case of persons subject to the Naval Discipline Act, the Army Act or the Air Force Act, when accused of certain offences, the Advocate General would be bound, if instructed by a competent authority to move the High Court for the transfer of the case to that Court and that Court would thereupon be bound to do so.

Lala Girdharlal Agarwala's Bill to repeal the Criminal Law Amendment Act was intended to do away with the "repressive" legislation that was still remaining on the Statute Book. He contended that the Act was no longer necessary and has recently been abused by having been applied to Congress Volunteer Associations, whose creed was non-violence. Sir Malcolm Hailey contended that bloodthirsty anarchists were still alive in India and the Executive could not afford to forego extraordinary powers on certain occasions. Permission to introduce the Bill was refused.

Creation of Indian Bar.

Mr. Rangachariar met with a different verdict from the Assembly when he moved a Bill for the creation of an Indian Bar and the abolition of distinctions between various branches of the profession. The Government of India, in view of the many considerations involved in it, allowed the Bill to be introduced without opposition and consented to appoint an authoritative Committee, which has since been enquiring into the matter.

The Code of Civil Procedure Amendment Bill was passed (Section 60) by which the limits within which the salary or allowance of public officers and servants of railway companies and local authorities while on duty are protected from attachment in execution of decrees raised.

The privilege of objecting to the proposed acquisition of a land for a public purpose before it is finally decided upon is granted to the owner by the Government's amendment to the Land Acquisition Act.

Mr. Seshagiri Iyer's Bills to amend the Hindu Law so as to include certain classes of heirs hitherto excluded from inheritance under the Hindu Law and to alter the order of succession under the Hindu Law in favour of certain classes of heirs in certain parts of the country were postponed for further consideration.

The first Assembly and the first Council of State will be remembered for the charter of social and economic justice which they legislated for the manual labourer. The Workmen's Compensation Act, which is to come into force from July 1924, lays down for the first time in India the principle that workmen should receive compensation for injuries suffered from accidents arising out of and in the course of their employment. It applies to workers in factories and mines, railways and trams, certain classes of seamen and builders, dock labourers, telegraph and telephone linesmen, underground sewage workers, men of fire brigade, etc. The exception is persons who receive more than Rs. 300 unless they are manual or railway workers. There are such conditions as drunkenness, negligence, etc., which disqualify an injured person from compensation. The Act is graduated to apply to cases of death, permanent injury but not death, and loss of earning capacity. It is framed as to reduce the scope of litigation as it provides for the administration and settlement of disputes by special commissioners. The Act is in no way comprehensive, but as a beginning it is considered by public opinion a great step in advance.

Progressive prohibition of child work in mines is laid down by the Mines Act, and it will be amplified when conditions permit, to extend to women. The hours of labour have been reduced to 60 hours above ground and to 54 hours below per week.

Another Act aims at the suppression of traffic in women and children. It may be stated in this connection that the Bill of Dr. Gour to raise the age of consent in case of rape (Indian Penal Code) was rejected by the Assembly on introduction;

Married Women's Property.

The improvement of the position of women engaged the attention of the Legislature a good deal. A Bill was passed into law by which the Married Women's Property Act was so amended as to provide that a policy of insurance expressed on the face of it to be for the benefit of the wife or the wife and children of the insurer shall automatically become a trust for their benefit. By the amendment of the Legal Practitioners Act, women are enabled to practice in law courts when properly qualified. Dr. Gour's Bill to amend the code of Civil Procedure in such a manner as to abolish imprisonment in the civil jail as a method of enforcing decrees for the restitution of conjugal rights was passed into law.

Dr. Gour has also linked his name with a famous measure, the Special Marriage Amendment Bill, which enables persons professing the Hindu, Buddhist, Sikh or Jain religion to marry under the Special Marriage Act of 1872 without being forced to declare that they do not profess those religions respectively, and applies the provisions of the Indian Succession Act to the property of such persons and their issues. In its final form the Act was a compromise one.

The Hindu Ceremonials Emoluments Bill, the object of which was to remove the obligation to pay fees to a hereditary priest, which is enforced in several parts of India, whether his services are required or not, was passed by the Assembly but thrown out by the Council on the plea that in destroying vested rights, it did not provide compensation.

Dr. Gour withdrew his Adoption Registration Bill. His motion to refer the Hindu Coparcener's Liability Bill to a select committee did not succeed.

The only piece of Muslim Legislation for the year was the Mussalman Wakf Act by which, in the provinces in which it is applied, the Muttawallis of all Wakfs are compelled to furnish within a specified time full particulars relating to the trust and to subject the accounts of the trust to an annual audit by qualified accountants.

The Bill of general human interest was the abolition of Transportation, which was abruptly dropped with a view to further discussion. It is intended that the Bill should be widened to imbibe the spirit of modern penology.

The Cantonments Bills aiming at the liberalisation of the administration of these areas could not be handled by the Council of State after its passage in the Lower House.

Two Bills of an entirely different class deserve mention. The Mahendra Pratab Singh Estates Act, which provides for the forfeiture of the estates and other property of Mahendra Pratab, a revolutionary now outside India, and for their grant, subject to conditions, to his son, is the first Act of Attainder passed by the Indian Legislature.

The Immigration into India Bill (the Reciprocity Bill referred to under Indians Overseas—Kenya) was passed in that haste at one sitting of the Assembly on the heels of the Kenya decision. It attempts to regulate the

entry into and residence in British India of persons in other British possessions, who shall have no more rights and privileges in India than Indians in those respective countries. It has still to win the approval of the Upper House.

The Financial legislation is dealt with under the head of Finance.

The Financial Conditions.

The year 1923-24 did not prove an exception to the statement of the late Lord Bryce that the chief difficulty of the Anglo-Indian administrator is finance. The anticipated deficit of nine crores had nearly doubled, revenue having fallen by 12¼ crores as follows:—

Posts and Telegraphs ..	.. (·94 crore)
Customs	.. (3·12 crores)
Income-tax	.. (3·4 crores)
Railways	.. (5·86 crores)

This was the fifth year of deficit, the accumulated total being 100 crores. (The Provincial Governments, it may be remembered in this connection, were not doing bettor.) Thirty-one crores of the deficit had been covered by the operation of the printing press, thus starting the vicious circle of taxation by inflation. The remainder amounting to 69 crores had been raised by borrowing. Moreover to the extent of 22 crores the borrowing had taken the form of issues of Treasury Bills to the public, "which are an evil even in England where the money market is much more elastic than in India." The continued deficits were impairing India's credit abroad. As to the public debt, since 1914 the total had increased by 370 crores and the unproductive debt by 227 crores. Borrowing as an instrument of relief could no longer be safe or reliable. The only way out lay in the country meeting her expenditure, whether on capital or revenue account, out of her own savings.

In preparing the estimates for the next yea 1923-24 these very grave considerations had to be taken into account. An expert had been brought out from the British Treasury, and Sir Basil Blackett promptly addressed himself to his task only to find himself astonished at what he called the Rake's Progress. Lord Inchcape, another famous expert, had also been brought out to wield the retrenchment "axe," and his committee's recommendations, before they published, were partly incorporated into the new Budget.

In his Financial Statement, the Finance Member, at the very beginning, ruled out the question of stabilising the currency as premature He warned against a higher rate of exchange as making a considerable difference to interest charges on the sterling debt, and as in all likelihood involving a restriction of India's export trade and a readjustment of internal prices.

The total gross expenditure including the working expenses of the commercial departments he estimated to be 204¼ crores or 11 crores less than in the previous Budget. The gross revenue was estimated at 198¼ crores, leaving on the existing taxation, a deficit of 5.85 crores. In respect of ways and means, the total liabilities were estimated at 67 crores including the railway capital outlay of 3[illegible] crores, loans to provincial Governments 1 crores, discharges on Treasury Bills 5½ crores, and of funded debt 5 crores. The loans next year were assumed for the estimates at £15 millions in sterling and 25 crores in rupees, though the exact method of effecting the remittance was not settled.

The Central Budget could not yet be balanced, though the total deficit of 5·85 crores had been reduced to 4·26 crores by crediting to revenue the interest on securities in the Paper Currency Reserve, which method was approved by the Assembly in 1922-23. While therefore the talk of provincial contributions being reduced for the present was not a practical proposition at all, new taxation became necessary to make up the uncovered deficit. It was not safe, said the Finance Member, to depend on any possible "cuts" being made on the basis of the Inchcape recommendations by the help of which a lump reduction of Rs. 40,27,000 had been made in the budget. Amidst cries of "No," "Never," the Finance Member next announced that the only practicable tax was the salt tax, which he proposed to double. It must be unpleasant, he concluded, but was preferable to recurring deficit and insolvency.

The usual discussion on the budget opened on the 5th and continued on the 6th March. The criticism of the military expenditure was only in severity exceeded by the criticism of the salt tax. The proposal was condemned as politically unwise and economically burdensome. A reduction in the amount of the tax was suggested by a few. A temporary surcharge of half an anna per rupee in respect of income-tax, super-tax and customs collections was suggested, also a four anna duty on silver and an export duty on petrol and jute, all of which were unacceptable to the Treasury Bench.

The military expenditure was considered too high, and it was urged there was still room for retrenchment. Introduction of Indians into all the branches of the Army on a cheaper scale was recommended. The present inequitable system of capitation grants was condemned, as also the policy of occupying Waziristan and civilising the Mahsuds. On the other hand, reduction in the passenger fares and stabilisation of the exchange were pressed.

His Excellency the Commander-in-Chief, in reply, said that large reductions had been made in the troops for economy's sake and he could not go further. He would not give any hope that military expenditure would be reduced to Rs. 50 crores, as the Inchcape Committee had desired. He endorsed the non-official view about capitation grants and held out hope that the financial commitments in Waziristan would be reduced.

Winding up the debate, Sir Basil Blackett examined and rejected all the alternative proposals, repeated that further cuts were impossible and asserted that the salt tax still held the field as economically the least harmful. He plainly disliked as mere easy manipulation the suggestion (made by Mr. Samarth) to transfer certain charges from revenue to capital expenditure; it would merely mean, he said, the piling up unproductive debt which had already grown to be Rs. 224 crores.

The Council of State also discussed the Budget on the 7th March. The salt tax was again opposed here, among other things, as being conducive

to the reduction of the vitality of the poor people and their cattle. The alternative suggestions were made of capitalising the railway annuities, levying a duty on imported iron and steel, and a surcharge on gross shipping freights. Finally an expenditure control committee was suggested.

The demands for grants were proceeded with in the Assembly from the 12th to the 17th March. The nett revenue and the nett expenditure in the estimates as they stood at this stage were Rs. 1,26,61,71,000 and Rs. 1,30,87,92,000 respectively.

At the outset the Assembly reasserted its right to discuss, though not vote upon, non-votable items, which according to an announcement of the Home Member just then made, the Assembly could not touch. Nominal reductions were moved in several of these departments such as the Political Service and the Government of India Secretariat, to ascertain the policy of the Government with regard to the Indianisation of the Services.

The Assembly finally made the following reductions:—

	Rs.
Customs	4,00,000
Railways	50,00,000
Railways	1,14,00,000
Government Administration ..	5,10,000
Stamps	1
Miscellaneous	3,00,000
Total ..	1,76,10,001

The Governor-General had to certify and restore two items among these. At the instance of Mr. Samarth, the Assembly had carried the suggestion to transfer the sum of Rs. 1,14,00,000 under Railways from revenue to capital expenditure. As pointed out in the course of general discussion, Government looked askance at the soundness of the proceeding and it was restored to where it stood in the Budget as presented on the 1st March. The item under "Miscellaneous" related to the Public Services Commission. The debate for omitting this item, which was based on opposition to the appointment of the commission, was on the same lines as the previous debate. (See under Resolutions.) Thrown out by a very narrow majority, the item had to be restored by the Governor-General.

The Salt Tax Enhancement.

On the 19th March, Sir Basil Blackett presented the Finance Bill which embodied only one new proposal, namely, the doubled salt tax (Rs. 2-8 per maund). The deficit at that stage was calculated to be Rs. 3,68,83,999, considering the cuts made by the Assembly.

A long, strenuous debate followed on the proposed enhancement. An informal conference to secure a formula of agreement failed, and the official defence grew more warm in which the economic soundness of the tax was maintained. Three annas per head per annum was considered as the lightest of light burdens at a time of falling prices. There was no more room for retrenchment. To present a deficit Budget to the world once again was not a thing worth contemplating. It would certainly impair India's credit and would raise India's interest payments on borrowings in and out of India. Finally the mild threat was held out that, if the tax were rejected, the Viceroy would be involved in a heavy responsibility for coming to a decision on a question of so momentous a nature. On the other hand, the opposition maintained that the salt tax was really burdensome. Politically, it would be unwise and prove a "messenger of revolution." Constitutionally it would be a retrograde step since the Legislature should be free to vote supplies as it liked. It was hinted that behind the proposal there was the dark design of standardising the expenditure at that year's level, the course of retrenchment automatically coming to an end.

An amendment to raise the tax to two rupees a maund in place of Rs. 2-8-0 as suggested by Government was rejected by 55 votes to 48, and finally Mr. Rangachariar's motion rejecting the proposed enhancement and maintaining the present rate (Rs. 1-4-0) was carried by 59 votes to 44. No chance was allowed for alternative proposals, among which was one by Sir Montagu Webb for drawing upon the Gold Standard Reserve, a proposal which the Finance Member condemned as the most unsound of unsound suggestions. The Finance Bill as amended by Mr. Rangachariar (rejecting the salt tax enhancement) was then carried.

On the 23rd March the Council of State restored the rejected item at the instance of the Government, but not before the objection was raised, chiefly by Sir Maneckji Dadabhoy, that over money bills the Upper House should not be brought into conflict with the Lower which was the more popular.

On the 28th March, the gloom thickened when the Assembly was given an opportunity to reconsider its decision by the Finance Bill as amended by the Council being once more placed before it. "Balance the Budget," was the slogan of the Finance Member. The opponents argued and appealed. They said they could not separate the political from the financial aspects of the matter. Government were reminded of their previous promise that if any new impost were to be levied it would be by the mandate of the Assembly. What had happened to it now? Was the generosity of the Assembly in voting several crores of taxation in the two previous years to be rewarded with this sort of treatment? Were the allies of Government to be sacrificed to the interests of the non-co-operators? How were the Reforms successfully to work? Did not, really speaking, Whitehall press for the tax and Delhi simply obey? Was not the money to be got out of the salt tax to be spent on a more forward policy on the Frontier? Had all possibilities of alternative taxation been explored? Would India's credit be so badly affected as was represented if the Budget were left as it was? Was not the deficit after all an "office-made," paper deficit?" All these and a number of other questions were asked, and all these were answered from the official benches. While denying that the Reforms would break down if the enhancement were decreed by certifi-

cation by the Viceroy, the Home Member contended that the powers of certification were not "kept for show, but for use."

The enhancement was again rejected by the Assembly by 58 votes against 47.

The salt tax at Rs. 2-8-0 as originally proposed was subsequently restored under the certification powers of the Governor-General, who issued a lengthy communique explaining his proceeding.

The Viceroy's action was debated in the House of Commons at a later stage, and was supported by Parliament.

Supplementary Grants.

The autumn session of the Legislature has not usually much financial work to do except passing the supplementary grants, though last year two Financial Bills were passed.

The Assembly first addressed itself to a formal task, that of regularising expenditure previously incurred in 1921-22 and it had little to offer by way of Government statement as the Public Accounts Committee of the Houses had already scrutinised the administration of funds; only it was desired that the appropriation reports should be fuller in details and be published earlier.

The excess grants as agreed to by the Assembly were:—Expenditure chargeable to revenue, Rs. 1,95,00,183 and disbursements of loans and advances, Rs. 2,98,32,976.

The supplementary grants were then taken up. The item of "opium" caused a heated debate. While Mr. Rangachariar opposed it on the plea of "Grievances before supply," Sir Deviprasad Sarvadhikary opposed the encouragement of cultivation even by an acre of opium on moral grounds. Government pleaded they were doing their very best to reduce poppy cultivation, and the Finance Member pleaded for a spirit of co-operation to work the Reforms, since an obstructive spirit would impede rather than accelerate the country's constitutional advance.

The motion was agreed to.

Financial Resolutions.

We may now turn to the financial resolutions and legislation of the year under review.

The lump sum contributions which the provinces have to pay to the Central Government are admittedly a drain on the resources, especially when they require large sums of money for the nation building departments; nor have the contributions been properly proportioned to the capacity of the provinces. Madras and the Punjab have a serious grievance in this respect while, out of sheer want of solvency, Bengal had to be excused payment of her share for three years. The Bombay Presidency's desire to have part of the proceeds of the income tax credited to her share has not been met.

The wiping out of the contributions being considered a necessary step in the process of the financial stability and the working of the reforms in the provinces, Mr. M. K. Reddi moved in the Assembly, on the 22nd February, that these contributions should be abolished in the course of six years. The Government opposed the resolution as inopportune coming as it did before the budget (March 1), and maintained that the Central Budget must be first balanced, for which all efforts were being made, and when their resources were declared sufficient, the present contributions could be withheld by the provinces. There was a clean division of opinion among the non-official members according to the provinces they represented; Madras and the Punjab went in for the resolution, Bengal and Bombay were against. The motion was for the present shelved by adjournment.

The Ackworth Committee in recommending the placing of Indian railways on a purely commercial basis had strongly emphasised the separation of railway from general finance. Government desired an open debate in the Assembly on this rather important subject, but that body, in view of several complicated issues involved in the subject, allowed postponement of the debate. It wanted to see the Financial Statement for the year and the Inchcape Retrenchment Report before coming to a decision. One of the elements that played its part in this decision was undoubtedly the fear that if the finances of the railways, over which the tax-payer had lost a good deal in former years, were separated from the general finances, the latter would not be able to get anything from the railways just at a time when they were beginning to pay a dividend.

The maintenance of the stability of the Indian exchange was the subject of a resolution in the Council of State on July 16, when Sirdar Jogendra Singh moved a resolution to make the pound sterling legal tender in India with Rs. 15 to the pound and abolish the theoretical legal tender of Rs. 10 to the pound. Among other reasons, the Finance Secretary urged that no exchange could pretend to permanence or stability in the very unsettled conditions of the world at present. The resolution was withdrawn.

The Council of State, on the 17th July, refused to follow in the footsteps of the Assembly to reduce the daily allowances to which the members were entitled on the ground of the Council's greater dignity and privileges.

Now as regards the financial legislation of the year. The Indian Stamp Amendment Act of July 1923 will be remembered for one feature of the discussion that arose on it. Mr. Rangachariar attempted to organise opposition on the sole ground of "Grievances before supply," that is, as a protest against the certification of the salt tax which had been rejected by the Assembly in the previous March. But the member gained few adherents to his creed of "non-co-operation," and the talk of refusing the Supplementary Budget, which had filled the air before the session met, vanished for good. As to the Bill, its object was to raise more

money for the provinces which were chiefly to benefit by the enhanced rate of duty on demand promissory notes. The new scale is one anna in the case of notes of a value not exceeding Rs. 250, two annas in the case of notes of a value exceeding Rs. 250 but not exceeding Rs. 1,000; and in other cases, four annas. Thus has disappeared a long existing anomaly of a flat rate of one anna for all promissory notes, be they of one rupee or of ten thousand rupees.

A Bill, at once popular and necessary, was enacted in July by which the expansion and contraction of the Indian Paper Currency was sought to be made automatically coincident with the fluctuations of the export and import trade, *i.e.*, seasonal market. The Indian Paper Currency Amendment Act authorises the increase from five crores to twelve crores of rupees the amount of emergency currency which may be issued against bills of exchange. The Act is also expected to reduce the working costs of the mints by obviating the necessity of recoinage of withdrawn coin at a time when the stock of silver coin is large.

The Indian National Congress.

For a complete history of the movement represented by the Indian National Congress the reader is referred to earlier editions of The Indian Year Book. The Congress was founded in 1885 by Mr. Allan Octavian Hume, a retired member of the Indian Civil Service, and it held its first session in Bombay at Christmas of that year, the fundamental principles of the Congress were laid down to be:—

Firstly, the fusion into one national whole of all the different and discordant elements that constitute the population of India;

Secondly, the gradual regeneration, along all lines, mental, moral, social and political of the nation thus evolved; and

Thirdly the consolidation of union between England and India by securing the modification of such of the conditions as may be unjust or injurious to the latter country.

With these objects in view the Congress pursued an uneventful career until 1907. It undoubtedly exercised a great influence in inducing a spirit of national unity amongst the diverse peoples of India, in focussing the chief political grievances, and in providing a training ground for Indian politicians. But in 1907 the Extremists, chiefly of the Deccan and the Central Provinces, who had for some time chafed under the control of the older generation, succeeded in wrecking the Surat session of the Congress and produced a split which had long been seen to be imminent. The senior members of the Congress therefore re-crystallised its creed in definite terms. They laid down that—

"The objects of the Indian National Congress are the attainment by the people of India of a system of Government similar to that enjoyed by the self-governing members of the British Empire, and a participation by them in the rights and responsibilities of the Empire on equal terms with those members. These objects are to be achieved by constitutional means by bringing about a steady reform of the existing system of administration and by promoting national unity, fostering public spirit and developing and organising the intellectual, moral, economic and industrial resources of the country."

For some years following 1907 efforts were made to heal the split and these were without avail until 1916 when a re-united Congress met at Lucknow under the presidency of Babu Ambica Charan Muzumdar of Faridpur in Bengal. But the union then effected was purely superficial; the difference between the Moderates and the Extremists was fundamental; the Extremists captured the machinery of the Congress and from the period of the special session held at Calcutta in September 1920 the Congress passed entirely under the domination of Mr. Gandhi.

THE NON-CO-OPERATION MOVEMENT.

Liberals and Non-co-operators.—This line of cleavage came definitely into view when the new constitutional system under the Government of India Act of 1919 came into existence. The older Congressmen who had taken a considerable part in formulating the new constitution lent it their cordial support. The Congress did not. True, the Amritsar Congress, held in 1919, rendered lip service to the Reforms. While declaring the fitness of India for full responsible government, and the reforms as inadequate, unsatisfactory and disappointing, it declared its willingness to work them so as to attain the early attainment of full responsible government. But this mood did not last long. On the report of the Hunter Committee on the Punjab disturbances of 1919, Mr. Ghandi broke away from the principle of constitutional progress and at a special session of the Congress held at Calcutta in September 1920 launched his campaign of "progressive, non-violent non-co-operation." This decision was endorsed at the ordinary session of the Congress held at Nagpur at Christmas, where in addition the creed of the Congress was altered to make it "the attainment of swarajya by the people of India, by all legitimate and peaceful means," the omission of the qualification "within the British Empire" being deliberate. The non-co-operation campaign was actively prosecuted during the year 1921, and shortly before the holding of the usual Christmas session of the Congress the Committee issued a report in which they claimed large successes for it in the boycott of schools, the collection of funds, and the stimulation of the use of khaddar or handspun and handwoven cloth (q. v. The Indian Year Book, 1922, pp. 689, 690). Before the Congress was actually held the active measures taken by the Governments of Bengal, the United Provinces and the Punjab against intimidation and lawlessness had led to the incarceration of many active non-co-operators. The actual session at Ahmedabad was therefore a one man show and that man Mr. Ghandi. The work of the Congress resolved itself into one resolution, re-affirming the Calcutta and Nagpur resolutions and appointing Mr. Ghandi dictator in the use of the machinery of Congress to carry them into effect. It was then announced that active civil disobedience would commence on January 21st, 1922.

Chauri-Chaura and Bardoli.—The first manifestations of civil disobedience appeared in some districts of the east coast of the Madras Presidency, where a campaign against the payment of Government dues speedily collapsed before the vigour of the local authorities. Mr. Ghandi himself went to the Bardoli Taluka of the Surat District, which was reported to be ripest for the campaign, to open it himself. But there Mr. Ghandi seems to have been stricken with doubts, for he sought to have the campaign postponed, but was vetoed by the mob he had wrought to the pitch of lawlessness. But before overt measures could be taken there occurred just such an episode as politically-minded people had known was in-

evitable in the conditions of India. At Chauri-Chaura, in the United Provinces, on February 4th, a mob of Congress "volunteers" and infuriated peasantry murdered twenty-one policemen and rural watchmen. This tragedy produced a wave of indignation throughout the country and opened the eyes of people to the certain end of the campaign of no law. His friends rushed to Mr. Ghandi and urged him to abandon the campaign. Either in deference to these appeals, or because he had become convinced of the impossibility of non-violent civil disobedience, Mr. Ghandi agreed and published as the fruit of a hasty meeting of the Working Committee of the Congress the recantation known as the Bardoli resolutions.

Briefly, the Bardoli Resolutions indefinitely suspended mass civil disobedience and advised Congress organisations (1) to enlist at least a crore of members for the Congress, (2) to popularise the spinning-wheel and the organisation and manufacture of hand-spun and hand-woven khaddar, (3) to organise national schools, (4) to organise the depressed classes for a better life, (5) to organise an effective temperance campaign, (6) to organise village and town panchayats, (7) to promote communal unity and (8) to collect money for the Tilak Swaraj Fund. Under the constitution, it was necessary that the Bardoli programme, as slightly modified by the Working Committee, should be submitted to the All-India Congress Committee and a special session was held at Delhi for that purpose. At this session it became more than ever apparent that the control of the movement had passed from the hands of Mr. Gandhi to the more violent men who had used them and who, having nothing to lose and nothing at stake, had chafed at the talk of non-violence. It was decided that individual civil disobedience might be launched by Provincial Congress Committees and the picketing of foreign cloth shops and liquor shops was also sanctioned. Then followed Mr. Gandhi's arrest and trial for sedition. A sentence of six years' simple imprisonment was passed on him. Mr. Gandhi's removal from the scene produced a remarkable change in the country. A period of political peace supervened, and people began to ask themselves more closely whither the campaign of "no-law" would lead. With this changed mentality there was a strong revulsion against the negation of Mr. Gandi's programme and a strong desire to enter the Councils. But pinned as the Congress was to the non-co-operation programme, it was not easy to resile therefrom. In June, therefore, the All-India Congress Committee appointed a Sub-Committee, generally known as the Civil Disobedience Committee, to enquire into the general situation and in particular to report whether Civil Disobedience in some form or some other measure of a similar character could be adopted. This Committee toured the country for six weeks and presented a report early in November 1922 unanimously holding that the country was not ready to undertake mass civil disobedience. They were sharply divided on the subject of seeking entry into the Councils, and this difference of opinion dominated the session of the Congress held during Christmas 1922 at Gaya, where under the leadership of Mr. C. R. Das the Swaraj Party was definitely formed.

THE CONGRESS IN 1923.

In earlier editions of the Indian Year Book, the gradual disruption of the Congress has been dealt with. The difference of opinion on the question of Council-entry completely dominated the session of the Congress held at Gaya during the Christmas week of 1922. It will be remembered that at that session a resolution reaffirming the programme of non-violent non-co-operation and the boycott of the Councils was passed by a majority vote. On the morrow of that decision, the dissentients headed by Mr. C. R. Das announced the formation of a party, within the Congress, to work for the non-co-operation programme from inside the Councils.

Attempts were subsequently made to bridge the differences and go back to the original non-co-operation programme. But these proved abortive. Ultimately, a special session of the Congress was summoned at Delhi in September 1923 mainly with a view to decide whether Congressmen as such should participate in the elections to the Assembly and the Provincial Councils which were then impending. Eleventh-hour efforts to achieve unity on the eve of this special session completely failed. Mr. C.R. Das, the leader of the pro-Council-entry Swaraj Party, conscious of the strength of his following, refused to yield any ground whatever. The die-hard non-co-operators led by Mr. Muhomed Ali, who had just then come out of jail, rather than definitely break with the Swarajists, agreed to a so-called compromise resolution. This resolution, while re-affirming the faith of the Congress in non-violent non-co-operation, gave the liberty to those Congressmen who had no religious or other conscientious objection to stand for election to the Legislatures and exercise their right of voting at the then impending general election. After making it plain that all propaganda in furtherance of Council boycott was to be suspended, the resolution further urged Congressmen to redouble their efforts in carrying out the "Constructive Programme" with a view to attaining Swaraj at the earliest possible moment. This resolution was debated for over four hours at the open session of the Congress and was ultimately carried by a majority vote.

Civil Disoberdience.

Having helped the Swaraj Party to gain their point, the leaders of the die-hard section of the Congress were anxious to do something to placate their following. They accordingly brought forward a resolution for the appointment of a Committee to organise an effective campaign of Civil Disobedience and to advise and regulate the action of the Provinces organising similar Provincial and local campaigns for the speedy attainment of Swaraj which alone, in their view, could guarantee the restoration of Mr. Gandhi and other political prisoners to liberty as well as the freedom of the Jazirat-ul-Arab and a satisfactory settlement of the Punjab "wrongs". This resolution was debated in the open Congress for close upon six hours. Speaker after speaker from the Punjab got up and swore that that Province at any rate

was not ready to undertake Civil Disobedience when the Hindus and Moslems were flying at each other's throats. The resolution was, however, carried by a majority, its supporters maintaining that the best way to achieve unity was through a strong common programme.

Boycott of British Goods.

The Special Congress then proceeded to consider another resolution calling for the boycott of British Empire goods as a protest against the Kenya decision. It was proposed to set up a small Committee with powers to co-opt to devise an effective scheme of boycott. After a debate lasting for a number of hours the resolution was carried by 640 votes to 221, the Bengal delegates numbering about 300 solidly voting in favour of it. The Congress next proceeded to consider a resolution recommended for acceptance by its executive in connecton with the Kenya decisions, declaring that the people of India must seriously consider the advisability of working for the establishment of Swaraj independent of the British Empire. Taking part in the debate on this motion, Mr. Mahomed Ali made an explosive speech declaring that the passing of the resolution would be merely an exhibition of petulence and childishness and that the Congress would be making itself the laughing-stock of the world and contribute something to gaiety of nations. Mr. Mahomed Ali's plain-speaking secured recruits for Prof. Gidwani's amendment calling for an educative propaganda regarding the position of Indians in the Colonies and to help Kenya Indians in any practical programme. This amendment was ultimately carried by 264 to 207 votes and the recommendation of the executive of the Congress completely thrown overboard.

Hindu-Moslem Differences.

Next in importance to the question of Councilentry, what perhaps engaged most attention at the Delhi Special Congress was the question of Hindu-Moslem differences. Both before and during the Congress, leaders of both the communities devoted many anxious hours in finding a solution to the problem, so much so that on occasions the ordinary delegates were kept waiting inside the pandal without any business being transacted, while discussions were in progress behind closed doors. After the Congress session had been prolonged by two or three days the resolutions, which ultimately emerge from the Hindu-Moslem Unity Committee after heated wrangling, were rushed through the session at the last minute with no explanation whatever. The resolutions neither sought to end the Suddhi Movement nor the counter-proselytism movement of the Mahomedans.

A Committee appointed.

The whole problem was shelved by the appointment of a Committee consisting of two Hindus, two Mahomedans, a Sikh and a Parsi to roam about Northern India and enquire on the spot into complaints of coercion, intimidation and undue influence in connection with the rival communal movements and to submit a report before December 15th. As things turned out this Committee did not begin its work at all; but Lala Lajpat Rai and Dr. Ansari produced a Hindu-Moslem National Pact which came up for consideration at the annual session of the Congress at Cocanada during Christmas 1923.

THE COCANADA CONGRESS.

Events moved fast after the special session of the Congress held at Delhi in September. The Swaraj Party, having at any rate secured the benevolent neutrality of the die-hard section of the Congress, proceeded with their election campaigns in right earnest. Other Congress activities over-shadowed by the Council elections were practically at a standstill. While the Swarajist's election campaign and their attempt to oust the Liberals from the Assembly as well as the Provincial Councils provoked a good deal of interest, few Congressmen of the die-hard variety appeared to be actively engaged in their own "Constructive Programme." A kind of paralysis seemed to have overtaken the die-hard section of the Congress. Notwithstanding the fact that they were fighting against time, the Swarajists stumped many parts of the country with their cry of obstruction from inside the Councils. They met with unexpected success in the Central Provinces and in Bengal. Meantime, the Hindu-Moslem relations in Northern India were steadily worsening. As the date for the Cocanada Congress approached, the two real issues that were exercising the minds of Congressmen were whether the Swaraj Party ought to get a mandate from the Congress to carry on their programme of obstruction inside the Councils or not, and whether any real solution was possible in connection with the Hindu-Moslem question.

Mr. Das with a view to consolidate his position at Cocanada and enlist Mahomedan sympathy for his programme entered into a compact with certain Mahomedan leaders of Bengal, whereby the Mahomedan community were promised very generous concessions at the expense of Hindus when India obtained Swaraj. This so-called Bengal Pact came as a bomb-shell and precipitated the publication of the Lajpatrai-Ansari Draft Pact which was to have come up for consideration at Cocanada in the first instance.

Lajpatrai-Ansari Pact.

The following are the main provisions of the Lajpatrai-Ansari Pact:—Full religious liberty, that is, liberty of belief, worship, propaganda, association and education is hereby guaranteed to all the communities forming the Indian nation and shall form a constitutional right which it shall never be lawful for any government to annul, modify, suspend or otherwise interfere with. The aforementioned liberties shall, however, be exercised subject to such disciplinary rules and regulations as may be found necessary to preserve peace and order and to eliminate force or compulsion by one party in derogation of the rights of others.

To prevent any particular religious denomination being given undue preference over any other. No Government fund or funds collected by local bodies from public revenues and public

taxes including cesses shall be devoted to the promotion and furtherance of any denominational institutions or purposes.

When once Swaraj has been achieved it shall be the sacred duty of every Indian, be he Hindu, Mussalman, Sikh, Parsi, Christian or any other denomination to defend it against all attack, external or internal.

In view of the present state of feeling prevailing in the different communities and in view of the insufficient development of political sense and responsibility in them, it is necessary, for sometime, to afford adequate protection to the interests of minorities. It is therefore hereby agreed that the various communities shall have separate representation in the legislatures both state and federal. There shall be no communal or colour or caste distinction in public services and in educational institutions.

Cow Slaughter.

In order to achieve national unity and out of regard for the religious feelings of their Hindu compatriots, the Mussalmans of India do hereby by a solemn self-denying ordinance bind themselves to give up cow slaughter except in connection with Idazha, when it will be done in such a manner as will not injure the feelings of Hindus.

In order to secure and preserve a calm atmosphere for public worship it is hereby declared that no music shall be allowed in front of places of public worship at such time as may be fixed by local mixed conciliatory boards.

Religious processions of different denominations, when falling on one and the same date, shall follow such different routes or be fixed for such different times as may be determined by local mixed conciliatory boards.

In order to prevent friction and settle all questions giving rise to differences and conflicts between different religious communities, *e.g.* on the occasion of Dussera, Mohurram, Rath Jatra procession, Sikh Diwans, etc., provincial and joint boards will be appointed to act as conciliatory and arbitration boards.

Compromise re-affirmed.

The Cocanada Congress met in an atmosphere surcharged with suspicion and intrigue under the presidentship of Mr. Mahomed Ali, who had had just under four months of freedom after his release from gaol. Many delegates thought that while Mr. Mahomed Ali played for safety at Delhi by forcing the "compromise" regarding Council-entry on the die-hards, he would give an open lead at Cocanada against the Swarajists. Such, however, was not the case. In the course of the lengthiest address ever delivered by a Congress President, Mr. Mahomed Ali recommended the re-affirmation of the "compromise". This was done by a majority vote after a good deal of manœuvring and wrangling.

In regard to the Hindu-Moslem problem there was some heated discussion. Mr. Das came in for a good deal of abuse for entering into a separate pact for his own Province. Ultimately, the question was again shelved by remitting the All-India Draft Pact to the Lajpatrai-Ansari Committee with instructions to call for further opinion and criticisms on the draft and submit a fresh report by 31st March 1924.

Text of Main Resolutions.

The following is the text of the main resolutions passed by the annual session of the Congress at Cocanada in December 1923.—

Hindu-Moslem Pact.

"Resolved that the Committee appointed by the Delhi session of the Congress do call for further opinion on the draft of and criticisms on the Indian National Pact and submit for further report by the 31st March 1924 to the All-India Congress Committee for its consideration and Sardar Amarsingh of Jhabbal be included in the place of Sardar Mehtab Singh who is now in Jail."

Compromise.

This Congress re-affirms the Non-co-operation resolutions adopted at Calcutta, Nagpur, Ahmedabad, Gaya and Delhi. Since doubts have been raised by reason of the Non-co-operation resolution adopted at Delhi with regard to Council-entry, whether there has been any change in the policy of the Congress regarding the triple boycott, this Congress affirms that the principle and policy of that boycott remain unaltered. This Congress further declares that the said principle and policy form the foundation of the Constructive Work, and appeals to the nation to carry out the programme of Constructive Work as adopted at Bardoli and prepare for the adoption of Civil Disobedience. This Congress calls upon every Provincial Congress Committee to take immediate steps in this behalf with a view to the speedy attainment of our goal."

Volunteer Organisation.

This Congress is of opinion that in order to train the people of India and make them effective instruments for the carrying out of National Work on the lines laid down by the Congress, it is necessary to have a trained and disciplined body of workers, under the control and supervision of the All-India Congress Committee except as regards its internal management. This Congress, therefore, welcomes the formation of an All-India Volunteer Organisation and accords it its full support.

Kenya.

"This Congress sends the greetings and sympathy of the Nation to the Indian community in Kenya and while adhering to the opinion that unless Swarajya is won for India, the sufferings and grievances of Indians abroad cannot be properly remedied, it authorises Mrs. Sarojini Naidu and Mr. George Joseph to attend the forthcoming Indian Congress in Kenya and study the situation and advise the Indian community there, as to what steps they should take in carrying on their struggle against the insults and injustices imposed upon them."

Indians Abroad.

"In view of the humiliating treatment accorded to Indian labourers in various parts of the British Empire, this Congress advises the people of India to consider the question of stopping all kinds of emigration from India for labour purposes and

calls upon the Working Committee to appoint a small Committee to examine the matter in all aspects and report to the All India Congress Committee."

AKALI STRUGGLE.

"This Congress declares that the attack made by the Government on the Shriomani Gurudwara Prabandhak Committee and the Akali Dal is a direct challenge to the right of free association of all Indians for non-violent activities, and being convinced that the blow is aimed at all movements for freedom, resolves to stand by the Sikhs and calls upon Hindus, Mussalmans, Christians, Parsis and all peoples of India to render all possible assistance to the Sikhs in the present struggle, including assistance with men and money. The Congress authorises the All-India Congress Committee to take necessary steps in this behalf."

SATYAGRAHA COMMITTEE.

"Resolved that this Congress authorises the Working Committee of the All-India Congress Committee to perform the duties of the Civil Disobedience Committee appointed at the Delhi session of the Congress, and further resolved that the Satygraha Committee do henceforward cease to exist as a Separate Committee."

All-India Liberal Federation.

The definite breach between the two wings of the old Congress party inevitably led to the formation of an organisation which embraces the older school of thought, formerly called Moderates and now known by the name of Liberals. This organisation was created in the name of the All-India Liberal Federation which holds its annual session about the same time but at a place different from that of the Congress. The Liberal Federation met at Poona in December 1923 under the presidentship of Sir Tej Bahadur Sapru, who had returned from England a few weeks earlier after taking part in the deliberations of the Imperial Conference. In the course of his presidential address Sir Tej Bahadur Sapru referred to the Kenya question and said that as a result of the deliberations of the Imperial Conference the position of Indians in the Colonies was distinctly stronger and the prospects more hopeful. "Apart from our having gained," said Sir Tej Bahadur Sapru, "an unequivocal expression of good-will towards our aspirations from the other members of the British Commonwealth—excluding South Africa—a very important constitutional advance has been secured, namely, the right of the Government of India to negotiate with the Colonial Office through men appointed by itself for this and no less is what is explicitly provided for in the formula. Lastly, we have again succeeded in isolating South Africa. You will perhaps ask me what guarantee there is that the Kenya Committees will succeed in gaining any solid or substantial results. My answer to such a question would be this? If the men you send are strong and reasonable they should be able to achieve something substantial, more particularly because the Government in England appreciate now the depth and strength of the feeling on this question. And for aught we know to the contrary we may have at no distant date a more favourable Government."

After denouncing the attitude of General Smuts at the Imperial Conference, Sir Tej Bahadur argued at some length for a further constitutional advance and emphasised the need for the reorganisation of the Liberal Party.

The Federation subsequently passed a resolution urging for the immediate release of the Government of India and the local Governments from the trammels of the Secretary of State and demanding provincial autonomy and complete responsibility in the Central Government except in the Military, Political and Foreign Departments. The resolution also asked for the early appointment of the Statutory Commission.

Indians Overseas.

Another resolution which dealt with the position of Indians overseas passed by the Federation ran as follows :—

(1) This meeting of the All-India Liberals places on record its indignation and resentment at the Kenya decision of July last, which, besides, being grossly unjust and invidious, violates the most solemn pledges of the Crown and other constituted authorities, and its firm determination, which is likewise the determination of the whole of India, never to accept any settlement which assigns to their countrymen in Crown Colonies, particularly Kenya, a status in any way inferior to that of any other class of His Majesty's subjects. This meeting trusts that the committee to be appointed by the Government of India in pursuance of the resolution of the last Imperial Conference will be able to secure for Indians in Kenya a position in keeping with her recognised status as an equal partner in the British Commonwealth besides safeguarding in an effective manner their economic interests.

(2) This meeting further views with alarm the tendency of the provisions of the Kenya Immigration Bill, and requests the Government of India notwithstanding the unfavourable attitude of the Secretary of State for the Colonies, to press upon him the necessity in ordinary good faith of delaying the progress of the Bill through the Kenya Legislature until the committee above mentioned should have had opportunities of examining the measure and discussing its provisions with the Colonial Office. This meeting is further of the opinion that the Government of India should without delay appoint a strong and representative committee and send it to England at the earliest possible date to raise the question with regard to the Kenya Immigration Bill with the Colonial Office.

Retaliation against South Africa.

(3) In view of the facts that the political, civic and economic interests of Indians in South Africa have been for generations without adequate protection, that at the present moment their economic status is further threatened by the imposition of restraints which are humiliating to this country as well as injurious to their interests and that the position of Indians within the Union of South Africa excepting Cape Colony has during many years been inconsistent with their status as subjects of a common Sovereign and with the national dignity of India, this meeting of the All-India Liberals strongly urges the Government of India and the Secretary of State to take effective retaliatory measures against the Government of that Dominion, whose representative refused even at the last Imperial Conference to explore any avenue for the redress of the grievances of Indians, great numbers of whom were born in that country and own it as theirs in particular, this meeting recommends the imposition on non-Indian South African Colonials of reciprocal restrictions and disabilities in respect of the franchise, both political and municipal, eligibility for the public services and the right to hold properties and trade, mining and navigation licenses.

(4) This meeting strongly urges (1) an amendment of the Racial Distinctions Removal Act so as to deprive non-Indian South African Colonies in India of the special privileges still accorded to them in criminal trials, and (2) the imposition of a prohibitive import duty on South African coal, taking care at the same time by suitable measures to provide adequate facilities to Indian coal in the way of transport and otherwise.

Mr. Sastri's resolution urging India's withdrawal from the Empire Exhibition was withdrawn at the last moment, the President of the Liberal Federation declaring: "The Liberal Party as a party does not stand committed to a policy of boycott."

The work of the reorganisation of the Liberal Party was entrusted to a committee consisting of the Rt. Hon. V. S. Srinivasa Sastri (Chairman), Sir Tej Bahadur Sapru, Mr. C. Y. Chintamani, Dr. R. P. Paranjpye, Mr. Gokaran Misra and the Hon. Mr. Chitnavis.

The Moslem League.

The Indian Moslem League was established in 1906. Prior to that time the Indian Moslems had stood aloof from politics. Acting under the guidance of the greatest man they have produced, **Sir Syed Ahmad**, they devoted their attention to education, founding the Aligarh College with the special purpose of making up the leeway of Mahomedans in education, and left politics to the other Indian peoples. A few Mahomedans joined the National Congress and took part in its annual sessions; but the community as a whole stood aside from political movements.

In 1906 however changes occurred which impelled Indian Moslems to action. Under the Act of 1892, constituting the Indian Legislative Councils, there was no specific Moslem representation and in the elections which had taken place under that Act the Moslems had for all practical purposes failed to find selection. Therefore, when the amendment of the Act and the extension of the representative principle were under discussion, they were stirred to action. They feared lest, under an academic system, adapted only to a homogeneous people, their distinct communal interests would either secure no representation at all, or only inadequate representation. They therefore took counsel together and approached the Viceroy in deputation, headed by His Highness the Aga Khan, and presented their views in an important State paper.

First Constitution.

It was felt that in view of the changed conditions the Moslems should organise their own political society for the expression of their communal policy. This was the origin of the Moslem League. The rules and regulations of the League provided for a constitution, with provincial branches, and defined the objects of the League in the following language:—

The **objects of the League** shall be—

(*a*) to promote among Indian Mussalmans feelings of loyalty towards the British Government, and to remove any misconception that may arise as to the intentions of Government with regard to any of its measures;

(*b*) to protect the political and other rights and interests of Indian Mussalmans and to place their needs and aspirations before the Government in temperate language;

(*c*) without prejudice to the objects mentioned under (*a*) and (*b*) of this section, to promote so far as possible concord and harmony between the Mussalmans and other communities of India.

Revised Constitution.

In 1912 and 1913 Moslem opinion as expressed by the League underwent a certain change. First at a meeting of the Council, afterwards at the annual session which was held at Lucknow, the constitution was amended so as to include in the objects of the League the attainment of a system of **self-government** in India under the Crown. The objects of the League, as defined, are thus set forth :—

The objects of the League shall be :—

(*a*) to maintain and promote among the people of this country feelings of loyalty towards the British Crown ;

(*b*) to protect and advance the political and other rights and interests of the Indian Mussalmans ;

(*c*) to promote friendship and union between the Mussalmans and other communities of India ;

(*d*) without detriment to the foregoing objects, attainment, under the ægis of the British Crown, of a system of self-government suitable to India, through constitutional means, by bringing about, amongst others, a steady reform of the existing system of administration, by promoting national unity, by fostering public spirit among the people of India and by co-operating with other communities for the said purposes.

This change in the constitution of the League produced much discussion and was opposed by many of the older men who had led the community.

Merged in the Congress.—From the time of the Amritsar Congress the Moslem League lost its effective separate existence. It followed the Congress step by step in the change of its constitution and in the adoption of non-co-operation ; its annual session is only a pale reflection of the Congress, whose resolutions it accepts, with special emphasis on the Khilafat issue. Few of the leading Moslems of India take any part in its discussions, and those Moslems who are active in public life prefer to make their appearance at the Congress rather than at the nominal session of the League. The place of the League as the exponent of militant Moslem opinion has been taken by the Khilafat Committee.

The Khilafat Committee.

The Constitution and Rules of the Centra Khilafat Committee are :—

(1) The Committee shall be named "The Central Khilafat Committee of India."

(2) The aims and objects of the Central Khilafat Committee are as follows :—

(*a*) To endeavour for the improvement and upkeep of the power and integrity of the Khilafat.

(*b*) To secure for Turkey a just and honourable peace and obtain a settlement of the Khilafat question, the Jazirat-ul-Arab and the Holy Places of Islam in strict accordance with the requirements of the Shariat.

(*c*) To secure by untiring and necessary efforts the fulfilment of the pledges given by the British Government in its notification, dated the 3rd November 1914, and by the Premier of England in his speech of the 5th January 1918 regarding immunity and safety of the holy places and Ottoman territories.

(3) With a view to secure the above subjects :—

(*a*) To carry on Khilafat propaganda both in India and in other countries.

(*b*) To create brotherly relations with the Muslims residing in other countries.

(*c*) To make the non-co-operation movement a success and to improve in this behalf national education, trades and industries. And to have mutual disputes settled through Panchayats.

(*d*) With a view to complete the above, to strengthen and improve unity and friendship between the Mussulmans and other races of India, to obtain Swaraj for India and to take such further steps as may be deemed necessary from time to time.

Constitution : (*a*) The Central Khilafat Committee of India shall consist of a president, two vice-presidents, more than one secretaries, assistant secretaries, treasurers and members.

(*b*) The president and the Secretary of each provincial Khilafat Committee shall be considered to be the member of the Central Committee.

(5) Besides the office bearers of the Central Khilafat Committee, the president and a secretary of each provincial committee, the total number of the members for the Central Committee shall be 200. These members shall be elected from different provinces in following numbers : N.W.F. Provinces 5, Punjab 20, Agra Province 22, Oudh 8, Delhi, Ajmere and Merwara 10, Behar 12, Orissa 3, Bengal 20, Assam 5, C.P. 10, Berar 5, Burma 5, Bombay and Sind 55, Andhra 5, Madras and Bangalore 15.

The Session of 1923.—The Khilafat Conference session of 1923 was held at Cocanada at the same time as that of the Congress, with Mr. Shaukat Ali in the chair. The Conference congratulated Sultan Abdul Majid Khan III and expressed the hope that the cause of the Khilafat would be strengthened with his help.

Resolutions, appealing to Mussalmans in India to help the children and relatives of the Moplahs of Malabar who were involved in the rebellion, were passed.

The Conference emphasised that it was the religious duty of every Mahomedan to work for the freedom of India and to sacrifice every thing for the attainment of Swaraj and congratulated Hasrat Mohani on his conduct in gaol. The Conference emphasised the need for communal unity and referred both the All-India National Pact and the Bengal Pact to a Sub-Committee of its own for report. A resolution urging that the Jazirat-ul-Arab should be freed from foreign control and that Thrace should be returned to Turkey was passed.

Red Cross Work.

The Joint War Committee of the Order of St. John of Jerusalem and the British Red Cross Society, Indian Branch, came into being on 2nd August 1916 and has been responsible for the provision of almost the whole of the supplies of comforts for the sick and wounded ever since. Up to the end of 1917 its own resources had to be supplemented by grants from the Home Committee, but the generous response to the "**Our Day**" appeal made by all classes in India secured its financial position and for the past year it has not only been self-supporting but can regard the future without anxiety.

In the beginning of 1918 a scheme of re-organization of Red Cross work throughout India and Burma was adopted as the result of which each Province became practically autonomous as regards its own Red Cross work. The wants of Military hospitals situated within the boundaries of a Province became its own special care and were met by a Provincial Committee which administered Provincial Funds and organized Work Parties and other supplies. Provinces also were most generous in sending supplies of clothing and other comforts to the Bombay Depot. The General Committee thus relieved of the supervision of local work was enabled to concentrate its energies on co-ordinating Red Cross work throughout India, to take the measures necessary to avoid over-lapping, to exercise general control over the operations of the Bombay Depot, and to arrange for supplies required by Commissions overseas. The result of the re-organization proved most satisfactory.

Finances.—The operations of the Joint War Committee were brought to a close in June 1920. According to the final report, the total receipts of the committee amounted to Rs. 1,77,85,716. Of this Rs. 17,44,683 was received from the Home Committee; of the collections on "**Our Day**" 85¼ lakhs were credited to the Central Committee donations to the Committee, interest, Government grants for Red Cross Hospitals and stores, etc. Mesopotamian "**Our Day**" collections and sale proceeds of assets of Mesopotamian commission account for the remainder. The Committee under its career with a capital investment of the face value of Rs. 56,33,000 (present market value Rs. 48,72,545) and Rs. 8,01,500-8-6 in floating and fixed deposit accounts.

New Organisation.—In 1919 when the Joint War Committee received an invitation to join the International League of Red Cross Societies, it was not deterred by the fact that it could not, in fact, claim to be a regularly constituted Red Cross Society. But it began to take the necessary steps to regularise its position in this regard. It recognized, moreover, that it had been constituted as a committee for war purposes; but the great war was over, and it desired that, following the example of the Red Cross Society of England, it should secure formal authority to expend for civil purposes such portions of its capital funds as remained after meeting the primary purposes for which they were subscribed. A Bill was introduced by Sir Claude Hill in the Imperial Legislative Council in March 1920, designed to give effect to these intentions, and duly passed into law as Act XV of 1920. The first members of the Indian Red Cross Society as constituted by that Act, were nominated on 7th June 1920, and the Managing Body duly elected; the resources and the obligations of the Joint War Committee passed on that date to the Indian Cross Society.

List of Officers.

His Excellency the Viceroy and Governor-General of India (President); His Excellency the Commander-in-Chief in India (Vice-President); The Hon. Sir Malcolm Hailey, K.C.S.I., C.I.E., I.C.S. (Chairman, Managing Body).

Managing Body.

The Hon'ble Sir Mian Mohammad Shafi, K.C.S.I., C.I.E.

The Hon'ble Sir John Wood, K.C.I.E., C.S.I.

H. Sharp, Esq., C.S.I., C.I.E.

Lieut.-General Sir Charles Burtchaell, K.C.B., C.M.G., K.H.S.

The Hon'ble Major-General Sir W. R. Edwards, K.C.I.E., C.B., C.M.G., K.H.P.

The Hon'ble Mr. H. Moncrieff-Smith, C.I.E., I.C.S.

Colonel Sir Sydney Crookshank, K.C.M.G., C.B., C.I.E.

The Hon'ble Mr. A. C. Chatterjee, C.I.E., I.C.S.

Col. W. D. Waghorn, C.B., C.M.G., R.E.

B. N. Mitra, Esq., C.I.E., C.B.E.

Lt.-Col. T. J. Carey-Evans, M.C., I.M.S.

Rev. James Black, M.A., O.B.E.

W. J. Litster, Esq., (Hon. Treasurer).

Messrs. Nelson Dignasse & Co. (Hon. Auditors.)

Lieut.-Col. H. Ross, C.I.E., O.B.E., I.M.S. (Organising Secretary.)

Customs Tariff.

General import duties are levied for fiscal purposes and not for the protection of Indian industries. But the tariff has been modified with a view to admitting free or at favourable rates articles, the cheap import of which was considered necessary in the interests of the country. Thus certain raw materials, manures, agricultural implements and dairy appliances are admitted free. Machinery, printing materials, etc. are assessed at 2½ per cent. and iron and steel railway material and ships at 10 per cent. High duties are imposed on tobacco, liquors and matches.

Re-Imports.—Articles of foreign production on which import duty has been once paid, if subsequently exported, are on re-import exempted from duty on the following conditions:—

The Collector of Customs must be satisfied—

(1) of the identity of the articles;

(2) that no drawback of duty was paid on their export;

(3) that the ownership has not changed between the time of re-export and subsequent re-import;

(4) that they are private personal property re-imported for personal use, not merchandise for sale;

(5) that not more than three years have passed since they were re-exported.

Duty is, however, charged on the cost of repairs done to the articles while abroad which should be declared by the person re-importing the articles in a form which will be supplied to him at the time of re-importation.

To facilitate identification on re-importation an export certificate giving the necessary particulars should be obtained from the Customs Department at the time of shipment of the articles which should be tendered for examination.

This concession of free entry on re-importation is not extended for the benefit of Companies or Corporate Bodies.

Drawbacks.—When any goods, capable of being easily identified which have been imported by sea into any Customs port from any foreign port, and upon which duties of Customs have been paid on importation, are re-exported by sea from such Customs port to any foreign port, or as provisions or stores for use on board a ship proceeding to a foreign port, seven-eighths of such duties shall, except as otherwise hereinafter provided, be repaid as drawback:

Provided that, in every such case, the goods be identified to the satisfaction of the Customs Collector at such Customs port and that the re-export be made within two years from the date of importation, as shown by the records of the Custom House, or within such extended term as the Chief Customs Authority, or Chief Customs Officer on sufficient cause being shown, in any case determines, provided further that the Chief Customs Officer shall not extend the term to a period exceeding 3 years.

When any goods, having been charged with Import duty at one Customs port and thence exported to another, are re-exported by sea as aforesaid, drawback shall be allowed on such goods as if they had been so re-exported from the former port:

Provided that, in every such case, the goods be identified to the satisfaction of the Officer-in-Charge of the Custom House at the port of final exportation, and that such final exportation be made within three years from the date on which they were first imported into British India.

No drawback shall be allowed unless the claim to receive such drawback be made and established at the time of re-export.

No such payment of drawback shall be made until the vessel carrying the goods has put out to sea, or unless payment be demanded within six months from the date of entry for shipment.

Every person, or his duly authorised agent, claiming drawback on any goods duly exported, shall make and subscribe a declaration that such goods have been actually exported, and have not been re-landed and are not intended to be re-landed at any Customs port; and that such person was at the time of entry outwards and shipment, and continues to be, entitled to drawback thereon.

Merchandise Marks.—Importers into India especially from countries other than the United Kingdom, would do well to make themselves acquainted with the law and regulations relating to merchandise marks. In Appendix II will be found the principal provisions of the Indian Merchandise Marks Act, 1889 and connected Acts and the notifications issued thereunder. The following summary of the regulations in force does not claim to be exhaustive. For those seeking more complete information a reference is suggested to the Merchandise Marks Manual which is published under the authority of the Government of India and obtainable of all agents for the sale of Indian Government publications.

Infringements or offences may be classified conveniently under four heads:—

1. Counterfeit trade marks;
2. Trade descriptions that are false in respect of the country of origin;
3. Trade descriptions that are false in other respects; and
4. Lengths not properly stamped on piece-goods.

Schedule II—(Import Tariff).

Note.— **In the expression "*ad valorem*" used in this schedule the reference is to real value as defined in section 30 of the Sea Customs Act, 1878 (VIII of 1878).**

No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	I.—Food, Drink and Tobacco.			
	FISH.			
1	FISH, SALTED, wet or dry	Indian maund of 82⅔ lbs. avoirdupois weight.	....	Such rate or rates of duty not exceeding one rupee as the Governor-General in Council may, by notification in the *Gazette of India*, from time to time prescribe.*
2	FISH, excluding salted fish (see No. 1)	....	*Ad valorem*	15 per cent.
3	FISHMAWS, including singally and sozille, and sharkfins.	....	,,	15 ,, ,,
	FRUITS AND VEGETABLES.			
4	FRUITS AND VEGETABLES, all sorts, fresh, dried, salted or preserved—		Rs. as.	
	Almonds without shell	cwt.	65 0	15 per cent.
	,, in the shell Persian	,,	14 0	15 ,, ,,
	,, kàgazi Persian in the shell ..	,,	90 0	15 ,, ,,
	,, All other sorts..	,,	*Ad valorem*	15 ,, ,,
	Cashew or cajoo kernels	,,	22 0	15 ,, ,,
	Cocoanuts, Straits and Dutch East Indies ..	thousand.	120 0	15 ,, ,,
	,, Maldives	,,	39 0	15 ,, ,,
	,, other	,,	55 0	15 ,, ,,
	,, kernel (khopra)..	cwt.	20 0	15 ,, ,,
	Currants	,,	35 0	15 ,, ,,
	Dates, dry, in bags	,,	8 0	15 ,, ,,
	,, wet, in bags, baskets and bundles ..	,,	6 0	15 ,, ,,
	,, ,, in pots, boxes, tins and crates ..	,,	10 0	15 ,, ,,
	Garlic	,,	7 8	15 ,, ,,
	Pistachio nuts	,,	90 0	15 ,, ,,
	Raisins, Munakka, Persian Gulf	,,	15 0	15 ,, ,,
	,, other sorts	....	*Ad valorem*	15 ,, ,,
	All other sorts of fruits and vegetables, fresh, dried, salted or preserved.	....	,,	15 ,, ,,
	GRAIN, PULSE AND FLOUR.			
5	FLOUR	....	,,	15 ,, ,,
6	GRAIN AND PULSE, all sorts, including broken grain and pulse, but excluding flour (see No. 6).	....	,,	2½ ,, ,,

The rate on 1st January 1924 and until further notice is annas 15.

Schedule II—(Import Tariff)—*continued.*

No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	I.—Food, Drink and Tobacco—*contd.*			
	LIQUORS.			Rs. a. p.
7	ALE, Beer, and Porter, Cider and other fermented liquors.	Imperial gallon or 6 quart bottles	....	0 8 0
8	Denatured Spirit	....	*Ad valorem*	7½ per cent.
9	LIQUEURS, Cordials, Mixtures and other preparations containing spirit—			
	(*a*) Entered in such a manner as to indicate that the strength is not to be tested.	Imperial gallon or 6 quart bottles.	....	30 0 0 or 15 per cent. *Ad valorem* whichever is higher.
	(*b*) If tested	Imperial gallon or 6 quart bottles of the strength of London proof.	....	21 14 0 and the duty to be increased or reduced in proportion as the strength of the spirit exceeds or is less than London proof or 15 per cent. *Ad valorem*, whichever is higher.
10	PERFUMED SPIRITS	Imperial gallon or 6 quart bottles.	....	36 0 0 or 15 per cent. *Ad valorem*.
11	All other sorts of SPIRIT	Imperial gallon or 6 quart bottles of the strength of London proof.	....	21 14 0 and the duty to be increased or reduced in proportion as the strength of the spirit exceeds or is less than London proof or 15 per cent. *Ad valorem*, whichever is higher.

Schedule II—(Import Tariff)—*continued.*

No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	I.—Food, Drink and Tobacco—*contd.*		Rs. a.	Rs. a. p.
	LIQUORS—*contd.*			
12	WINES—			
	Champagne and all other sparkling wines not containing more than 42 per cent. of proof spirit.	Imperial gallon or 6 quart bottles.	....	9 0 0
	All other sorts of wines not containing more than 42 per cent. of proof spirit.	,,	....	4 8 0
	Provided that all sparkling and still wines containing more than 42 per cent. of proof spirit shall be liable to duty at the rate applicable to "All other sorts of Spirit."			
	PROVISIONS AND OILMAN'S STORES.			
13	PROVISIONS, OILMAN'S STORES, AND GROCERIES, all sorts, excluding vinegar in casks (see No. 14)—			
	Butter	lb.	2 0	15 per cent.
	Cassava, Tapioca or Sago whole	cwt.	17 0	15 ,, ,,
	,, ,, ,, flour	,,	13 0	15 ,, ,,
	China preserves in syrup	Box of 6 large or 12 small jars.	9 0	15 ,, ,,
	,, ,, dry, candied	lb.	0 8	15 ,, ,,
	China canned fruit	case of 4 dozen.	16 0	15 ,, ,,
	Cocum	cwt.	7 0	15 ,, ,,
	Ghi	,,	60 0	15 ,, ,,
	Vermicelli, flour, Chinese	,,	30 0	15 ,, ,,
	,, Peas ,, ...	,,	34 0	15 ,, ,,
	,, Rice ,, ...	,,	18 0	15 ,, ,,
	Vinegar not in casks	....	*Ad valorem*	15 ,, ,,
	Yeast, Chinese	cwt.	27 0	15 ,, ,,
	All other sorts of provisions, oilman's stores and groceries.	....	*Ad valorem*	15 ,, ,,
14	VINEGAR, in casks	....	,, ,,	2½ ,, ,,
	SACHHARINE.			
15	Sachharine (except in tablets)	lb.	20 0	15 ,, ,,
16	Sachharine Tablets	....	*Ad valorem*	25 per cent. or Rs. 20 per pound of Sachharine Contents, whichever is higher.
	SPICES.			
17	SPICES, all sorts—			
	Betelnuts, raw, whole, split, or sliced, also red whole from Goa.	cwt.	15 0	15 per cent.
	,, ,, ,, ,, ,, ,, Straits	,,	14 0	15 ,, ,,
	,, boiled, split or sliced	,,	22 8	15 ,, ,,

Schedule II—(Import Tariff)—*continued.*

No.	Name of Articles.	Per	Tariff Valuation.	Duty.
	I.—Food, Drink and Tobacco—*contd.*			
	SPICES—*contd.*		Rs. a.	
	Betelnuts, whole, from Ceylon	cwt.	15 0	15 per cent.
	,, raw, split (sun-dried), from Ceylon	,,	30 0	15 ,, ,,
	,, all other sorts	....	*Ad valorem*	15 ,, ,,
	Chillies, dry..	cwt.	25 0	15 ,, ,,
	Cloves	,,	65 0	15 ,, ,,
	,, exhausted..	,,	16 0	15 ,, ,,
	,, stems and heads	,,	9 0	15 ,, ,,
	,, in seeds, nariavang	,,	20 0	15 ,, ,,
	Ginger, dry..	,,	35 0	15 ,, ,,
	Mace	lb.	1 0	15 ,, ,,
	Nutmegs	,,	0 7	15 ,, ,,
	,, in shell	,,	0 5	15 ,, ,,
	Pepper, black	cwt.	27 0	15 ,, ,,
	,, white	,,	56 0	15 ,, ,,
	All other sorts of spices	....	*Ad valorem*	15 ,, ,,
	SUGAR.			
18	CONFECTIONERY	....	,, ,,	30 ,, ,,
19	SUGAR, all sorts, including Molasses, but excluding confectionery (see No. 18)—			
	Sugar, crystallised and soft, not inferior to 8 Dutch standard—			
	From Java, 23 Dutch standard and above..	cwt.	17 12	25 ,, ,,
	,, ,, 16 to 22 Dutch standard ..	,,	15 12	25 ,, ,,
	,, ,, 15 Dutch standard and under..	,,	15 4	25 ,, ,,
	,, Japan or Formosa	,,	19 12	25 ,, ,,
	Refined in China including Hong Kong ..	,,	19 12	25 ,, ,,
	From Egypt	,,	18 12	25 ,, ,,
	,, Mauritius	,,	16 4	25 ,, ,,
	Cane, from other countries	,,	16 4	25 ,, ,,
	Sugar, crystallised, beet	,,	17 12	25 ,, ,,
	Molasses	,,	4 0	25 ,, ,,
	Sugar-candy	,,	25 0	25 ,, ,,
	Sugar, all other sorts, including saccharine produce of all kinds.	....	*Ad valorem*	25 ,, ,,
	TEA.			
20	TEA—			
	Tea, black	lb.	0 12	15 ,, ,,
	,, green	,,	0 15	15 ,, ,,

Schedule II—(Import Tariff)—*continued.*

No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	I.—Food, Drink and Tobacco—*contd.*		Rs. a.	
	OTHER FOOD AND DRINK.			
21	COFFEE..	cwt.	36 0	15 per cent.
22	HOPS	....	....	Free.
23	SALT, excluding Salt exempted under No. 22 ..	Indian maund of 82⅔ lbs. avoirdupois weight.	....	The rate at which excise duty is for the time being leviable on salt manufactured in the place where the import takes place.*
24	SALT imported into British India and issued, in accordance with rules made with the previous sanction of the Governor-General in Council, for use in any process of manufacture; also salt imported into the port of Calcutta and issued with the sanction of the Government of Bengal to manufacturers of glazed stoneware; also salt imported into any port in the provinces of Bengal and Bihar and Orissa and issued, in accordance with rules made with the previous sanction of the Governor-General in Council, for use in curing fish in those provinces.	....	....	Free.
25	ALL OTHER SORTS OF FOOD AND DRINK not otherwise specified.	....	*Ad valorem*	15 per cent.
	TOBACCO.			
26	CIGARS AND CIGARETTES	....	,, ,,	75 ,, ,,
27	TOBACCO, unmanufactured	lb.	....	Rs. a. p. 1 0 0
28	All other sorts of TOBACCO, manufactured.. ..	,,	....	2 4 0
	II.—Raw Materials and produce and articles mainly unmanufactured.			
	COAL, COKE AND PATENT FUEL.			
29	COAL, COKE AND PATENT FUEL	Ton.	....	0 8 0
	GUMS, RESINS AND LAC.			
30	GUMS, RESINS AND LAC, all sorts—			
	Gambier, block	cwt.	27 0	15 per cent.
	,, Cube	,,	27 0	15 ,, ,,
	,, Other Sorts	....	*Ad valorem*	15 ,, ,,
	Gum Ammoniac	cwt.	38 0	15 ,, ,,
	,, Arabic	,,	25 0	15 ,, ,,
	,, Benjamin, ras	,,	26 0	15 ,, ,,

* The rate of excise duty on 1st January 1924 and until further notice is Rs. 2-8-0.

Schedule II—(Import Tariff)—*continued.*

No.	Names of Articles.	Per	Tariff valuation.	Duty.
	II.—Raw Materials and produce and articles mainly unmanufactured —*contd.*		Rs. a.	
	GUMS, RESINS AND LAC, all sorts—*contd.*			
	Gum Benjamin, cowrie..	cwt.	60 0	15 per cent.
	,, Bysabol (coarse myrrh)	,,	45 0	15 ,, ,,
	,, Olibanum or frankincense	,,	15 0	15 ,, ,,
	,, Persian (false)	,,	12 0	15 ,, ,,
	Myrrh	,,	45 0	15 ,, ,,
	Rosin	,,	16 0	15 ,, ,,
	All other sorts of gums, gum-resins, and articles made of gum or gum-resin.	....	*Ad valorem*	15 ,, ,,
	HIDES AND SKINS, RAW.			
31	HIDES AND SKINS, raw or salted..	....	....	Free.
	METALLIC ORES, AND SCRAP IRON OR STEEL FOR RE-MANUFACTURE.			
32	IRON OR STEEL, old..	cwt.	2 0	10 per cent.
33	METALLIC ORES, all sorts, except Ochres and other pigment Ores,	....	....	Free.
	OILS.			Rs. a. p
34	KEROSENE and MOTOR SPIRIT; also any mineral oil other than kerosene and motor spirit which has its flashing point below one hundred degrees of Fahrenheit's thermometer by Abel's close test.*	Imperial gallon.	....	0 2 0
35	MINERAL OIL which has its flashing point at or above two hundred degrees of Fahrenheit's thermometer and is such as is not ordinarily used for any other purpose than for the batching of jute or other fibre, or for lubrication—			
	Batching oil	ton.	125 0	7½ per cent.
	Other sorts	....	*Ad valorem*	7½ ,, ,,
36	Mineral oil which has its flashing point at or above one hundred and fifty degrees of Fahrenheit's thermometer and is such as is not ordinarily used except as fuel or for some sanitary or hygienic purpose—			
	(i) Imported in bulk	ton.	65 0	7½ ,, ,,
	(ii) Otherwise imported	....	*Ad valorem*	7½ ,, ,,
37	All sorts of animal, essential, mineral, and vegetable non-essential OILS not otherwise specified (see Nos. 34, 35 and 36) :—			
	Cocoanut oil	cwt.	30 0	15 per cent.
	Linseed Oil, raw and boiled	gallon.	4 8	15 ,, ,,
	All other sorts of oil	....	*Ad valorem*	15 ,, ,,

* Motor spirit is liable to an additional duty of six annas per gallon under Act II of 1917 as amended by Act III of 1919.

Schedule II—(Import Tariff)—*continued.*

No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	II.—Raw materials and produce and articles mainly unmanufactured—*contd.*		Rs. a.	
	SEEDS.			
38	OIL-SEEDS, imported into British India by sea from the territories of any Prince or Chief in India.	....	....	Free.
39	SEEDS, all sorts, excluding oil-seeds specified in No. 38.	....	*Ad valorem*	15 per cent.
	TALLOW, STEARINE AND WAX.			
40	TALLOW AND STEARINE, including grease and animal fat, and WAX of all sorts, not otherwise specified(see No. 41).	....	*Ad valorem*	15 „ „
41	Vegetable Wax	cwt.	60 0	15 „ „
	TEXTILE MATERIALS.			
42	COTTON, raw	....	....	Free.
43	TEXTILE MATERIALS, the following;—			
	Silk waste and raw silk including cocoons—			
	Bokhara	lb.	12 0	15 per cent.
	Floss	....	*Ad valorem*	15 „ „
	Raw silk—Yellow Shanghai, including re-reeled.	lb.	8 0	15 „ „
	Yellow from Indo-China, and places in China other than Shanghai including re-reeled.	„	9 0	15 „ „
	Mathow	„	6 8	15 „ „
	Panjam	„	6 0	15 „ „
	Persian	„	9 0	15 „ „
	Siam	„	8 0	15 „ „
	White Shanghai, Thonkoon or Duppion.	„	5 0	15 „ „
	„ other kinds including re-reeled.	„	9 0	15 „ „
	„ other kinds of China, including re-reeled.	„	11 0	15 „ „
	Waste and Kachra	....	*Ad valorem*	15 „ „
	All other sorts, including cocoons	....	„	15 „ „
	Coir fibre	cwt.	10 0	15 „ „
	Raw hemp	„	22 0	15 „ „
	Raw Flax, Jute and all other unmanufactured textile materials not otherwise specified.	....	*Ad valorem*	15 „ „
44	WOOL, raw, and WOOL-TOPS	....	....	Free.
	WOOD AND TIMBER.			
45	FIREWOOD	....	„	2½ per cent.
46	WOOD AND TIMBER, all sorts, not otherwise specified, including all sorts of ornamental wood.	....	„	15 „ „

Schedule II—(Import Tariff)—*continued.*

No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	II.—Raw materials and produce and articles mainly unmanufactured—*contd.*		Rs. a.	
	MISCELLANEOUS.			
47	CANES AND RATTANS	....	*Ad valorem*	15 per cent.
48	COWRIES AND SHELLS—			
	Cowries, bazar, common	cwt.	7 8	15 ,, ,,
	,, yellow, superior quality	,,	8 8	15 ,, ,,
	,, Maldive	,,	12 0	15 ,, ,,
	,, Sankhli	,,	140 0	15 ,, ,,
	Mother-of-pearl, nacre	,,	18 0	15 ,, ,,
	Nakhla	,,	130 0	15 ,, ,,
	Tortoise-shell	lb.	7 0	15 ,, ,,
	,, nakh	,,	2 4	15 ,, ,,
	All other sorts, including articles made of shell, not otherwise described.	....	*Ad valorem*	15 ,, ,,
49	IVORY, unmanufactured—			
	Elephant's grinders	cwt.	300 0	15 ,, ,,
	,, tusks (other than hollows, centres, and points), each exceeding 20 lb. in weight, and hollows, centres, and points each weighing 10 lb. and over.	,,	875 0	15 ,, ,,
	Elephants' tusks (other than hollows, centres and points), not less than 10 lb. and not exceeding 20 lb. each, and hollows, centres, and points each weighing less than 10 lb.	,,	750 0	15 ,, ,,
	Elephants' tusks, each less than 10 lb. (other than hollows, centres, and points).	,,	475 0	15 ,, ,,
	Sea-cow or moye teeth, each not less than 4 lb..	,,	200 0	15 ,, ,,
	Sea-cow or moye teeth, each not less than 3 lb. and under 4 lb.	,,	165 0	15 ,, ,,
	Sea-cow or moye teeth, each less than 3 lb. ..	,,	100 0	15 ,, ,,
	All other sorts unmanufactured not otherwise specified.	....	*Ad valorem*	15 ,, ,,
50	MANURES, all sorts, including animal bones and the following chemical manures:—Basic slag, nitrate of ammonia, nitrate of soda, muriate of potash, sulphate of ammonia, sulphate of potash, kainit salts, nitrate of lime, calcium cyanamide, mineral phosphates and mineral superphosphates.	....	....	Free.
51	PRECIOUS STONES, UNSET AND IMPORTED CUT. ..	....	....	Free.
52	PRECIOUS STONES, IMPORTED UNCUT AND UNSET AND PEARLS, unset	....	*Ad valorem*	15 per cent.
53	PULP OF WOOD, RAGS and other paper-making materials.	....	....	Free.
54	ALL OTHER RAW MATERIALS, and produce and articles mainly unmanufactured, not otherwise specified. *	....	*Ad valorem*	15 per cent.

* Under Government of India Notification No. 4317, dated 2nd July 1921, unmanufactured mica and Raw Rubber are exempt from payment of import duty.

Schedule II—(Import Tariff)—*continued.*

No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured.			
	APPAREL.			
55	APPAREL, including drapery, boots and shoes, and military and other uniforms and accoutrements, but excluding uniforms and accoutrements exempted from duty (No. 56) and gold and silver thread (Nos. 96 and 97) and articles made of silk (No. 107).	....	*Ad valorem*	15 per cent.
56	UNIFORMS AND ACCOUTREMENTS appertaining thereto, imported by a public servant for his personal use.	....	....	Free.
	ARMS, AMMUNITION AND MILITARY STORES.			
57	Subject to the exemptions specified in No. 60, ARMS, AMMUNITION AND MILITARY STORES, that is to say,—			Rs. a.
	(1) Firearms other than pistols, including gas and air guns and rifles.	Each.	....	15 0
	(2) Barrels for the same, whether single or double.	,,	....	15 0
	(3) Pistols, including automatic pistols and revolvers.	,,	....	15 0
	(4) Barrels for the same, whether single or double.	,,	....	15 0
	(5) Main springs and magazine springs for firearms, including gas, guns and rifles.	,,	....	5 0
	(6) Gun stocks and breech blocks	,,	....	3 0
	(7) Revolver cylinders, for each cartridge they will carry.	,,	....	2 0
	(8) Actions (including skeleton and waster), breech bolts and their heads, cocking pieces, and locks (for muzzle-loading arms).	,,	....	1 0
				or 30 per cent. *ad valorem* whichever is higher.
	(9) Machines for making loading or closing cartridges for rifled arms.	....	*Ad valorem*	30 per cent
	(10) Machines for capping cartridges for rifled arms.	....	,,	30 ,, ,,
58	GUNPOWDER for cannons, rifles, guns, pistols and sporting purposes.	....	,,	30 ,, ,,
59	Subject to the exemptions specified in No. 60 all ARTICLES, other than those specified in entry No. 57, which are ARMS OR PARTS OF ARMS within the meaning of the Indian Arms Act, 1878 (excluding springs used for air-guns which are dutiable as hardware, under No. 75), all tools used for cleaning or putting together the same, all machines for making, loading, closing or capping cartridges for arms other than rifled arms and all other sorts of ammunition and military stores, and any articles which the Governor General in Council may by notification in the *Gazette of India* declare to be "ammunition" or "military stores" for the purposes of this Act.	....	,,	30 ,, ,,

Schedule II.—(Import Tariff)—*continued.*

No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*			
	ARMS, AMMUNITION AND MILITARY STORES—*contd.*			
60	The following ARMS, AMMUNITION AND MILITARY STORES:— (*a*) Articles falling under the 5th, 6th, 8th, 9th or 10th item of No. 57 when they appertain to a firearm falling under the 1st or 3rd item and are fitted into the same case with such firearm; (*b*) Arms forming part of the regular equipment of a commissioned or gazetted officer in His Majesty's Service entitled to wear diplomatic, military, naval, Royal, Air Force or police uniform; (*c*) A revolver and an automatic pistol and ammunition for such revolver and pistol up to a maximum of 100 rounds per revolver or pistol (*i*) when accompanying a commissioned officer of His Majesty's regular forces or of the Indian Auxiliary Force or the Indian Territorial Force or a Gazetted Police Officer, or (*ii*) certified by the commandant of the corps to which such Officer belongs or in the case of an Officer not attached to any Corps, by the Officer Commanding the Station or District in which such Officer is serving, or in the case of a Police Officer by an Inspector-General or Commissioner of Police, to be imported by the Officer for the purpose of his equipment; (*d*) Swords for presentation as Army or Volunteer Prizes; (*e*) Arms, ammunition and Military Stores imported with the sanction of the Government of India for the use of any portion of the Military Forces of a State in India which may be maintained and organised for Imperial Service; (*f*) Morris tubes and patent ammunition imported by Officers Commanding British and Indian Regiments or Volunteer Corps for the instruction of their men;	....	....	Free.
61	EXPLOSIVES, namely, blasting gunpowder, blasting gelatine, blasting dynamite, blasting roburite, blasting tonite, and all other sorts, including detonators and blasting fuse.	....	*Ad valorem*	15 per cent.
	CHEMICALS, DRUGS AND MEDICINES.			
62	ANTI-PLAGUE SERUM	....	....	Free.
63	COPPERAS, green—		Rs. a.	
	(1) Imported in bulk	cwt.	5 0	2½ per cent.
	(2) „ otherwise	„	*Ad valorem*	2½ „ „
				Rs. a. p.
64	OPIUM and its alkaloids, and their derivatives ..	Seer of 80 tolas.	....	24 0 0 or 15 per cent. *ad valorem* whichever is higher.

Schedule II.—(Import Tariff)—*continued.*

No.	Names of Articles.	Per	Tariff Valuation. Rs. a.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*			
	CHEMICALS, DRUGS AND MEDICINES-*contd.*			
65	CINCHONA BARK and the alkaloids extracted therefrom including *Quinine.*	....	....	Free.
66	CHEMICALS, DRUGS AND MEDICINES, all sorts, not otherwise specified—			
	Alkali, Indian (saji-khar)	cwt.	3 8	15 per cent.
	Alum (lump)	,,	10 0	15 ,, ,,
	Ammonium chloride—			
	Muriate of Ammonia, crystalline	,,	32 0	15 ,, ,,
	Salammoniac, sublimed	,,	35 0	15 ,, ,,
	Other sorts, including compressed ..	,,	38 0	15 ,, ,,
	Arsenic (China mansil)	,,	85 0	15 ,, ,,
	,, other sorts	....	*Ad valorem*	15 ,, ,,
	Bleaching Powder	cwt.	12 8	15 ,, ,,
	Carbide of Calcium	,,	22 0	15 ,, ,,
	Carbonate of Ammonia	,,	40 0	15 ,, ,,
	Peppermint crystals	lb.	23 0	15 ,, ,,
	Silicate of Soda (in liquid form)	cwt.	11 8	15 ,, ,,
	Soda ash including calcined natural soda and manufactured sesqui-carbonates.	,,	7 0	15 ,, ,,
	Soda bicarbonate	,,	10 8	15 ,, ,,
	Soda, caustic, solid	,,	7 8	15 ,, ,,
	,, flake	,,	23 0	15 ,, ,,
	,, powdered	,,	22 0	15 ,, ,,
	Soda Crystal in bulk	,,	8 0	15 ,, ,,
	Sulphate of Copper	,,	24 0	15 ,, ,,
	Sulphur (brimstone) flowers	,,	6 0	15 ,, ,,
	,, ,, Roll	,,	7 0	15 ,, ,,
	,, ,, Rough	,,	5 0	15 ,, ,,
	Trona or natural soda uncalcined	,,	3 8	15 ,, ,,
	All other sorts of Chemical products and preparations not otherwise specified.†	....	*Ad valorem*	15 ,, ,,
	Aloe-wood	....	,, ,,	15 ,, ,,
	Asafoetida (hing)	cwt.	100 0	15 ,, ,,
	,, coarse (hingra)	,,	38 0	15 ,, ,,
	Atary, Persian	....	*Ad valorem*	15 ,, ,,
	Banslochan (bamboo camphor)	lb.	0 8	15 ,, ,,
	Calumba root	cwt.	10 0	15 ,, ,,
	Camphor, refined, other than powder ..	lb.	2 12	15 ,, ,,
	Camphor powder, from Japan	lb.	2 12	15 ,, ,,
	,, ,, ,, China including Hongkong.	,,	2 4	15 ,, ,,
	Cassia Lignea	cwt.	22 0	15 ,, ,,
	China root (chobchini) rough	,,	20 0	15 ,, ,,
	,, ,, scraped	,,	30 0	15 ,, ,,
	Cubebs	,,	150 0	15 ,, ,,
	Galangal, China	,,	12 8	15 ,, ,,
	Salep	,,	250 0	15 ,, ,,
	Storax, liquid (rose mellos or salaras) ..	,,	50 0	15 ,, ,,
	All other sorts of drugs, medicines and narcotics.	....	*Ad valorem*	15 ,, ,,

† Under Government of India Notification No. 1796, dated 1st April 1922, and 1380, dated 10th November 1923, Urea and Carbo Limbo are exempt from the payment of import duty.

Schedule II.—(Import Tariff)—*continued.*

No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*			
	CONVEYANCES.			
67	CONVEYANCES including tram cars, motor omnibuses, motor-lorries, motor-vans, passenger lifts, carriages, carts, jinrikshas, bath-chairs perambulators, trucks, wheel-barrows, bicycles, tricycles, and all other sorts of conveyances not otherwise specified, and component parts and accessories thereof and component parts and accessories thereof, except such parts land accessories of the motor vehicles above mentioned as are also adapted for use as parts' or accessories of motor-cars, motor-cycles, or motor-scooters, (*see* No. 68).	....	*Ad valorem*	15 per cent.
68	MOTOR-CARS, motor-cycles, motor-scooters, and articles adapted for use as parts and accessories thereof: provided that such articles as are ordinarily also used for purposes other than as parts and accessories of motor-vehicles included in this item or in No. 67 or of bicycles or tricycles shall be dutiable at the rate of duty specified for such article.	....	,,	30 ,, ,,
	CUTLERY, HARDWARE, IMPLEMENTS AND INSTRUMENTS.			
69	The following AGRICULTURAL IMPLEMENTS, namely, winnowers, threshers, mowing and reaping machines, binding machines, elevators, seed-crushers, chaff-cutters, root-cutters, ensilage cutters, horse and bullock gears, ploughs, cultivators, scarifiers, harrows, clod-crushers, seed-drills, hay-tedders, and rakes; also agricultural tractors; also component parts of these implements or tractors, provided that they can be readily fitted into their proper places in the implements or tractors for which they are imported, and that they cannot ordinarily be used for purposes unconnected with agriculture.	....	....	Free.
70	ARTICLES PLATED WITH GOLD AND SILVER ..	....	*Ad valorem*	30 per cent.
71	CLOCKS AND WATCHES, and parts thereof.. ..	....	,,	30 ,, ,,
72	CUTLERY, excluding plated cutlery (*see* No. 69.) ..	....	,,	15 ,, ,,
73	The following DAIRY APPLIANCES, namely, cream separators, milk sterilizing or pasteurising plant, milk aerating and cooling apparatus, churns, butter dryers and butter workers; also component parts of these appliances provided that they can be readily fitted into their proper places in the appliances for which they are imported and that they cannot ordinarily be used for other than dairy purposes.	....	....	Free.

Schedule II.—(Import Tariff)—*continued.*

No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*			
	CUTLERY, HARDWARE, IMPLEMENTS AND INSTRUMENTS—*contd.*			
74	ELECTRICAL CONTROL GEAR AND TRANSMISSION GEAR, namely, switches, fuses and current-breaking devices of all sorts and descriptions, designed for use in circuits of less than ten *amperes* and at a pressure not exceeding 250volts and regulators for use with motors designed to consume less than 187 watts; bare or insulated copper wires and cables, any one core of which has a scetional area of ess than one-eightieth part of a square inch and wires and cables of other metals of not more than equivalent conductivity; and line insulators, including also cleats, connectors, leading in tubes and the like, of types and sizes such as are ordinarily used in connection with the transmission of power for other than industrial purposes, and the fittings thereof.	....	*Ad valorem.*	15 per cent.
75	HARDWARE, IRONMONGERY AND TOOLS, all sorts not otherwise specified.	....	,,	15 ,, ,,
76	INSTRUMENTS, APPARATUS, AND APPLIANCES, Imported by a passenger as part of his personal baggage and in actual use by him in the exercise of his profession or calling.	....	....	Free.
77	MUSICAL INSTRUMENTS AND PARTS THEREOF ..	....	*Ad valorem*	30 per cent.
78	TELEGRAPHIC INSTRUMENTS AND APPARATUS, and parts thereof, imported by or under the orders of a railway company.	....	,,	10 ,, ,,
79	WATER-LIFTS, SUGAR-MILLS, OIL-PRESSES, and parts thereof, when constructed so that they can be worked by manual or animal power.	....	....	Free.
80	All other sorts of MPLEMENTS, INSTRUMENTS, APPARATUS AND APPLIANCES, and parts thereof, not otherwise specified. *	....	*Ad valorem*	15 per cent.
	DYES AND COLOURS.			
81	DYEING AND TANNING SUBSTANCES, all sorts, and PAINTS AND COLOURS and painters' materials, all sorts—		Rs. a.	
	Alizarine dye, dry, not exceeding 40 per cent.	lb.	1 12	15 per cent.
	,, ,, ,, over 40 per cent. but not exceeding 50 per cent.	,,	2 0	15 ,, ,,
	,, ,, ,, over 50 per cent. but not exceeding 60 per cent.	,,	2 4	15 ,, ,,
	,, ,, ,, over 60 per cent. but not exceeding 70 per cent.	,,	2 8	15 ,, ,,

* Under Government of India Notification No. 245, dated the 19th May 1923, apparatus for wireless telegraph imported in accordance with the terms of the Notification of the Government of India in the Commerce Department No. 6081, dated the 22nd October 1921, is liable to duty at 2½ per cent. *ad valorem*.

Schedule II.—(Import Tariff)—*continued.*

No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*		Rs. a.	
	DYES AND COLOURS—*contd.*			
	Alizarine dye, dry, over 70 per cent. but not exceeding 80 per cent.	lb.	2 12	15 per cent.
	,, ,, ,, over 80 per cent. ..	,,	3 4	15 ,, ,,
	,, ,,moist, not exceeding 10 per cent.	,,	0 8	15 ,, ,,
	,, ,, ,, over 10 per cent. and not exceeding 16 per cent. ..	,,	0 10	15 ,, ,,
	,, ,, ,, over 16 per cent. and not exceeding 20 per cent. ..	,,	0 12	15 ,, ,,
	,, ,, ,, exceeding 20 per cent.	,,	1 4	15 ,, ,,
	Aniline Dye, moist	,,	2 4	15 ,, ,,
	,, dyes, black, of sulphur series	,,	0 12	15 ,, ,,
	,, ,, Congo red	,,	1 4	15 ,, ,,
	All other aniline dyes, dry	,,	2 8	15 ,, ,,
	Aniline Salts	..	*Ad valorem*	15 ,, ,,
	Avar bark	cwt.	4 8	15 ,, ,,
	Cochineal	lb.	0 14	15 ,, ,,
	Gallnuts (myrabolams)	....	*Ad valorem*	15 ,, ,,
	,, Persian	cwt.	35 0	15 ,, ,,
	Gamboge	lb.	2 8	15 ,, ,,
	All other sorts of dyeing and tanning materials.	....	*Ad valorem*	15 ,, ,,
	Lead, red, dry	cwt.	27 0	15 ,, ,,
	,, white, dry	,,	35 0	15 ,, ,,
	Turpentine	Imperial gallon.	6 8	15 ,, ,,
	Vermillion, Canton	box of 90 bundles.	200 0	15 ,, ,,
	Zinc, white, dry	cwt.	45 0	15 ,, ,,
	All other sorts of paints, colours and painters' materials not otherwise specified, including glue and putty.	....	*Ad valorem*	15 ,, ,,
	FURNITURE, CABINETWARE AND MANUFACTURES OF WOOD.			
82	FURNITURE, CABINETWARE, and all manufactures of wood not otherwise specified.	....	,,	15 ,, ,,
	GLASSWARE AND EARTHENWARE.			
83	GLASS AND GLASSWARE, lacquered ware, earthenware, China and porcelain; all sorts, except glass bangles, beads and false pearls and aerated water bottles (Codd's pattern) (*see* Nos. 84 and 85).	....	*Ad valorem*	15 ,, ,,
84	AERATED WATER BOTTLES, (Codd's pattern)—			
	8 ozs. and under	gross.	45 0	15 ,, ,,
	Over 8 ozs.	,,	55 0	15 ,, ,,
85	Glass Beads and false pearls	,,	*Ad valorem*	30 ,, ,,
	GLASS BANGLES—			
	China—		Rs. a. p.	
	Nimuchi and pasalal	100 pairs	2 0 0	30 ,, ,,
	Bracelet Jadi and fancy all kinds	,,	4 0 0	30 ,, ,,
	Rajawarakh all kinds	,,	9 0 0	30 ,, ,,

Schedule II.—(Import Tariff)—*continued.*

No.	Names of Articles.	Per	Tariff Valuation	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*			
	GLASSWARE AND EARTHENWARE—*contd.*		Rs. a. p.	
	Japan—			
	Reshmi, plain and fancy, all colours, including vakmel.	Dozen pairs	0 2 0	30 per cent.
	Sonerikada (golbala)	,,	0 4 6	30 ,, ,,
	European—			
	Common, including plain colours, painted and flowered:—			
	Garnet and ruby	,,	0 14 0	30 ,, ,,
	All colours excepting garnet and ruby but including pasabadrang.	,,	0 5 0	30 ,, ,,
	Gilt and fancy, all sizes, including Kerihira, Chandtera, Salmadar, "K" flower and Momachi and including pressed and painted.	,,	1 9 0	30 ,, ,,
	Pasaful and machine polished, thin, including patli flower and fancy round rings.	,,	1 0 0	30 ,, ,,
	Common mirror bangles including chasma and Ranidarbar.	,,	0 14 0	30 ,, ,,
	Pasalai	,,	0 10 0	30 ,, ,,
	All other kinds	....	*Ad valorem*	30 ,, ,,
	HIDES, SKINS AND LEATHER.			
86	HIDES AND SKINS not otherwise specified, LEATHER AND LEATHER MANUFACTURES, all sorts, not otherwise specified.	....	,, ,,	15 ,, ,,
	MACHINERY.			
87	MACHINERY, namely, such of the following articles as are not specified in any of the following numbers, namely, Nos. 67, 68, 69, 73, 74, 89, 108, 114, 127, 132, and 134—	....	,, ,,	2½ ,, ,,
	(1) prime-movers, boilers, locomotive engines and tenders for the same, portable, engines (including power-driven road rollers, fire engines and tractors,) and other machines in which the prime-mover is not separable from the operative parts;			
	(2) machines and sets of machines to be worked by electric, steam, water, fire or other power, not being manual or animal labour, or which before being brought into use require to be fixed with reference to other moving parts;			
	(3) apparatus and appliances, not to be operated by manual or animal labour, which are designed for use in an industrial system as parts indispensable for its operation and have been given for that purpose some special shape or quality which would not be essential for their use for any other purpose;			

Schedule II.—(Import Tariff)—*contd.*

No.	Name of Articles.	Per.	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*			
	MACHINERY—*contd.*			
	(4) control gear, self-acting or otherwise and transmission gear designed for use with any machinery above specified including belting of all materials and driving chains but not driving ropes;			
	(5) bare hard-drawn electrolytic copper wires and cables and other electrical wires and cables, insulated or not; and poles, troughs, conduits and insulators designed as parts of as transmission system, and the fittings thereof.			
	Note.—The term "industrial system" used in sub-clause (3) means an installation designed to be employed directly in the performance of any process or series of processes necessary for the manufacture, production or extraction of any commodity.			
88	COMPONENT PARTS OF MACHINERY, as defined in No. 87, namely, such parts only as are essential for the working of the machine or apparatus and have been given for that purpose some special shape or quality which would not be essential for their use for any other purpose;	....	*Ad valorem.*	2½ per cent.
	Provided that articles which do not satisfy this condition shall also be deemed to be component parts of the machine to which they belong if they are essential to its operation and are imported with it in such quantities as may appear to the Collector of Customs to be reasonable.			
89	MACHINERY and component parts thereof, meaning machines or parts of machines to be worked by manual or animal labour, not otherwise specified (*see* Nos. 69, 73, and 79) and any machines except such as are designed to be used exclusive in industrial processes which require for their operation less than one quarter of one brake-horse-power.	....	,, ,,	15 ,, ,,
	METALS, IRON AND STEEL.			
90	IRON—			
	ANGLE—			
	Angle and T, not fabricated—		Rs. as.	
	Crown and superior qualities	ton.	200 0	10 ,, ,,
	Other kinds	,,	160 0	10 ,, ,,
	,, ,, if galvanised tinned, or lead coated.	,,	200 0	10 ,, ,,
	Angle and T, fabricated	....	*Ad valorem*	10 ,, ,,

Schedule II.—Import Tariff—*contd.*

No.	Names of Articles.	Per	Tariff Valuation. Rs. a.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*			
	METALS, IRON AND STEEL—*contd.*			
	IRON—*contd.*			
	BAR, ROD AND CHANNEL, INCLUDING CHANNEL FOR CARRIAGES—			
	Bar, qualities superior to Grade A of the British Engineering Standard Association.	ton	350 0	10 per cent.
	,, Grade A of the British Engineering Standard Association and Crown quality and intermediate qualities—			
	Over ½ inch in diameter or thickness	ton	160 0	10 ,, ,,
	½ inch and under in diameter or thickness.	,,	190 0	10 ,, ,,
	,, common	,,	140 0	10 ,, ,,
	,, ,, if galvanized, tinned, or lead coated.	,,	180 0	10 ,, ,,
	Channel, including channel for carriages ..	,,	170 0	10 ,, ,,
	All other sorts	....	*Ad valorem*	10 ,, ,,
	PIG	ton	90 0	10 ,, ,,
	RICE BOWLS	cwt.	25 0	10 ,, ,,
91	IRON OR STEEL—			
	ANCHORS AND CABLES	....	*Ad valorem.*	10 ,, ,,
	BEAMS, joists, pillars, girders and other structural shapes, whether fabricated or not, screw-piles bridge work and other descriptions of iron or steel, not ordinarily used for other than building purposes; including ridging, guttering, flashing and continuous roofing; also including expanded metal and other descriptions of iron or steel designed for use in the reinforcing of concrete but not including builders hardware, that is to say, grates, stoves, ventilators, door and window fittings and the like; (*see* No. 75).	....	,,	10 ,, ,,
	BOLTS and nuts, including hook bolts and nuts for roofing.	....	,,	10 ,, ,,
	HOOPS AND STRIPS—			
	Hoops, Crown and superior qualities.	ton	250 0	10 ,, ,,
	,, other kinds	,,	200 0	10 ,, ,,
	,, ,, ,, if galvanised, tinned, planished, lead coated or aluminium coated.	,,	250 0	10 ,, ,,
	Strips, Crown and superior qualities.	,,	250 0	10 ,, ,,
	,, other kinds	,,	200 0	10 ,, ,,
	,, ,, ,, if galvanised, tinned, planished, lead coated, or aluminium coated.	,,	250 0	10 ,, ,,
	NAILS, RIVETS AND WASHERS, ALL SORTS—			
	Nails, wire or French	cwt.	14 0	10 ,, ,,
	,, rose, deck, and flat-headed	,,	20 0	10 ,, ,,
	,, other kinds, including galvanised, tinned or lead coated, and panel pins and tacks.	,,	33 0	10 ,, ,,
	Rivets, black	,,	14 0	10 ,, ,,
	,, other sorts	,,	24 0	10 ,, ,,
	Washers, galvanized, nickel plated, tinned or lead coated and dome-shaped, spring or locking washers.	,,	*Ad valorem*	10 ,, ,,
	,, other sorts	,,	19 0	10 ,, ,,

Schedule II.—(Import Tariff)—*continued.*

No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*		Rs. a.	
	METALS, IRON AND STEEL—*contd.*			
	IRON OR STEEL—*contd.*			
	PIPES AND TUBES, and fittings therefor, such as bends, boots, elbows, tees, sockets, flanges, plugs, valves, cocks and the like.	....	*Ad valorem*	10 per cent
	RAILS, CHAIRS, sleepers, bearing and fish plates, spikes (commonly known as dog spikes), switches, and crossings, other than those described in No. 101, also lever boxes, clips, and tie-bars.	....	,,	10 ,, ,,
	SHEETS AND PLATES, not fabricated, all sorts, excluding discs, and circles—			
	Plates, boiler, firebox and special qualities above $\frac{1}{4}$ inch in thickness.	ton	300 0	10 ,, ,,
	Sheets $\frac{1}{8}$ inch and under in thickness, annealed, which have been either cold-rolled, smoothed (including planished), pickled, or cleaned by acid or other material or process.	,,	200 0	10 ,, ,,
	Sheets, corrugated, galvanised or black up to and including 26 Gauge.	,,	300 0	10 ,, ,,
	,, ,, galvanised or black above 26 Gauge.	,,	400 0	10 ,, ,,
	Sheet and plate cuttings	,,	140 0	10 ,, ,,
	Tin plates	,,	400 0	10 ,, ,,
	,, cuttings	....	*Ad valorem*	10 ,, ,,
	Sheets, other kinds, black, up to and including $\frac{1}{8}$ inch in thickness.	ton	175 0	10 ,, ,,
	Plates, ship, tank, bridge and common above $\frac{1}{8}$ inch in thickness.	,,	150 0	10 ,, ,,
	Sheets, other kinds, if galvanised, tinned, lead coated, or aluminium coated, up to and including 26 gauge, also chequered and galvanised plates.	,,	425 0	10 ,, ,,
	Sheets, other kinds, if galvanised, tinned, lead coated, or aluminium coated, above 26 Gauge, including tin taggers.	,,	425 0	10 ,, ,,
	Sheets and plates, fabricated, all sorts including discs, and circles.	....	*Ad valorem*	10 ,, ,,
	Wire, including fencing wire, piano-wire, and wire rope but excluding wire-netting which is dutiable under No. 93.	....	,,	10 ,, ,,
92	STEEL—			
	ANGLE—			
	Angle and T, not fabricated, if galvanised, tinned, or lead coated.	ton	200 0	10 ,, ,,
	,, ,, all other sorts	,,	150 0	10 ,, ,,
	,, and T, fabricated	....	*Ad valorem*	10 ,, ,,

Schedule II.—(Import Tariff)—*continued.*

No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*		Rs. a.	
	METALS, IRON AND STEEL—*contd.*			
	STEEL—*contd.*			
	BAR, ROD, AND CHANNEL, including channel for carriages—			
	Bar, Swedish and similar qualities	ton	220 0	10 per cent.
	,, common merchant nail-rod, round rod, and square over-½ inch in diameter or thickness and under.	,,	150 0	10 ,, ,,
	,, ,, ,, other sizes and section.	,,	135 0	10 ,, ,,
	,, galvanized, tinned, planished, polished or lead coated.	,,	180 0	10 ,, ,,
	,, crucible, cast steel (tool steel) including—			
	(*a*) High Speed	....	*Ad valorem*	10 ,, ,,
	(*b*) Carbon Steel	....	,,	10 ,, ,,
	,, High tensile steel	....	,,	10 ,, ,,
	Channel, including channel for carriages ..	ton.	170 0	10 ,, ,,
	All other sorts, including faggot steel ..	....	*Ad valorem*	10 ,, ,,
	CAST, including spring, blistered and tub steel.	....	,,	10 ,, ,,
	INGOTS, BLOOMS, BILLETS AND SLABS ..	....	,,	10 ,, ,,
93	All sorts of IRON AND STEEL and manufactures thereof, not otherwise specified—			
	Iron or steel cans or drums, when imported containing kerosene and motor spirit which is separately assessed to duty under No. 34, namely:—			
	Cans, tinned, of four gallons capacity ..	can.	0 5	15 ,, ,,
	Cans or drums, not tinned, of two gallons capacity—			
	(*a*) with faucet caps	can or drum	1 8	15 ,, ,,
	(*b*) ordinary	,,	0 6	15 ,, ,,
	Drums of four gallons capacity—			
	(*a*) with faucet caps	drum.	2 3	15 ,, ,,
	(*b*) ordinary	,,	1 8	15 ,, ,,
	Iron or steel cans or drums, other sorts ..	....	*Ad valorem*	15 ,, ,,
	Iron or steel, all other sorts, including wire-netting.	....	,,	15 ,, ,,
	METALS, OTHER THAN IRON AND STEEL.			
94	CURRENT NICKEL, BRONZE, AND COPPER COIN of the Government of India.	....	....	Free.
95	GOLD AND SILVER BULLION AND COIN	....	....	,,
96	GOLD PLATE, gold thread and wire and gold manufactures, all sorts.	....	*Ad valorem*	30 per cent.

Schedule II.—(Import Tariff)—*continued.*

No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*			
	METALS, OTHER THAN IRON AND STEEL—*contd.*		Rs. a.	
97	SILVER PLATE, SILVER THREAD and wire and SILVER MANUFACTURES, all sorts.	....	*Ad valorem*	30 per cent.
98	ALL SORTS OF METALS OTHER THAN IRON AND STEEL, and manufactures thereof, not otherwise specified—			
	Aluminium circles	lb.	0 15	15 ,, ,,
	,, sheets	,,	0 14	15 ,, ,,
	Brass, patent or yellow metal sheets and sheathing, weighing 1 lb. or above per square foot, and braziers and plates.	cwt	60 0	15 ,, ,,
	,, patent or yellow metal (including gun metal) ingots.	,,	35 0	15 ,, ,,
	,, ,, ,, ,, old	,,	30 0	15 ,, ,,
	,, sheets, flat or in rolls, and sheathing, weighing less than 1 lb. per square foot.	....	*Ad valorem*	15 ,, ,,
	,, wire	....	,,	15 ,, ,,
	,, all other sorts	....	,,	15 ,, ,,
	Copper, bolt and bar, rolled	....	,,	15 ,, ,,
	,, braziers, sheets, plates and sheathing..	cwt.	65 0	15 ,, ,,
	,, sheets, planished	....	*Ad valorem*	15 ,, ,,
	,, nails and composition nails	....	,,	15 ,, ,,
	,, old	cwt.	36 0	15 ,, ,,
	,, pigs, tiles, ingots, cakes, bricks and slabs.	,,	55 0	15 ,, ,,
	,, China, white, copperware	lb.	3 0	15 ,, ,,
	,, foil or dankpana, plain, white, 10 or 11 in. × 4 to 5 in.	hundred leaves	2 4	15 ,, ,,
	,, foil or dankpana, plain, coloured, 10 to 11 in. × 4 to 5 in.	,,	2 12	15 ,, ,,
	,, wire, including phosphor-bronze ..	.. .	*Ad valorem*	15 ,, ,,
	,, all other sorts, unmanufactured and manufactured, except current coin of the Government of India which is free.	....	,,	15 ,, ,,
	German silver	....	,,	15 ,, ,,
	Lead, pig	cwt.	20 0	15 ,, ,,
	Lead, all sorts (except pig).	....	*Ad valorem.*	15 ,, ,,
	Quicksilver	lb.	2 4	15 ,, ,,
	Tin, block	cwt.	150 0	15 ,, ,,
	,, foil, and other sorts	....	*Ad valorem*	15 ,, ,,

Schedule II.—(Import Tariff)—*continued.*

No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*			
	METALS, OTHER THAN IRON AND STEEL—*contd.*			
	ALL SORTS OF METALS OTHER THAN IRON AND STEEL, and manufactures thereof, not otherwise specified—*contd.*		Rs. a. p.	
	Zinc or spelter, tiles, slabs or plates, hard or soft.	cwt.	25 0 0	15 per cent.
	,, ,, all other sorts including boiler tiles and sheets.	....	*Ad valorem*	15 ,, ,,
	All other sorts of metals and manufactures thereof.	....	,, ,,	15 ,, ,,
	PAPER, PASTEBOARD AND STATIONERY.			
99	PAPER AND ARTICLES MADE OF PAPER AND PAPIER MACHE, PASTEBOARD, MILLBOARD, AND CARDBOARD all sorts, and STATIONERY including ruled or printed forms and account and manuscript books, drawing and copy books, labels, advertising circulars, sheet or card almanacs and calendars, Christmas, Easter and other cards, including cards in booklet form, including also wastepaper and old newspapers for packing except old newspapers in bales, and bags, but excluding trade catalogues and advertising circulars imported by packet, book, or parcel post (*see* No. 100) and also excluding the descriptions given below :—	....	,, ,,	15 ,, ,,
	Old newspapers in bales and bags	cwt.	8 0 0	15 ,, ,,
	News printing paper, glazed and unglazed :—			
	White or grey	lb.	0 2 3	15 ,, ,,
	Coloured	,,	0 2 6	15 ,, ,,
	Printing paper, white or coloured :—			
	Real Art	,,	0 6 6	15 ,, ,,
	Imitation Art, machine finish, super calendered, ivory finish, antique, stereo, litho, poster, cartridge, (other than drawing or photographic cartridge) and cover paper.	,,	0 4 3	15 ,, ,,
	Other sorts	....	*Ad valorem*	15 ,, ,,
	Packing and wrapping paper—			
	Nature brown, and machine-glazed pressings machine-glazed wrappings.	lb.	0 2 3	15 ,, ,,
	Manilla, machine-glazed or unglazed, and sulphite envelope.	,,	0 2 9	15 ,, ,,
	Kraft and imitation kraft	,,	0 3 3	15 ,, ,,
	Other sorts including tissues	,,	*Ad valorem*	15 ,, ,,
	Writing paper—			
	Bond, bank, Cream laid glazed and unglazed.	,,	0 6 6	15 ,, ,,
	Cream laid other than Mechanical	,,	0 4 6	15 ,, ,,
	Mechanical Cream laid	lb.	0 4 0	15 ,, ,,
	Other sorts	....	*Ad valorem*	15 ,, ,,
	Straw boards	cwt.	8 8 0	15 ,, ,,
100	TRADE CATALOGUES AND ADVERTISING CIRCULARS IMPORTED BY PACKET, BOOK OR PARCEL POST.	....	....	Free.

Schedule II.—(Import Tariff)—*continued.*

No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*			
	RAILWAY PLANT AND ROLLING STOCK.			
101	RAILWAY MATERIALS for permanent-way and rolling stock, namely, cylinders, girders, and other material for bridges, rails, sleepers, bearing and fish-plates, fish-bolts, chairs, spikes, crossings, sleeper fastenings, switches, interlocking apparatus, brake gear, couplings and springs, signals, turn-tables, weigh-bridges, engines, tenders, carriages, wagons, traversers, trollies, trucks, and component parts thereof; also the following articles when imported by or under the orders of a railway company, namely, cranes, water cranes, water tanks and standards, wire and other materials for fencing. Provided that for the purpose of this entry "railway" means a line of railway subject to the provisions of the Indian Railways Act, 1890, and includes a railway constructed in a State in India and also such tramways as the Governor-General in Council may, by notification in the *Gazette of India*, specifically include therein. Provided also that nothing shall be deemed to be dutiable hereunder which is dutiable under No. 87 or No. 88.	....	*Ad valorem*	10 per cent.
102	COMPONENT PARTS OF RAILWAY MATERIALS, as defined in No. 101, namely, such parts only as are essential for the working of railways and have been given for that purpose some special shape or quality which would not be essential for their use for any other purpose: Provided that articles which do not satisfy this condition shall also be deemed to be component part of the railway material to which they belong, if they are essential to its operation and are imported with it in such quantities as may appear to the Collector of Customs to be reasonable.	....	*Ad valorem*	10 per cent.
	YARNS AND TEXTILE FABRICS.			
103	COTTON PIECE-GOODS	....	*Ad valorem*	11 per cent.
104	COTTON TWIST AND YARN, and COTTON SEWING OR DARNING THREAD.	....	,,	5 ,, ,,
105	SECOND-HAND OR USED GUNNY BAGS made of jute.	....	....	Free.
106	YARNS AND TEXTILE FABRICS, that is to say—			
	Cotton thread other than sewing or darning thread, and all other manufactured cotton goods not otherwise specified.	....	*Ad valorem*	15 per cent
	Flax, twist and yarn and manufactures of flax .	....	,,	15 ,, ,,
	Haberdashery and millinery excluding articles made of Silk.	....	,,	15 ,, ,,
	Hemp manufactures	....	,,	15 ,, ,,
	Hosiery excluding articles made of Silk ..	....	,,	15 ,, ,,
	Jute twist and yarn and jute manufactures, excluding second-hand or used gunny bags (*see* No. 105). *	....	,,	15 ,, ,,
	Silk yarn, noils and warps, and silk thread ..	....	,,	15 ,, ,,
	Woollen yarn, knitting wool, and other manufactures of wool, including felt.	....	,,	15 ,, ,,
	All other sorts of yarns and textile fabrics, not otherwise specified.	....	,,	15 ,, ,,

* Under Governmnet of India Notification No. 281, dated the 26th May 1923, used gunny cloth made of jute is exempt from payment of Import duty.

Schedule II.—(Import Tariff)—*continued.*

No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*		Rs. a.	
	YARNS AND TEXTILE FABRICS—*contd.*			
107	SILK PIECE-GOODS, and other manufactures of silk—			
	Silk piece-goods, (white or coloured, plain or figured and all widths) from Japan and China (including Hongkong)—			
	Japan—			
	Paj, Thama; Junken and Nankin, all kinds, including striped, printed, embossed and pine-apples.	lb.	28 0	30 per cent.
	Satins and Kohaku, all kinds, including striped, printed, woven and embossed.	,,	33 0	30 ,, ,,
	Twill, all kinds	,,	28 0	30 ,, ,,
	Jarina (Gold embroidered)	,,	37 0	30 ,, ,,
	Fugi and Boseki, all kinds	,,	21 0	30 ,, ,,
	Fancies, printed and woven, including Georgettes, Kobe-crepes, crepe-de-chine, (chirmin), ninons and gauzes.	,,	42 0	30 ,, ,,
	Embroideries, excluding Burmese scarves ..	,,	52 0	30 ,, ,,
	Shawls, dhuties, scarves, excluding Burmese, mufflers, handkerchiefs and hosiery.	,,	48 0	30 ,, ,,
	Dupettas and China Silk patkas	,,	23 0	30 ,, ,,
	Burmese Scarves (*a*) Paj	,,	40 0	30 ,, ,,
	,, ,, (*b*) other kinds	,,	50 0	30 ,, ,,
	Cotton and Silk mixed satins, embroidered..	,,	16 0	30 ,, ,,
	Cotton and silk mixed satins, other kinds ..	,,	8 0	30 ,, ,,
	,, ,, Hosiery	,,	28 0	30 ,, ,,
	,, ,, Fugi and Boseki, all kinds	,,	12 0	30 ,, ,,
	Silk Fents	,,	14 0	30 ,, ,,
	China (including Hongkong but excluding Cantons)—			
	Honans, all kinds, and patkas	,,	9 0	30 ,, ,,
	Shantungs, all kinds, and Patkas	,,	5 8	30 ,, ,,
	Corded, all kinds, except Woochow	,,	7 0	30 ,, ,,
	White cord (Woochow), all kinds	,,	15 0	30 ,, ,,
	Crepe. Gauze and paj, all kinds	,,	23 0	30 ,, ,,
	Satins and fancies, all kinds	,,	31 0	30 ,, ,,
	Cantons, all kinds	....	*Ad valorem*	30 ,, ,,
	Silk piece-goods, apparel and other manufactures of silk not otherwise specified.	....	,,	30 ,, ,,
	MISCELLANEOUS.			
108	AEROPLANES, aeroplane parts, aeroplane engines and aeroplane engine parts.	....	,,	2½ ,, ,,
109	ART, the following works of:—(1) statuary and pictures intended to be put up for the public benefit in a public place, and (2) memorials of a public character intended to be put up in a public place, including the materials used, or to be used in their construction, whether worked or not.	....	....	Free.

Schedule II.—(Import Tariff)—*continued.*

No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*			
	MISCELLANEOUS—*contd.*		Rs. a.	
110	ART, works of, excluding those specified in No. 109.	....	*Ad valorem*	15 per cent.
111	Bangles—			
	Celluloid, plain, flat, without border	dozen pairs	2 4	15 ,, ,,
	,, other sorts	,,	*Ad valorem*	15 ,, ,,
	,, (rubber) rings	,,	0 8	15 ,, ,,
112	BOOKS, printed, including covers for printed books, maps, charts, and plans, proofs, music and manuscripts.	....	....	Free.
113	BRUSHES AND BROOMS	....	*Ad valorem*	15 per cent.
114	BUILDING AND ENGINEERING MATERIALS, including asphalt, bricks, cement other than Portland cement, chalk and lime, clay, other than China clay (*see* No. 116), pipes of earthenware, tiles fire bricks not being component parts of any article included in No. 87 or No. 101, and all other sorts of building and engineering materials not otherwise specified including bitumen and other insulating materials.	....	,,	15 ,, ,,
	PORTLAND CEMENT	cwt.	3 0	15 per cent.
115	CANDLES	....	*Ad valorem*	15 ,, ,,
116	CHINA CLAY	ton.	85 0	15 ,, ,,
117	CINEMATOGRAPH FILMS :—			
	Exposed standard positive films new or used ..	foot.	0 4	15 ,, ,,
	Other films	....	*Ad valorem*	15 ,, ,,
118	CORDAGE AND ROPE AND TWINE OF VEGETABLE FIBRE.	....	,,	
119	FIREWORKS *	....	,,	30 ,, ,,
120	FURNITURE, TACKLE AND APPAREL, not otherwise described, for steam, sailing, rowing and other vessels.	....	,,	15 ,, ,,
121	Ivory, manufactured	....	,,	30 ,, ,,
122	JEWELLERY AND JEWELS	....	,,	30 ,, ,,
123	MATCHES—			Rs. a.
	(1) In boxes containing on the average not more than 100 matches.	Gross of boxes.	....	1 8
	(2) In boxes containing on the average more than 100 matches.	For every 25 matches or fraction thereof in each box, per gross of boxes.	....	0 6
124	MATS AND MATTING	....	*Ad valorem*	15 per cent.
125	OIL CAKES	....	,,	15 ,, ,,
126	OILCLOTH AND FLOOR CLOTH	....	,,	15 ,, ,,
127	PACKING—ENGINE AND BOILER—all sorts, excluding packing forming a component part of any article included in Nos. 87, 88 and 101.	....	,,	15 ,, ,,

* Under the Government of India Notification No. 4467, dated 2nd September 1922, such fireworks as are specially prepared as danger or distress lights for the use of ships are liable to duty at 15 per cent. *ad valorem*.

Schedule II.—(Import Tariff)—*continued.*

No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*		Rs. a.	
	MISCELLANEOUS—*contd.*			
128	PERFUMERY, not otherwise specified—			
	Gowla husked and unhusked	cwt.	50 0	15 per cent.
	Kapurkachri (zedoary)	,,	25 0	15 ,, ,,
	Patch leaves (patchouli)	,,	30 0	15 ,, ,,
	Rose-flowers, dried	,,	16 0	15 ,, ,,
	Rose-water	Imperial gallon.	5 0	15 ,, ,,
	All other sorts	....	*Ad valorem*	15 ,, ,,
129	PITCH, TAR AND DAMMER—			
	Coal pitch	cwt.	7 0	15 ,, ,,
	Coal tar	,,	*Ad valorem*	15 ,, ,,
	Stockholm tar	,,	20 0	15 ,, ,,
	Dammer Batu	,,	8 0	15 ,, ,,
	Other sorts	....	*Ad valorem*	15 ,, ,,
130	PNEUMATIC RUBBER TYRES and tubes for motor cars, motor lorries, motor-cycles, and motor-scooters.	....	,,	30 ,, ,,
131	POLISHES AND COMPOSITIONS..	....	,,	15 ,, ,,
132	PRINTING AND LITHOGRAPHING MATERIAL, namely, presses, type, ink, aluminium lithographic plates, brass rules, composing sticks, chases, imposing tables, and lithographic stones, stereo-blocks, wood blocks, half-tone blocks, electrotype blocks, roller moulds, roller frames and stocks, roller composition, standing screw and hot presses, perforating machines, gold blocking presses, galley presses, proof presses, arming presses, copper plate printing presses, rolling presses, ruling machines, ruling pen making machines, lead and rule cutters, type casting machines, type setting and casting machines, rule bending machines, rule mitreing machines, bronzing machines, leads, wooden and metal quoins, shooting sticks and galleys, stereo-typing apparatus, metal furniture, paper folding machines, and paging machines, but excluding paper (*see* No. 99).	....	,,	24 ,, ,,

Schedule II.—(Import Tariff) – *concluded.*

No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	III.—Articles wholly or mainly manufactured—*contd.*		Rs. a.	Rs. a. p.
	MISCELLANEOUS – *contd.*			
133	PRINTS, ENGRAVINGS AND PICTURES, including photographs and picture post cards.	....	*Ad valorem*	30 per cent.
134	RACKS for the withering of tea leaf	....	,,	2½ ,, ,,
135	RUBBER tyres and other manufactures of rubber not otherwise specified (*see* No. 130).	....	,,	15 ,, ,,
136	SHIPS AND OTHER VESSELS for inland and harbour navigation, including steamers, launches, boats and barges, imported entire or in sections. Provided that articles of machinery as defined in No. 87 or No. 88 shall, when separately imported, not be deemed to be included hereunder.	....	,,	10 ,, ,,
137	SMOKERS' REQUISITES, excluding tobacco (Nos. 26 to 28) and matches (No. 123).	....	,,	30 ,, ,,
138	SOAP	....	,,	15 ,, ,,
139	STARCH AND FARINA	....	,,	15 ,, ,,
140	STONE AND MARBLE, and articles made of stone and marble.	....	,,	15 ,, ,,
141	TOILET REQUISITES, not otherwise specified ..	....	,,	15 ,, ,,
142	TOYS, games, playing cards and requisites for games and sports, excluding bird-shot.	....	,,	30 ,, ,,
	Bird-shot	cwt.	35 0	30 ,, ,,
143	ALL OTHER ARTICLES wholly or mainly manufactured, not otherwise specified.	....	*Ad valorem*	15 ,, ,,
	IV.—Miscellaneous and unclassified.			
144	ANIMALS, living, all sorts	....	....	Free.
145	CORAL	....	*Ad valorem*	15 per cent.
146	FODDER, BRAN AND POLLARDS	....		2½ ,, ,,
147	SPECIMENS illustrative of natural science, and medals and antique coins.	....	....	Free.
148	UMBRELLAS, including parasols and sunshades, and fittings therefor.	....	*Ad valorem*	15 per cent.
149	ALL OTHER ARTICLES NOT OTHERWISE SPECIFIED, including articles imported by post.	....	,,	15 ,, ,,

Schedule III.—(Export Tariff).

No.	Names of Articles.	Per	Tariff Valuation.	Duty.
	Jute other than Bimlipatam Jute.		Rs. a. p.	Rs. a.
1	RAW JUTE—			
	(1) Cuttings	Bale of 400 lbs.	....	1 4
	(2) All other descriptions	,,	....	4 8
2	JUTE MANUFACTURES when not in actual use as coverings, receptacles or bindings for other goods—			
	(1) Sacking (cloth, bags, twist, yarn, rope and twine).	Ton of 2,240 lbs.	....	20 0
	(2) Hessians and all other descriptions of jute manufactures not otherwise specified.*	,,	....	32 0
	RICE.			
3	RICE, husked or unhusked, including rice flour, but excluding rice bran and rice dust, which are free.	Indian maund of 82⅔ lbs. avoirdupois weight.	....	0 3
	TEA.			
4	TEA	100 lbs.	....	1 8
5	RAW HIDES AND SKINS IF EXPORTED FROM BURMA—			
	(1) Arsenicated and air dried hides—			
	(*a*) Cows (including calf skins)	lb.	0 5 0	5 per cent.
	(*b*) Buffaloes (Do. do.)	,,	0 3 0	5 ,,
	(2) Dry salted hides—			
	(*a*) Cows (including calf skins)	,,	0 4 0	5 ,,
	(*b*) Buffaloes (Do. do.)	,,	0 2 0	5 ,,
	(3) Wet salted hides—			
	(*a*) Cows (including calf skins)	,,	0 3 0	5 ,,
	(*b*) Buffaloes (Do. do.)	,,	0 1 6	5 ,,
	(4) Goat and Kid Skins	piece.	1 6 0	5 ,,
	(5) Sheepskins	,,	0 10 0	5 ,,
6	RAW HIDES AND SKINS IF EXPORTED FROM ANY PLACE IN BRITISH INDIA OTHER THAN BURMA :—			
	(1) Arsenicated and air dried hides—			
	(*a*) Cows (including calf skins)—			
	Framed	lb.	0 9 0	5 ,,
	Unframed	,,	0 5 0	5 ,,
	(*b*) Buffaloes (including calf skins)—			
	Framed ..	,,	0 5 0	5 ,,
	Unframed ..	,,	0 3 0	5 ,,
	(2) Dry salted hides—			
	(*a*) Cows (including calf skins)	,,	0 4 0	5 ,,
	(*b*) Buffaloes (Do. do.)	,,	0 2 6	5 ,,
	(3) Wet salted hides—			
	(*a*) Cows (including calf skins)	,,	0 3 0	5 ,,
	(*b*) Buffaloes (Do. do.)	,,	0 2 0	5 ,,
	(4) Goat and Kid Skins	piece.	1 8 0	5 ,,
	(5) Sheep Skins	,,	0 10 0	5 ,,

* Under Government of India Notification No. 1428, dated 17th November 1923, Jute Rags such as are used for paper making are exempt from payment of export duty provided that the Customs Collector is satisfied that they are useless for any purpose to which cloth or rope is ordinarily put.

THE VICTORIA CROSS.

The announcement, made at the Delhi Durbar in 1911, that in future Indians would be eligible for the Victoria Cross gave satisfaction which was increased during the War and afterwards by the award of that decoration to the following:—

Subadar (then Sepoy) Khudadad Khan, 129th Baluchis.—On 31st October 1914, at Hollebeke, Belgium, the British Officer in charge of the detachment having been wounded, and the other gun put out of action by a shell, Sepoy Khudadad, though himself wounded, remained working his gun until all the other five men of the gun detachment had been killed.

Naick Darwan Sing Negi, 1-39th Garhwal Rifles.—For great gallantry on the night of the 23rd-24th November 1914 near Festubert, France, when the Regiment was engaged in retaking and clearing the enemy out of our trenches, and, although wounded in two places in the head, and also in the arm, being one of the first to push round each successive traverse, in the face of severe fire from bombs and rifles at the closest range.

Subadar (then Jamadar) Mir Dast, 55th Coke's Rifles.—For most conspicuous bravery and great ability at Ypres on 26th April 1915, when he led his platoon with great gallantry during the attack, and afterwards collected various parties of the Regiment (when no British Officers were left) and kept them under his command until the retirement was ordered. Jamadar Mir Dast subsequently on this day displayed remarkable courage in helping to carry eight British and Indian Officers into safety, whilst exposed to very heavy fire.

Rifleman Kulbir Thapa, 2-3rd Gurkha Rifles.—For most conspicuous bravery during operations against the German trenches south of Mauquissart. When himself wounded, on the 25th September 1915, he found a badly wounded soldier of the 2nd Leicestershire Regiment behind the first line German trench, and though urged by the British soldier to save himself, he remained with him all day and night. In the early morning of the 26th September, in misty weather, he brought him out through the German wire, and, leaving him in a place of comparative safety returned and brought in two wounded Gurkhas one after the other. He then went back in broad daylight for the British soldier and brought him in also, carrying him most of the way and being at most points under the enemy's fire.

Havildar (then Lance-Naick) Lala, 41st Dogras.—Finding a British Officer of another regiment lying close to the enemy he dragged him into a temporary shelter which he himself had made, and in which he had already bandaged four wounded men. After bandaging his wounds he heard calls from the Adjutant of his own Regiment who was lying in the open severely wounded. The enemy were not more than one hundred yards distant, and it seemed certain death to go out in that direction, but Lance-Naik Lala insisted on going out to his Adjutant, and offered to crawl back with him on his back at once. When this was not permitted, he stripped off his own clothing to keep the wounded officer warmer and stayed with him till just before dark when he returned to the shelter. After dark he carried the first wounded officer back to the main trenches, and then, returning with a stretcher carried back his Adjutant. He set a magnificent example of courage and devotion to his officers.

Sepoy Chatta Singh, 9th Bhopal Infantry.—For most conspicuous bravery and devotion to duty in leaving cover to assist his Commanding Officer who was lying wounded and helpless in the open. Sepoy Chatta Singh bound up the officer's wound and then dug cover for him with his entrenching tool, being exposed all the time to very heavy rifle fire. For five hours until nightfall he remained beside the wounded officer shielding him with his own body on the exposed side. He then, under cover of darkness, went back for assistance, and brought the officer into safety.

Naick Shahamad Khan, 89th Punjabis.—For most conspicuous bravery. He was in charge of a machine-gun section in an exposed position in front of and covering a gap in our new line within 150 yards of the enemy's entrenched position. He beat off three counter-attacks, and worked his gun single-handed after all his men, except two belt-fillers, had become casualties. For three hours he held the gap under very heavy fire while it was being made secure. When his gun was knocked out by hostile fire he and his two belt-fillers held their ground with rifles till ordered to withdraw. With three men sent to assist him he then brought back his gun, ammunition, and one severely wounded man unable to walk. Finally, he himself returned and removed all remaining arms and equipment except two shovels. But for his great gallantry and determination our line must have been penetrated by the enemy.

Lance-Dafedar Govind Singh, 28th Cavalry.—For most conspicuous bravery and devotion to duty in thrice volunteering to carry messages between the regiment and brigade headquarters, a distance of 1½ miles over open ground which was under the observation and heavy fire of the enemy. He succeeded each time in delivering his message although on each occasion his horse was shot, and he was compelled to finish the journey on foot.

Rifleman Karan Bahadur Rana, 2-3rd Gurkha Rifles.—For conspicuous bravery and resource in action under adverse conditions, and utter contempt of danger during an attack. He with a few other men succeeded, under intense fire, in creeping forward with a Lewis gun in order to engage an enemy machine gun which had caused severe casualties to officers and other ranks who had attempted to put it out of action. No. 1 of the Lewis gun party opened fire and was shot immediately. Without a moment's hesitation Karan Bahadur pushed the dead man off the gun, and in spite of bombs thrown at him and heavy fire from both flanks, he opened fire and knocked out the enemy machine gun crew. Then switching his fire on the enemy bombers and riflemen in front of him, he silenced their fire. He kept his gun in action, and showed the greatest coolness in removing defects which had twice prevented the gun from firing. He did magnificent work during the remainder of the day and when a withdrawal was ordered

assisted with covering fire until the enemy was close to him. He displayed throughout a very high standard or valour and devotion to duty.

Ressaldar Badlu Singh, 14th Lancers attached 29th Lancers.—For most conspicuous bravery and self-sacrifice on the morning of the 23rd September 1918, when his squadron charged a strong enemy position on the west bank of the River Jordan, between the river and Kh. es Samariveh Village. On nearing the position Ressaldar Badlu Singh realised that the squadron was suffering casualties from a small hill on the left front occupied by machine guns and 200 infantry. Without the slightest hesitation he collected six other ranks and with the greatest dash and an entire disregard of danger charged and captured the position, thereby saving very heavy casualties to the squadron. He was mortally wounded on the very top of the hill when capturing one of the machine guns single-handed, but all the machine guns and infantry had surrendered to him before he died. His valour and initiative were of the highest order.

Rifleman Gobar Sing Negi, 2nd Battalion, 39th Garhwal Rifles.—For most conspicuous bravery on 10th March 1915 at Neuve Chapelle. During an attack on the German position he was one of a bayonet party with bombs who entered their main trench, and was the first man to go round each traverse, driving back the enemy until they were eventually forced to surrender. He was killed during this engagement.

Sepoy Ishaw Singh, 28th Punjabis.—For devotion and bravery "quite beyond all praise" in Waziristan on 10th April, 1921. He received a severe gunshot wound in the chest while serving a Lewis gun, and when all the havildars had been killed or disabled he struggled to his feet, called to his assistance two men, and charged and recovered the gun, restoring it to action. He refused medical attention, insisting first on pointing out where the other wounded were and on carrying water to them. While the medical man was attending to these wounded he shielded him with his body and he submitted to medical attention himself only after he was exhausted through three hours' continual effort and by loss of blood.

PASSPORT REGULATIONS.

The following are the chief regulations concerning Passports :—

1. Applications for Indian Passports must be made in the prescribed form, and submitted either direct or through the local authority—(*a*) in the case of a resident in British India, to the Local Government or Local Administration concerned; (*b*) in the case of a resident in an Indian State, to the Agent to the Governor-General or Political Resident concerned.

2. Forms of application may be obtained from any District Magistrate, from the Commissioner of Police, Bombay, by post from the Passport Officer to the Government of Bombay, by personal application at the Passport Office, the Secretariat, Bombay, or from any of the leading Banking and Shipping Agents in Bombay. The charge for an Indian Passport is Rs. 3.

3. Indian Passports are granted to—(*a*) British subjects by birth; (*b*) wives and widows of such persons; (*c*) British subjects by naturalisation; and (*d*) British protected persons. A married woman is deemed to be a subject of the State of which her husband is for the time being a subject.

4. Passports are granted upon the production of a declaration by the applicant (in the case of a child under 15 requiring a separate passport by the child's parent or guardian) in the prescribed form of application verified by a declaration made by a *Political Officer, Magistrate, Justice of the Peace, Police Officer not below the rank of Superintendent* or *Notary Public,* resident in India. If possible the declaration should be signed by an officer of the district in which the applicant is resident. Otherwise the issue of a Passport may be delayed while enquiries are being made from the local authorities.

5. If the applicant for a Passport be a British subject by naturalisation the certificate of naturalization must be forwarded with the form of application to the Officer empowered to grant the Passport. It will be returned with the Passport to the applicant through the person who may have verified the declaration. British subjects by naturalisation will be described as such, in their Passports, which will be issued subject to the necessary qualifications.

6. Small duplicate unmounted photographs of the applicant (and wife, if to be included) must be forwarded with the application for a Passport, one of which must be certified on the back by the person verifying the declaration made in the application form.

7. Indian Passports are not available beyond two years from the date of issue. They may be renewed for four further periods of two years each after which fresh Passports must be obtained. Application for renewal should be made in the prescribed form which should be certified by one of the officers shown in para. 4. The fee for each renewal is Re. 1-8-0.

8. Passports cannot be issued or renewed on behalf of persons already abroad: such

persons should apply for Passports to the London Foreign Office or nearest British Mission or Consulate. Passports must not be sent out of India by post.

9. In the case of an applicant for a Passport being unable to write English a transcription in English should be placed below the applicant's vernacular signature in the form of application. In the case of an illiterate person, a thumb impression should be substituted for a signature on the form of application, which should be certified by the person verifying the declaration.

10. The Passport is only available for travel to the countries named but may be endorsed for additional countries. No charge is made for such endorsements given by British authorities in India, but the possession of a Passport so endorsed does not exempt the holder from compliance with any immigration laws in force in British or Foreign countries, or from the necessity of obtaining a Visa when required.

11. Passports endorsed as valid for the British Empire are also available for travelling to territory under British protection or mandate, not however, including Palestine, Mesopotamia or Egypt, for which countries the Passport must be especially endorsed.

Except in the case of (1) military officers and other ranks and employees of the Government of Iraq and (2) *bona fide* representatives of firms, Passports for Iraq cannot be granted without the previous sanction of the local authorities in Iraq. The Passport Officer will, on request, ask for this permission by post, or, if the applicant is prepared to defray the cost of a telegram, by cable. Applicants must state clearly the nature of their business in Iraq and the precise address at which they propose to reside on reaching their destination, as the local authorities will not grant them permission to land unless they are assured that the applicants have definite business in the country and have secured accommodation beforehand.

Restrictions also exist on travel to various parts of the British Empire and to certain foreign countries. Amongst these may be mentioned Australia, Canada, Constantinople, Egypt, Gibraltar, Mohammerah and Abadan, New Zealand, Palestine, Southern Rhodesia, Union of South Africa, South West Africa and the United States of America. The restrictions apply particularly to Indians.

Parda-nashin or gosha women desirous of travelling from India to Malaya, the Straits Settlements, the East Africa Protectorate, Uganda, Zanzibar, Mauritius, the Nyassaland Protectorate and the Union of South Africa are exempted from the necessity of attaching their photographs to their applications for Passports or of appearing in person before the Passport issuing authorities.

Racing.

Calcutta.

[*Season* 1922-23].

King-Emperor's Cup. Distance 1 mile.—

Mr. Ephraum's Orange William (9st. 3lbs.), Morris .. ..

Mr. Galstaun's Solo Bridge (9st. 3lbs.), Donoghue .. ..

Mr. Avasia's Quarryman (9st. 3lbs.), Townsend .. ..

Mr. Eve's Flaming Orb (9st. 3lbs.), A. C. Walker .. ..

Won by one and a quarter lengths; short head; three-quarters of a length. Time—1 min. 38 2-5 secs.

Viceroy's Cup. Distance 1¾ miles.—

Mr. Ephraum's Orange William (9st. 3lbs.), Morris 1

Mr. Avasia's Vale of York (9st.), Townsend. 2

Mr. Pannick's Sweet Adare (9st. 31bs.), Riley 3

Mr. Galstaun's Starshot (9s. 3lbs.). Parker. 4

Won by three-quarters of a length; one and three-quarter lengths; one length. Time—2 mins. 59 2-5 secs.

Apear Plate. Distance 6 furlongs.—

Mr. Thaddeus' Goldgainer (8st.), Morris .. 1

Mr. Eve's Rostrum (8st. 11lbs.), Lambert.. 2

Mr. Avasia's Quarryman (9st. 1lb.), Townsend 3

Mr. Eve's Nicety (8st. 12lbs.), A. C. Walker. 4

Won by a head; one and a quarter lengths; three-quarters of a length. Time—1 min. 14 secs.

Carmichael Cup. Distance 1½ miles.—

Mr. Galstaun's Solo Bridge (8st. 10lbs.), Townsend 1

Mr. Sam's Orange William (9st. 6lbs.), Bullock 2

Mr. Pannick's Sweet Adare (9st. 1lb.), Barnett 3

Mr. Galstaun's Simon's Choice (9st. 1lb.), Dobie 4

Won by three-quarters of a length; two and a half lengths; a head. Time—2 mins. 6 4-5 secs.

Merchants' Cup. Distance 1¼ miles.—

Mr. Garda's Olivine (7st. 11lbs.), Hoyt .. 1

Mr. Bartleet's Aborigine (8st. 5lbs.), Brownlee 2

Mr. Avasia's Crab Apple (7st. 10lbs.), Townsend 3

Messrs. Douetil and Hartley's Kilcloon (9st. 2lbs.), Harrison 4

Won by one and three-quarter lengths; one length; half a length. Time—2 mins. 39 secs.

Burdwan Cup. Distance 1¾ miles. (Hurdle Race.)—

Mr. Rossco's Archie's Fancy (10st. 3lbs.), C. Black 1

Mr. Wadia's Kintail (10st.), Capt. Newill.. 2

Mr. Eve's Knight of Clonmel (10st. 3lbs.), Baker 3

Mr. Lindsay's Tycono (10st. 3lbs.), Callanan. 4

Won by one and a half lengths; one and three-quarter lengths; half length Time—3mins. 17 1-5 secs.

Macpherson Cup. Distance 1½ miles.—

Mr. Sam's Orange William (9st. 12lbs.), Bullock 1

Mr. Douetil's Midensis (8st. 5lbs.), Harrison. 2

Mr. Galstaun's Simon's Choice (8st. 7lbs.), Townsend 3

Mr. Thomas' Jack (7st. 7lbs. cd. 7st. 8lbs.), Northmore 4

Won by one length; short head; two lengths. Time—2 min. 33 4-5 secs.

Governor's Cup. Distance 1¾ miles.—

Mr. Douetil's Midensis (8st. 1lb., cd. 8st. 2lbs.), Harrison 1

Mr. Thaddeus' Unitoi (8st. 12lbs.) Ruiz .. 2

H. H. the Maharaja of Rajpipla's Charlie's Smile (8st. 2lbs.), Ritchie 3

Mr. Galstaun's Solo Bridge (9st. 5lbs.), Townsend 4

Won by three-quarters of a length; three-quarters of a length; one length. Time—3 mins. 1 1-5 secs.

ndian Grand National. Distance 3 miles. (Steeplechase.)—

Mr. Gilford's Joyship (10st. 2lbs.), Seastream 1

Messrs. Gregson and O'Cock's Ugly Gosling (12st. 5lbs.), Pearce 2

Mr. Margrett's Golden Rule (9st. 3lbs.), Callanan 3

Col. Commandant Poole and Major Marriott's Traveller (10st. 2lbs.), Capt. Misa.. 4

Won by three-quarters of a length; eight lengths; distance. Time—6 mins. 2 4-5 secs.

Grand Annual. Distance about 2 miles. (Hurdle Race.)—

Mr. Wadia's Kintail (11st. 9lbs.), Capt. Newill 1

Mr. Wesche Dart's On Leave (11st. 5lbs.), Edwards 2

Mr. Lindsay's Tycoon (11st. 6lbs.), Callanan .. ..
Mr. Lauder's Happy Iola (10st. 10lbs.), Black .. .. } 3

Won by one and a quarter lengths; one and a half lengths; dead heat. Time—3 mins. 45 4-5 secs.

Mayfowl Cup. Distance 1 mile.—

Mr. Eve's Plymouth Rock (8st. 10lbs.), A. C. Walker 1

Mr. Scott's Jack (7st. 12lbs., cd. 8st. 11lbs.), Higgins 2

Mr. Galstaun's Simon's Choice (8st. 10lbs.), Donoghue .. .. } 3
Mr. Vernon's Canterbury Lamb (7st. 10lbs.), Townsend .. .. .. }

Won by half a length; one and a quarter lengths; dead heat. Time—1 min. 39 3-5 secs.

Eclipse Pony Cup. Distance 7 furlongs.—

Mr. Garda's Lumination B (8st. 3lbs.), Hoyt 1

Capt. Farrar and Mr. Roberts' Pure Gem (7st. 10lbs., cd. 7st. 13lbs.), Edwards .. 2

Messrs. Louvet and Galstaun's Patrick (10st. 11lb.), Donoghue 3

Mr. Douetil's Bachelor's Siren (10st. 5lbs.), Harrison 4

Won by three-quarters of a length; half a length; a neck. Time—1 min. 29 2-5 secs.

Metropolitan Stakes. Distance 6 furlongs.—

Mr. Thaddeus' Goldgainer (9st. 11b.), Ruiz .. 1

H. H. the late Maharaja of Cooch-Behar's Fretwork (7st. 11lbs.), Ritchie 2

Mr. Galstaun's Galway Gate (9st. 12lbs.), Townsend 3

Nawab Bahadur of Murshidabad's Wedding Ring (8st. 6lbs.), O'Brien 4

Won by a short head; one and a half lengths; one and a half lengths. Time—1 min. 14 2-5 secs.

Hilliard Plate. Distance 7 furlongs.—

Mr. Pannick's Sweet Adare (9st. 4lbs.), Dobie 1

Mr. Eve's Flaming Orb (9st. 5lbs.), A. C. Walker 2

Mr. Avasia's Quarryman (9st. 9lbs.), Townsend 3

Mr. Thaddeus' Goldgainer (9st. 11b.), Perkins 4

Won by a short head; four lengths; one and a quarter lengths. Time—1 min. 26 3-5 secs.

Prince of Wales' Plate. Distance 1 mile.—

Mr. Sam's Orange William (9st. 7lbs.), Bullock 1

Nawab Bahadur of Murshidabad's Wedding Ring (8st. 9lbs.), O'Brien 2

Mr. Thomas' Jack (7st. 9lbs.), Northmore .. 3

Mr. Galstaun's Simon's Choice (8st. 10lbs.), Dobie 4

Won by one and a quarter lengths; one and a half lengths; one and a quarter lengths. Time—1 min. 39 secs.

Bombay.

Western India Champion Stakes. Distance 1½ miles.—

Mr. P. B. Avasia's Vale of York (8st. 11lbs.), Townsend 1

Mr. A. M. Khairaz's Risen Again (8st. 11lbs.), Burn 2

Mr. M. Goculdass' Flaming Orb (9st.), Lambert 3

Mr. C. N. Wadia's Aquilegia (8st. 11 lbs.), Audas 4

Won by three-quarters of a length; one length; six lengths. Time—2 mins. 36 1-5 secs.

Byculla Club Cup. Distance 1½ miles.—

Mr. Sam's Orange William (9st. 8lbs.), Bullock 1

Mr. G. Wesche-Dart's Belle Voyageuse (7st. 8lbs.), R. Jones 2

Mr. F. M. Garda's Allington (6st. 11lbs.), cd. 7st. 4 lbs.), Clarke 3

Mr. J. C. Galstaun's Simon's Choice (8st. 5lbs.), Townsend 4

Won by a neck; three-quarters of a length; three lengths. Time.— 2 mins. 34 secs.

Grand Western Handicap. Distance 1 mile.—

Mr. A. Geddis' Vallance (7st. 2lbs.), R. Jones 1

Mr. M. Goculdass' Silver Image (9st. 12lbs.), Lambert 2

Messrs. Heath and P. B. Avasia's Quarryman (8st. 7lbs.), Burn 3

Mr. J. C. Galstaun's Starshot (7st. 11lbs.), Morris 4

Won by two and a half lengths; two lengths; two lengths. Time—1 min. 37 4-5 secs.

Mansfield Plate. Distance 6 furlongs 41 yards.—

Mr. Vernon's Kilrea (7st. 9 lbs.), A. T. Harrison 1

Mr. M. Goculdass' Verge (8st. 2lbs.), Lambert 2

Mr. Hammond's Owen Roe (9st. 2 lbs.), Audas 3

Messrs. Heath and P. B. Avasia's Quarryman (8st. 9lbs.), McPherson 4

Won by three-quarters of a length; three-quarters of a length; half a length. Time—1 min. 14 secs.

Flying Plate. Distance 5 furlongs (straight).—

Mr. R.R.S.'s Joy Girl (7st. 11lbs.) F. Huxley 1

Mr. M. Goculdass' Flaming Orb (8st. 5lbs.), Lambert 2

Mr. Hammond's Owen Roe (9st.), R. Jones 3

Mr. M. Goculdass' Nicety (8st. 4lbs.), A. C. Walker 4

Won by half a neck; a head; two lengths. Time—59 2-5 secs.

Willingdon Plate. Distance 1¼ miles.—

Mr. T. M. Thaddeus' Unitoi (9st.), Ruiz.. 1

Messrs. Heath and P. B. Avasia's Carborandum (8st. 11lbs.), McPherson .. 2

Mr. J. C. Galstaun's Simon's Choice (8st. 12lbs.), Townsend 3

Mr. J. C. Galstaun's Starshot (8st. 10lbs.), Morris 4

Won by a neck; half a length ; a neck. Time— 2 mins. 8 secs.

Colaba Cup (Div. I). Distance 1 mile.—

Mr. M. Goculdass' Knight of Clonmel (8st. 5lbs.), A. C. Walker 1

Mr. Hammond's Whit Week (8st. 5 lbs.), R. Jones 2

Genl. Nawab Obaidulla Khan's Miss Evans (8st. 8lbs.), Buckley 3

Mr. A. Geddis' Atrocity (8st.), W. G. Thompson 4

Won by two lengths; half a length ; one length. Time—1 min. 39 1-5 secs.

Colaba Cup (Div. II). Distance 1 mile.—

Mr. Frank's Red Cross Boy (8st. 3 lbs.), Burn 1

Mr. J. N. De Souza's Dayspring (7st. 7lbs.), F. Huxley 2

Mr. J. C. Galstaun's Crenides (8st. 5lbs.), Townsend 3

Mr. M. Goculdass' The Count (9st. 1lb.), Lambert 4

Won by two lengths; one and a half lengths; a short head. Time—1 min. 39 3-5 secs.

Bombay City Plate. Distance 1¼ miles.—

Mr. M. Goculdass' Silver Image (8st. 11lbs.), Lambert 1

Mr. Sam's Orange William (9st. 7lbs.), Bullock 2

Mr. J. C. Galstaun's Simon's Choice (8st. 7lbs.), Townsend 3

Mr. H. B. Sorabjee's Swithin (6st. 11lbs.), O'Connor 4

Won by one and three-quarter lengths; one length; six lengths. Time— 2 mins. 5 4-5 secs.

Malabar Hill Plate. Distance 6 furlongs 41 yards.—

Mr. M. Goculdass' Flaming Orb (7st. 12lbs.), A. C. Walker 1

Mr. R. R. S.'s Joy Girl (7st 5lbs.), R. Jones 2

Mr. Vernon's Kilrea (7st. 9 lbs.), A. T. Harrison 3

Mr. R. H. Gahagan's Owen Roe (9st. 2lbs.), Easton 4

Won by a short head; two and a half lengths; a neck. Time— 1 min. 14 secs.

Innovation Plate. Distance 6 furlongs 41 yards.—

Mr. M. Goculdass' Nicety (7st. 12lbs.), A. C. Walker 1

Mr. Vernon's Kilrea (7st. 9lbs.), A. T. Harrison 2

Messrs. Heath and P. B. Avasia's Quarryman (8st. 13lbs.), McPherson 3

Mr. M. Goculdass' Plymouth Rock (8st. 4lbs.), Lambert 4

Won by one length; two and a half lengths; three-quarters of a length. Time— 1 min. 14 4-5 secs.

Turf Club Cup. Distance 1¼ miles.—

Mr. Eve's Apollo (7st. 6lbs.), R. Jones .. 1

Mr. M. Goculdass' Kokab (8st. 10lbs.), Lambert 2

Mr. H. E. Stephen's Huntsman (8st.), Buckley .. ..

S. S. Akkasaheb Maharaj's Ishallah (8st. 11lb.), Morris 4

Won by half a length; three-quarters of a length; half a length. Time— 2 mins. 51 4-5 secs.

Bombay Derby. Distance 1¼ miles.—

Mr. M. Goculdass' Kokab (8st. 5lbs.), Lambert 1

S. S. Akkasaheb Maharaj's Ishallah (8st. 5lbs.), R. Jones 2

Messrs. M. M. Isfani and T. V. Shroff's Bahadorjung (8st. 9lbs., cd. 8st. 13lbs.), Easton 3

H. H. the Maharaja of Kolhapur's Dartmoor (9st. 7lbs.), Hewitt 4

Won by one and a half lengths; seven lengths; a short head. Time— 2 mins. 55 3-5 secs.

Gough Memorial Plate. Distance 1 mile.—

Mr. M. Goculdass' Khundil (9st. 9lbs.), A.C. Walker 1

Mr. M. Goculdass' Baktavar (8st. 6lbs.), Lambert 2

Mr. Heath's Hatchel (7st. 7lbs., cd. 7st. 11lbs.), Aldridge 3

H. H. the Maharaja of Kolhapur's Arvil (8st.), Hewitt 4

Won by three-quarters of a length; three-quarters of length; two lengths. Time— 1 min. 50 secs.

Sir Cowasjee Jehangir Plate. Distance 6 furlongs 41 yards.—

Mr. M. Goculdass' Chieftain (8st. 5lbs.), A. C. Walker 1

Mr. H. R. Shah's Silver Streak (9st. 6lbs.), Morris 2

H. H. the Maharaja of Kolhapur's Waterloo (8st. 10lbs.), Hewitt 3

Messrs. A. M. Shamlan and S. N. Mahomed's Karikata (9st. 10lbs.), Burn 4

Won by three-quarters of a length; a head; a neck. Time—1 min. 24 4-5 secs.

Rajpipla Gold Cup. Distance 1 mile.—

Messrs. Heath and P. B. Avasia's Carborandum (7st. 10lbs.), McPherson 1

Mr. Sam's Orange William (9st. 5lbs.), Bullock 2

Mr. M. Goculdass' Verge (8st. 2lbs.), Lambert 3

Messrs. Eve and M. Goculdass' Brixworth (7st. 10lbs.), A. C. Walker 4

Won by a head ; one and a quarter lengths ; a neck. Time—1 min. 39 secs.

Bombay Handicap. Distance 1 mile.—

Mr. Hammond's Owen Roe (9st. 5lbs.), W. G. Thompson 1

H. H. the Maharaja of Kolhapur's Marmion (8st.), Hewitt 2

Mr. Frank's Red Cross Boy (7st. 13lbs.), Morris 3

Mr. B. P. Avasia's Vale of York (8st. 11b.), Aldridge 4

Won by a short head ; half a length ; half a length. Time—1 min. 38 3-5 secs.

Cheveley Handicap. Distance 1 mile.—

Mr. M. Goculdass' Verge (9st. 4lbs.), Lambert 1

Mr. T. M. Thaddeus' The Devil (9st. 4lbs.), Ruiz 2

Mr. M. Goculdass' Plymouth Rock (9st. 11b.), Bowley 3

Mr. M. Goculdass' Lemoine (7st. 5lbs.), A. T. Harrison 4

Won by a head ; half a neck ; a head. Time—1 min. 40 secs.

Perth Plate. Distance 1 mile.—

Mr. M. Goculdass' Silver Image (9st. 9lbs.), Lambert 1

Mr. M. Goculdass' Verge (8st. 10lbs.), A. C. Walker 2

Mr. Kelso's Huon River (7st. 10lbs., cd. 7st. 12lbs.), McPherson 3

Mr. F. M. Garda's Allington (7st. 12lbs.), Clarke 4

Won by three and a half lengths ; three-quarters of a length ; three-quarters of a length. Time—1 min. 39 secs.

Wellington Plate. Distance 6 furlongs 41 yards.—

Mr. M. Goculdass' Nicety (8st. 2lbs.), A. C. Walker 1

Mr. C. N. Wadia's Count Palatine (8st. 3lbs.), Herbert 2

Mr. Vernon's Kilrea (8st. 4lbs.), Morris .. 3

Mr Heath's Carborandum (8st. 9lbs.), McPherson 4

Won by a neck ; a neck ; a head. Time—1 min. 14 4-5 secs.

Doncaster Plate. Distance 1¼ mile.—

Mr. C. N. Wadia's Rock Dew (8st. 4 lbs.), Herbert 1

Mr. Darcy's Charles William (7st. 2 lbs.), R. Jones 2

Capt. J. B. Browne's Plaxtol (9st.), Buckley 3

Mr. M. Goculdass' Lemoine (8st. 2lbs), A. C. Walker 4

Won by two lengths ; one length ; one and a half lengths. Time—2 mins. 35 secs.

Newmarket Plate. Distance 1¼ miles.—

Mr. G. Wesche-Dart's Belle Voyageuse II (8st. 13lbs.), R. Jones 1

Mr. M. Goculdass' Entailed (9st. 6 lbs.), A. C. Walker 2

Mr. P. G. Singhanee's Rakings (7st. 4lbs.), Donnelly 3

Mr. A Geddis' Treddle (9st. 3lbs.), S. J. Meekings 4

Won by a neck ; one and a half length ; two lengths. Time—2 mins. 6 4-5 secs.

Epsom Plate. Distance 6 furlongs 41 yards.—

Mr. Sangidas Jesiram's Quarryman (8st. 12lbs.), Burn 1

Mr. Vernon's Kilrea (8st. 11b.), Morris .. 2

Mr. A. M. S. Mahomed's Murmansk (8st.), S. J. Meekings 3

Mr. M. Goculdass' Silver Image (9st. 7lbs.) Lambert 4

Won by one and a quarter lengths ; half a length ; a neck. Time—1 min. 14 3-5 secs.

Poona.

Western India Derby Stakes. Distance 1½ miles.—

Mr. J. C. Galstaun's Eggesford (9st.), Townsend 1

Mr. A. M. Khairaz's Ctesiphon (9st.), Burn 2

Mr. M. Goculdass' Resemblance (8st. 11lbs.), A. C. Walker 3

Mr. R. R. S's Wasp (9st.), F. Huxley .. 4

Won by one and three-quarter lengths ; one and a half lengths; three and a half lengths. Time—2 mins. 16 secs.

Turf Club Cup. Distance 1½ miles.—

Mr. M. Goculdass' Mandil (9st. 6lbs.), A. C. Walker 1

Mr. A. M. Mahade's Arab Knight (7st.), M. Hoyt 2

Mr. Ahmed Hazamy's Moyeed (7st. 7lbs.), Townsend 3

Messrs. M. C. Patel and T Harrison's Shahzada (8st. 2lbs.), Morris .. 4

Won by three-quarters of a length ; one and a quarter length ; a head. Time—2 mins. 57 3-5 secs.

Western India Stakes. Distance 1¼ miles.—

Mr. Eve's Silver Image (9st. 4lbs.), Lambert 1

Mr. A. E. Ephraum's Orange William (9st. 3lbs.), Bowley 2

Messrs. M. Goculdass and T. M. Goculdass' Rostrum (8st.), A. C. Walker 3

Mr. J. C. Galstaun's Starshot (7st. 12lbs.), Barnett 4

Won by a neck; two lengths; two lengths. Time—2 mins. 12 3-5 secs.

Governor's Cup. Distance R. C. and Distance.—

Mr. M. Goculdass' Mandil (9st.), A. C. Walker 1

Mr. M. Goculdass' Salsette (7st. 8lbs.), Townsend 2

Mr. T. M. Goculdass' Zohal (7st. 13lbs.), A. T. Harrison 3

Mr. T. M. Goculdass' Malta (8st. 8lbs.), Lambert 4

Won by three-quaters of a length; a head; three-quarters of a length. Time—3 mins. 7½ secs.

Aga Khan's Cup. Distance 1½ miles.—

Mr. P. B. Avasia's Vale of York (8st. 12lbs.), Townsend 1

Mr. J. C. Galstaun's Starshot (8st. 7lbs.), Barnett 2

Mr. Eve's Silver Image (9st. 2lbs.), Lambert 3

Mr. A. M. Khairaz's Risen Again (8st. 3lbs.), Burn 4

Won by two and three-quarter lengths; three-quarters of a length; half a length. Time—2 mins. 35 4-5 secs.

Ganeshkhind Plate. Distance 6 furlongs.—

Mr. R. R. S.'s Joy Girl (8st.), F. Huxley 1

Mr. T. Harrison's Kilrea (8st.), A. T. Harrison .. .. } 2
Messrs. M. Goculdass and T. M. Goculdass' Rostrum (7st. 10lbs.), A. C. Walker .. .. }

Mr. Hammond's Owen Roe (9st. 4lbs.), Audas 4

Won by half a length; dead heat; short head. Time—1 min. 13 4-5 secs.

Aga Shamshudin Plate. Distance 1 mile.—

Messrs. M. Goculdass and T. M. Goculdass' Rostrum (7st. 12lbs.), A. C. Walker 1

Mr. H. B. Sorabjee's Swithin (8st. 2lbs.), Morris 2

Mr. J. C. Galstaun's Solo Bridge (7st. 11lbs.), Northmore 3

Mr. M. Goculdass' Plymouth Rock (7st. 8lbs.), Purtoosingh 4

Won by eight lengths; three-quarters of a length; half a length. Time—1 min. 48 secs.

St. Leger Plate. Distance R. C. and Distance.—

H. H. the Maharaja of Rajpipla's Charlie's Smile (7st.), M. Hoyt 1

Mr. T. M. Thaddeus' Unitol (8st., cd. 8st. 11lb.), Perkins 2

Mr. Eve's Silver Image (9st. 7lbs.), Lambert 3

Mr. J. C. Galstaun's Starshot (7st. 9lbs.), Townsend 4

Won by two and a half lengths; one and a half length; two lengths. Time—2 mins. 56 4-5 secs.

Stand Plate. Distance 1 mile.—

Mr. H. B. Sorabjee's Swithin (7st. 11lbs.), Morris 1

Mr. Eve's Flaming Orb (8st. 2lbs.), Lambert 2

Mr. A. E. Ephraum's Orange William (9st.), Buckley 3

Mr. J. C. Galstaun's Solo Bridge (8st. 2lbs.), Townsend 4

Won by one length; half a length; a neck. Time—1 min. 42 1-5 secs.

Poona Plate. Distance 1 mile.—

Mr. H. B. Sorabjee's Swithin (8st. 9lbs.), Morris 1

Mr. Eve's Flaming Orb (9st. 9lbs.), Lambert 2

Mr. Kelso's Pomme Anna (7st. 7lbs.), Townsend 3

Mr. J. H. Currie's LeGamin (7st. 7lbs.), Ritchie 4

Won by one and a quarter lengths; one and a quarter lengths; a neck. Time—1 min. 42 3-5 secs.

Newmarket Plate. Distance 6 furlongs.—

Mr. Eve's Nicety (7st. 11lbs.), A. C. Walker 1

Mr. Eve's Flaming Orb (8st. 11lb.), Lambert 2

Mr. T. Harrison's Kilrea (7st. 12lbs.), A. T. Harrison 3

Mr. Hammond's Owen Roe (9st.), Audas.. 4

Won by one length; five lengths; three-quarters of a length. Time—1 min. 18 secs.

Eclipse Plate. Distance about 5 furlongs.—

Mr. R. B. Davison's Cintra (8st. 10lbs.), Herbert 1

Mr. Kelso's Crushed Glass (8st. 9lbs.), McPherson 2

Mr. M. Goculdass' Footpedal (7st. 6lbs.); A. C. Walker 3

Mr. F. M. Garda's Chummy (7st. 10lbs.), M. Hoyt 4

Won by four and a half lengths; half a length; half a length. Time—1 min. 3 1-5 secs.

Poona Country-Bred St. Leger. Distance 1½ miles.—

Mr. C. N. Wadia's The Knut (9st.), Herbert .. .. } 1
Mr. Heath's Zara (8st. 11lbs.), McPherson .. .. }

H. H. the Maharaja of Dhar's Devotion (8st. 11lbs.), Barnett 3

General Raja Sir Harisingh's Bohemian (9st. 7lbs.), Baker 4

Dead heat; two lengths; one and a half lengths. Time—2 mins. 15 secs.

Poona Country-Bred Derby. Distance 7 furlongs.—

General Raja Sir Harisingh's Bohemian (9st.), Baker 1

Mr. N. F. Garda's Lumination B (8st. 11lbs.), Trahan 2

H. H. the Maharaja of Dhar's Devotion (8st. 11lbs.), Barnett 3

Mr. C. N. Wadia's The Knut (9st.), Herbert 4

Won by one and three-quarter lengths; a head; a short head. Time—1 min. 32¼ secs.

Country-Bred Breeders' Stakes. Distance about 5 furlongs.—

Mr. A. M. Khairaz's Joviality (9st.), Burn 1

Mr. F. N. Furdoonji's Mystery (8st. 11lbs.), Perkins 2

Mr. and Mrs. G. Wesche Dart's Pomona (8st. 11bs.), W. G. Thompson.. .. 3

Won by three-quarters of a length; twelve lengths. Time—1 min. 6 4-5 secs.

Arab Pony Derby. Distance 6 furlongs.—

Mr. H. Hassanalli's Ornate (9st. 7lbs.), Fozard 1

Mr. T. M. Goculdass' Safety (8st. 2lbs., cd. 8st. 3lbs.), Lambert 2

Mr. A. M. Khairaz's Last Call (7st. 10lbs., cd. 7st. 11lbs.), Burn.. 3

Mr. I. B. Torquato's Eshel (8st. 10lbs.), Townsend 4

Won by one length; one and a half lengths; a head. Time—1 min. 23 secs.

Poona Arab Derby. Distance 1½ miles.—

Messrs. A. K. Essa and Abdulla Jusub's Sannayat (8st. 8lbs.), Barnett 1

Mr. Ahmed Hazamy's Gosub (7st. 2lbs.), M. Hoyt 2

Mr. S. R. A. Wahab's Baronet (7st. 9lbs., cd. 7st. 11lbs.), Morris 3

Mr. Ebrahim Kadum's Alder (8st. 7lbs.), Perkins 4

Won by a head; three lengths; three and a half lengths. Time.—2 mins. 53 secs.

Trial Plate. Distance 1 mile.—

Mr. T. M. Thaddeus' The Devil (8st. 7lbs.), Perkins 1

Mr. P. B. Avasia's Quarryman (9st.), Townsend 2

Mr Eve's Flaming Orb (8st. 13lbs.), Bowley 3

Mr. J. C. Galstaun's Starshot (8st. 7lbs.), Barnett 4

Won by a head; three-quarters of a length; a head. Time—1 min. 42 4-5 secs.

Criterion Plate. Distance 7 furlongs.—

Mr. M. Goculdass' Madame Sze (8st. 3lbs.), A. C. Walker 1

Mr. Vernon's Canterbury Lamb (8st. 3 lbs.), A. T. Harrison .. .. .. } 2
Mr. Kelso's Huon River (8st. 11lbs.), McPherson .. .. }

Mr. T. M. Thaddeus' Redcot (8st. 2lbs.), Perkins 4

Won by one and a half lengths; dead heat; a head. Time—1 min. 28 3-5 secs.

Poona Cæsarewitch. Distance 2½ miles.—

Mr. R. Gujadhar's Prague (8st. 11b.), Donnelly 1

Mr. Ahmed Hazamy's Neap Tide (7st. 12lbs.), Morris 2

Mr. M. Goculdass' Perfect Day (7st. 8lbs.), A. C. Walker 3

Mr. M. Goculdass' Silver Saint (9st.), Herbert 4

Won by one and three-quarter lengths; one and three-quarter lengths; two lengths. Time—4 mins. 10 4-5 secs.

Madras.

Lord Reading Cup. Distance 6 furlongs.—

Mr. S. R. A. Wahab's Baronet (8st. 10lbs), S. Meekings.. 1

Mr. Ali Askar's Arab Knight (9st. 13lbs.), J. Meekings.. 2

Mr. Ahmed Hazamy's Revolver (7st. 10lbs.), Shankarau 3

Mr. F. Bomanji's Logic (8st. 13lbs.), Bona.. 4

Won by three-quarters of a length; one and a half lengths; a short head. Time—1 min. 31 1-5 secs.

Governor's Cup. Distance 1¼ miles.—

Mr. T. M. Ross' Wee Dote (7st. 11lbs.), F. Bland 1

Sirdar Lakshmikantaraj Urs' Zanzibar (8st.), McQuade 2

H. H. the Maharaja of Nawanagar's Marby (8st.), Aldridge 3

Messrs. W. King and V. J. Reed's Thunder (8st. 12lbs.), Trahan 4

Venkatagiri Cup. Distance 1 mile.—

Mr. J. Cromwell's Corinda (9st. 7lbs.) .. 1

Mr. M. H. Sharaballi's Trafalgar (9st. 7lbs.), Bland .. 2

Mr. Esmail Hashun's Napoleon (8st. 6lbs.), Akey 3

Mr. Goolam Hoosein Essaji's Shahzada (10st. 7 lbs.), Riley.. 4

Won by one length; three-quarters of a length; a neck. Time—1 min. 55 secs.

Bobbili Cup. Distance 1 mile.—

Mr. S. R. A. Wahab's Baronet (9st. 2lbs.), S. Meekings.. 1

H. H. the Maharaja of Kolhapur's Bahadur-ul-mulk (10st. 6lbs.), Hewitt 2

Mr. Lokhandwalla's Leopold (8st. 8lbs), Thompson 3

Mr. A. Sattar's Lookhman (9st. 11b.), H. McQuade 4

Won by a neck; one length; a head. Time —1 min. 54 2-5 secs.

Travancore Cup. Distance 6 furlongs.—

H. H. the Rajah of Bobbili's Happy Princess II (8st. 4lbs.), Fozard 1

Mr. M. Yunus' Bosworth (8st. 9lbs.), H. McQuade 2

Mr. G. A. Marsh's Good Day (8st. 5lbs.), Wragg 3

H. H. the Maharaja of Mysore's Hill and Dale (8st. 6lbs.), S. Meekings 4

Won by a neck; half a length; a neck. Time—1 min. 16 2-5 secs.

Mysore Cup. Distance 1 mile.—

H. H. the Maharaja of Mysore's Miss Twistum (7st. 8lbs.), Northwood 1

Mr. Ali Askar's Fearless (7st.), H. McQuade 2

H. H. the Maharaja of Mysore's Ma Bap (8st. 2lbs.), Bland 3

Messrs. W. King and V. J. Reed's Toddy (7st.), Bona 4

Won by five lengths; one and a quarter lengths; one length. Time—1 min. 46 secs.

Sivaganga Cup. Distance 6 furlongs.—

Sirdar Lakshmikantaraj Urs' Highroad (9st.), H. McQuade.. 1

Mr. J. S. Harper's Ship's Biscuit (8st. 11lbs.), Trahan 2

H. H. the Maharaja of Mysore's Sandra (7st. 11lbs.), Goolam Mohd 3

Mr. J. O. Robinson's Daffum (7st. 6lbs.), Bona 4

Won by a neck; one and a quarter lengths; two lengths. Time—1 min. 16 1-5 secs.

Merchants' Cup. Distance 1 mile 1 furlong—

Mr. J. S. Harper's Ship's Biscuit (8st.), Meekings 1

Sirdar Lakshmikantaraj Urs' Highroad (8st. 10lbs.), McQuade 2

Mr. T. M. Ross' Wee Dote (9st. 11b.), Bland 3

H. H. the Maharaja of Nawanagar's Marby (8st. 11lbs.), Riley 4

Won by a neck; three-quarters of a length; half a length. Time—1 min. 56 1-5 secs.

Stewards' Cup. Distance 6 furlongs.—

Mr. M. Yunus' Ballina Breeze (8st.), H. McQuade 1

Mr. P. C. Fernando's Nicaragua (8st. 4lbs.), Scilcy 2

Mr. P. Pogose's Nat Gould (7st. 2lbs.), J. Meekings 3

Sirdar Lakshmikantaraj Urs' Highroad, Bona 4

Won by a small margin in 1 min. 15 2-5 secs.

Ceylon Cup. Distance 1 mile.—

Mr. J. S. Harper's Ship's Biscuit(8st. 6lbs.), Meekings 1

Messrs. Norman and McCabe's Capable (9st. 7lbs.), Pullen 2

Mrs. E. Conran Smith's Quite Grave (8st. 2lbs.), White 3

Lt.-Col. A. K. Hyland's Crookley Hall (7st. 7lbs.), H. McQuade 4

Won by two and a half lengths; one length; half a length. Time—1 min. 44 2-5 secs.

Lady Willingdon Plate. Distance 1½ miles.—

Mr. Goorje Yacoob's Nimble (7st. 11lb.), H. McQuade 1

Mr. Essa's Isonomy (9st. 2lbs.), Trahan .. 2

Mr. J. Cromwell's Corinda (9st. 3lbs.), Bland 3

Mr. M. H. Sharaballi's Trafalgar(9st. 10lbs.) 4

Won by two and a half lengths; half a length; a neck. Time—3 mins. 32 secs.

Douetil Cup. Distance 5 furlongs.—

Zemindar of Sivaganga's Low Forse (9st. 11lbs.), Fozard 1

Mr. E. C. Ramshaw's Florella (8st. 13lbs.), Trahan 2

H. H. the Maharaja of Mysore's Hill and Dale (8st. 11b.), Bona 3

H. H. the Maharaja of Nawanagar's Marby (9st. 8lbs.), Riley 4

Won by a neck; one length; three-quarters of a length. Time—1 min. 2 4-5 secs.

Kirlampudi Cup. Distance 7 furlongs.—

Mr. Dee's Bachelor's Cape (9st.), Harraway 1

H.H. the Rajah of Bobbili's Happy Princess II (10st. 6lbs.), Fozard 2

Mr. Orenden's Chatty Tales (9st. 10lbs.) Raymond 3

H. H. the Maharaja of Mysore's Max (7st. 9lbs.), S. Meekings 4

Won by a neck; one and a quarter lengths; a short head. Time—1 min. 29 3-5 secs.

Hajee Sir Ismail Sait's Cup. Distance 1 mile.—

H. H. the Rajah of Bobbili's Limerick (8st. 8lbs.), Fozard 1

Mr. Lokhandwalla's Silver Cloud (7st. 6lbs.), Burgess 2

Mr. S. R. A. Wahab's Sultan (8st. 6lbs.), Meekings 3

Mr. Lokhandwalla's Mahtab (7st. 13lbs.), Babahjan 4

Won by a neck; the same; half a length. Time—1 min. 55 4-5 secs.

Trades Cup. Distance 1 mile.—

H. H. the Maharaja of Mysore's King's Daughter (8st. 2lbs.), S. Meekings .. 1

Mr. Dee's Toy Symphony (7st. 3lbs., cd. 7st. 10lbs.), Thompson 2

Zemindar of Sivaganga's Low Forse (8st. 2lbs.), White 3

Mr. and Mrs. G. Wesche Dart's Cheery Girl (9st. 12lbs.), Wragg 4

Won by one and a half lengths; the same; one length. Time—1 min. 41 3-5 secs.

Pethachi Cup. Distance 1½ miles.—

Sirdar Lakshmikantaraj Urs' Presteau (8st.), H. McQuade 1

Mrs. E. Conran Smith's Quite Grave (8st. 1lb.), Fozard 2

Messrs. Norman and McCabe's Capable (9st. 9lbs.), Pullen 3

Messrs. Mahdi and Ali Askar's Witch Doctor (7st.), Syed Saleh 4

Won by a one and a quarter lengths; one and a half lengths; half a length. Time—2 mins. 40 2-5 secs.

Lucknow.

Civil Service Cup. Distance 6 furlongs.—

Mr. Galstaun's Bidesia (9st. 13lbs.), Dobie 1

Major Hilliard's Felladeen (8st.), Northmore 2

Mr. Galstaun's Slow Coach (10st. 5lbs.), Ruiz 3

Mr. Fawcett's Pure Gem (6st. 7lbs., cd. 7st.), Airth 4

Won by one and a quarter lengths; three-quarters of a length; a short head. Time—1 min. 17 secs.

Indian Grand Military Steeplechase. Distance 2½ miles—

Major Hilliard's Ordex (11st. 2lbs.), Owner 1

Major Lucas' Athenian (10st. 8lbs.), Owner 2

Captain Messervy's Golden Glory (10st. 8lbs.), Captain Oxley 3

Mr. Graham's Prim (12st. 3lbs.), Owner . 4

Won by two lengths; four lengths; six lengths. Time—5 mins. 8 secs.

Army Cup. Distance 7 furlongs.—

Major Lucas and Mr. Kennedy Crawford-Stewart's Golden Rule (9st. 6lbs.), Captain Newill 1

Major Burridge's Argent (9st.), Captain Oxley 2

Mr. Rossco's Engraver (10st. 10lbs.), Captain Misa 3

Won by one length; half length.

N.B.—This race was actually won by Mr. Dara Cowasji's Vlinger, but on an objection being made to the R.C.T.C. the winner was disqualified and the positions altered as above.

Governor's Cup. Distance 1 mile.—

Messrs. Byass and Sheppard Oxcroft's (7st. 7lbs., cd. 7st. 9lbs.), Ritchie 1

Raikut of Baikuntapur's Flying Foe (8st. 3lbs.), A. D. Walker 2

Mr. Thomas' Silver Gift (7st. 11lbs.), Northmore 3

Mr. Bhargava's Sunline (8st. 13lbs.), Ruiz 4

Won by one length; a neck; half a length. Time—1 min. 43 1-2 secs.

Lucknow Grand National. Distance 2½ miles (Steeplechase.)—

Mr. Leetham's Chatty Bit (10st. 2lbs.), Owner 1

Mr. Ivan Jones' China Egg (12st. 12lbs.), Callahan 2

Messrs. Byass and Sheppard's Lesto (11st. 1lb.), Mr. Byass 3

Won by ten lengths; six lengths; fifteen lengths. Time—6 mins. 2 4-5 secs.

N.B.—Prim ran second, but was disqualified for interfering with China Egg.

Jehangirabad Cup. Distance 5 furlongs.—

Mr. Galstaun's Slow Coach (8st. 12lbs.), Dobie 1

Mr. Hobday's Mooi (7st. 4lbs.), M. Hoyt .. 2

Raikut of Baikuntapur's Elsie R. (9st. 5lbs.), Walker 3

Thakur Chandrika Pershad's Kishoree (6st. 12lbs.), Japhet 4

Won by a short head; one and a half lengths; two lengths. Time—1 min. 4 secs.

Stewards' Cup. Distance 6 furlongs.—

Mr. Chander's Luana (7st. 5lbs.), Balfour .. 1

Mr. Wadia's Kintail (8st. 1lb.), Edwards .. 2

Mr. Leetham's Chatty Bit (7st. 4lbs.), Moossamdin 3

Captain Plunkett's We Two (8st. 11lbs.), M. Hoyt .. .. } 4
Mr. Basheer Ali's Black Peter (7st. 8lbs., cd. 7st. 11lbs.), Ritchie .. .. .. }

Won by half a length; one length; two lengths; dead heat for fourth place. Time—1 min. 16 secs.

Pragnarain Bhargava Cup. Distance 1 mile.—

Sirdar Sant Singh Chhachi's Come On (7st. 5lbs.), M. Hoyt 1

H. H. the Maharaja of Dhar's Devotion (8st. 10lbs.), Barnett 2

Raja Sripal Singh's Sarfaraz (10st. 8lbs.), J. Harrison 3

Mr. Kashi Charan's Amphitryon (8st. 10lbs.), O'Brien 4

Won by one length; a neck; two lengths. Time—1 min. 47 2-5 secs.

Points Cup. Distance 1 mile 1 furlong.—

Mr. Goculdass' Kinta (8st. 5lbs., cd. 8st. 6lbs.), Mcherjee 1

Mr. Leetham's Chatty Bit (8st. 10lbs.), Owner 2

Mr. Elliott's Charmio (9st. 8lbs.), Stokes.. 3

Messrs. Byass and Sheppard's Oxcroft (10st. 2lbs.), Mr. Byass 4

Won by one and a half lengths; two lengths; one and a half lengths. Time—1 min. 58½ secs.

Fowne's Cup. Distance 6 furlongs —

Captain Farrar's Empty Title (10st. 12lbs.), Captain Barker 1

Major Burridge's Argent (9st. 7lbs.), Mr. Leetham 2

Messrs. Byass and Sheppard's Lesto (10st.) Mr. Byass 3

Captain Chaudhuri's Ratli (9st. 7lbs., cd. 9st. 12lbs.), Mr. McAlister 4

Won by one and a quarter lengths, five lengths; ten lengths. Time—1 min. 19½ secs.

Oudh Arab Handicap. Distance 7 furlongs.—

Mr. Basheer Ali's Second String (8st. 8lbs.), Stokes .. .. } 1
Rai Bahadur Kali Charan's Varlet (7st. 8lbs., cd. 7st. 9lbs.), Northmore .. }

Hakim Mian Mahomed's Rangoon (7st. 3lbs.), M. Hoyt 3

Mr. Goculdass' Muslat (9st.), Mcherjee .. 4

Won by a head by dead heaters, and a head. Time.—1 min. 43 secs.

Patiala Cup. Distance 1¼ miles.—

Raikut of Balkuntapur's Flying Foe (9st. 11lb.), A. D. Walker 1

Mr. Thomas' Silver Gift (8st. 7lbs.), Northmore 2

Mrs. Wilson's Still Better (9st. 2lbs.), Sleigh 3

Raikut of Balkuntapur's Barsen (9st. 3lbs.), Trenoweth 4

Lahore.

Governor's Cup. Distance 1 mile.—

Malik Shah Jahan's Mujloon (8st. 4lbs.), Marland 1

Miss Anderson's Queen Bess II (7st. 11lbs.), C. Hoyt 2

Sardar Sant Singh Chachachi's Come On (9st. 2lbs.), Capt. Bernard 3

Captain Plunkett's Homespun (8st. 8lbs.), Brookman 4

Won by a neck; one and a half lengths; close fourth. Time—1 min. 46 2-5 secs.

North-Western Cup Distance 1 mile.—

Captain Bernard's Pussyfoot (9st. 10lbs.), Owner 1

Mr. Woodward's Two Gates (9st. 12lbs.), Buckley 2

Lt.-Col. Stewart's Buff Mail (7st. 13lbs.), Marland 3

Major Burridge's Argent (7st. 13lbs.), Goolam Mohd. 4

Won by a neck; one length; good fourth. Time—1 min. 45 secs.

Punjab Cup. Distance round course.—

Captain Carpentier's Rambler (10st. 10lbs.), Major Guild 1

Major White's Forest Lover (10st. 9lbs.), Captain Bernard 2

Major Vanrennen's Columbine (10st. 9lbs.), Alford 3

Nawab Sahib of Mamdot's O. K. (10st. 10lbs.), Captain Kemp 4

Won by a short head; one and a half length. Time—3 mins. 19 1-5 secs.

Mamdot Cup. Distance round course.—

Malik Jan Mahomed's Bluebeard (9st. 12lbs.), Balfour 1

Mrs. Stewart's Carlisle (7st. 13lbs.) Marland 2

Major Edward's Karun (8st. 9lbs.), Tymon 3

Sirdar Jiwan Singh's Sambo (7st.), C. Hoyt 4

Won by half a length; one length; good fourth. Time—3 mins. 26 secs.

Merchants' Cup. Distance 6 furlongs.—

Major Exham's Spring Music (8st. 7lbs.), Captain Bernard 1

Mr. Lindsay Smith's Virvig (9st. 2lbs.), Quinn 2

Sirdar Jiwan Singh's Dewilene (7st. 6lbs.), Balfour 3

Major Vanrennen's Lady Avidity (8st. 4lbs.), Alford 4

Won by two lengths; one length; close fourth. Time—1 min. 18 3-5 secs.

Breeders' Cup. Distance 1 mile.—

Mr. Lindsay Smith's Virvig (11st.), Quinn. 1

Sirdar Jiwan Singh's Hameth Boy (7st. 7lbs.), T. Balfour 2

Mr. Pearey Lall's Credit (7st. 13lbs.) Jones.. 3

Major Vanrennen's Irish Love (7st. 7lbs.), Tymon 4

Won by a neck; short head; close fourth. Time—1 min. 50 secs.

Renala Cup. Distance 6 furlongs.—

Major Vanrennen's Irish Love (8st. 10lbs Alford 1

Nawab of Apam's Gulzar (9st. 8lbs.), Zassie Baghdad 2

Mr. Shah's Lady Superior (8st. 10lbs.), Captain Carroll 3

Won by four lengths; five lengths. Time—1 min. 20 secs.

Sandha Cup. Distance 1¼ miles.—

Mr. Lindsay Smith's Virvig (11st. 4lbs.), Quinn 1

Major Vanrennen's Irish Love (7st. 5lbs.), Tymon 2

Captain Watson's Aram (8st.), C. Hoyt .. 3

Sirdar Jiwan Singh's Hameth Boy (7st. 8lbs.), Balfour 4

Won by half a length; a head. Time—2 mins. 18 secs.

Lahore Cesarewitch. Distance round course—

Lt.-Col. Stewart's Buff Mail (7st. 9lbs., cd. 8st.), Marland 1

Sirdar Jiwan Singh's Casket (7st. cd. 7st. 3lbs.), Balfour 2

Mr. Graham's Sombrous (7st. 8lbs.), C. Hoyt 3

Major Burridge's Argent (7st. 9lbs., cd. 7st. 11lbs.), Brookman 4

Won by a neck; half a length. Time—3 mins. 6 3-5 secs.

Service Chase. Distance 2 miles. (Steeplechase)—

Captain Barker and Mr. Macintyre's Traveller (12st. 3lbs.), Mr. Webber 1

Lt.-Colonel Brooke's Jamadar (10st. 11lbs., cd. 10st. 12lbs.), Owner 2

Captain Wallington's Rejected (12st. 7lbs.), Captain Martin 3

Won by four lengths; three lengths. Time—4 mins. 15 1-5 secs.

Punjap Army Cup. Distance 2½ miles. (Steeplechase.)—

Captain Wallington's Tugboat (10st. 10lbs.), Captain Newill 1

Rest fell. Time—5 mins. 28 secs.

Meerut.

Meerut Silver Vase. Distance 6 furlongs—

Mr. Woodward's First Impressions (9st. 4lbs.), Balfour 1

Mr. Trilaki Nath's Mudlool (7st. 8lbs.), Tymon 2

Mr. Vernon's Vernon (7st. 11lb.), Purtoosingh 3

Mr. Sulleman's Wilson (8st. 6lbs., cd. 8st. 7lbs.), Buckley 4

Won by a neck; a head; close fourth. Time—1 min. 24 3-5 secs.

N.B.—Mudlool won the race but was disqualified for first place on an objection being raised by the owner of First Impressions.

Governor-General's Cup. Distance 1¼ miles.—

Messrs. Patel and T. Harrison's Steel Blue (10st. 3lbs.), Easton 1

Raja Sripal Singh and Kaur Rajendra Singh's Sarfaraz (10st. 3lbs.), Harraway 2

Mr. Wadia's The Knut (8st. 4lbs.), Hoyt 3

Mr. Vernon's Sugarcane (10st. 3lbs.), Harrison 4

Won by three lengths; two lengths; ten lengths. Time—2 mins. 11 3-5 secs.

Governor's Cup. Distance 2 miles (Steeplechase)

Mr. Weber's Lure (10st. 10lbs.), Owner .. 1

Mr. Calder's Glenapp (10st. 10lbs., cd. 11st. 2lbs.), Mr. Ritchie 2

Mr. Graham's Prim (12st. 10lbs.), Owner .. 3

Captain Barker and Mr. Macintyre's The Traveller (12st. 10lbs.), Captain Barker 4

Won by two and a half lengths; one length; good fourth. Time—4 mins. 25 secs.

Meerut Military Cup. Distance 1½ miles.—

Major Conder and Capt. Bowhay's Middleton (11st.), Capt. Marriott 1

Captain Barker's St. Bee (11st. 7lbs.), Capt. Martin 2

Captain George's Jou Jou (11st.), Capt. Creagh 3

Major Guild's Foxtor (9st. 11lbs.), Owner.. 4

Won by a neck; three lengths; close fourth. Time—2 mins. 45 1-5 secs.

Patiala Cup. Distance 2 miles—

Captain Wallington's Rejected (11st. 3lbs.), Capt. Newill .. .. } 1
Major Lucas' Athenian (10st. 10lbs.), Owner }

Major Hodgin's Liberator (10st. 10lbs.), Capt. Marriott 3

Lieut.-Col. Brooks' Jemadar (10st. 10lbs.), Owner 4

Won by dead-heaters by four lengths; close fourth. Time—4 mins. 9 3-5 secs.

Tikra Cup. Distance 6 furlongs.—

Mr. Abdulla Mana's Firjah (9st. 11lbs.), Raymond 1

Mr. Hakim Mohd. Mian's Rangoon (7st. 9lbs.), Harrison 2

H.H. the Maharaja of Dhar's Dholpore (8st. 2lbs.), Bona 3

Mr. Balbir Singh's Taiseer (7st. 2lbs.), Hoyt 4

Won by a neck; one length; a head. Time—1 min. 24 1-5 secs.

Produce Fund Plate. Distance 1 mile.—

Messrs. Patel and T. Harrison's Steel Blue (12st. 10lbs.), Easton 1

Mr. Wadia's The Knut (7st. 13lbs.), Hoyt.. 2

Mr. Vernon's Sugarcane (10st. 8lbs.), Harrison 3

Raja Sripal Singh and Kaur Rajendra Singh Sarfaraz (10st. 2lbs), Harraway 4

Won by three-quarters of a length; one length; half a length. Time—1 min. 45 1-5 secs.

Rawalpindi.

Rawalpindi Gold Cup. Distance 1 mile 1 furlong.—

Mr. A. M. Fawcett's Pure Gem (10st. 4lbs.), Audas 1

Mr. E. Cornforth's Better Half (7st. 10lbs.), Jones 2

Mr. A. O. Fray's Isolda (8st. 6lbs.), Hoyt .. 3

Mr. W. Turner's Little Eva (8st., cd. 8st. 4lbs.), Capt. Bernard 4

Won by one and a half lengths; three-quarters of a length; one length. Time—2 mins. 5 2-5 secs.

Rawalpindi Autumn Cup. Distance 7 furlongs.—

Mr. Pearey Lal's Credit (9st. 2lbs.), Captain Oxley 1

Malik Shah Jehan's Gulpari (7st. 12lbs.), Jones 2

Mrs. Dudley Matthew's Lady Free Chin (8st. 9lbs.), Capt. Bernard 3

Won by a neck; a head. Time—1 min. 36 secs.

Kashmir Cup. Distance 1 mile 1 furlong.—

Major Burridge's Argent (9st. 13lbs.), Mr. Martin 1

Mr. Graham's Sombrous (9st. 2 lbs.), Captain Oxley 2

Lt.-Col. Stewart's Buff Mail (10st. 11b.), Colonel Steele 3

Won by one length; half a length. Time—2 mins. 1-5 secs.

Northern Cup. Distance 1½ miles.—

Captain Farrar's Le Grande (8st. 6lbs.), Bona 1

Mrs. Stewart's Carlisle (9st. 2lbs.), Major Glendenning 2

Major Elphinstone's Chungiz (9st. 12lbs.), Hoyt 3

Won by half a length; half a length. Time—3 mins. 3 2-5 secs.

Patron's Cup. Distance 1 mile.—

Major Glendenning's Melwood (9st.), Owner 1

Mr. Deane's Cider (7st. 3lbs.), Bona .. 2

Captain Carpentier's Rambler (7st. 3lbs.), Grace 3

Mr. Quinn Young's Ginger Mick (9st. 11lbs.) Harraway 4

Won by two and a half lengths; half a length; three-quarters of a length. Time—1 min. 49 2-5 secs.

Punjab Army Cup. Distance 2½ miles. (Steeplechase).—

Captain Wallington's Tugboat (10st. 10lbs.), Capt. Newill 1

Other horses fell or refused and winner finished alone. Time—5 mins. 28 secs.

Northern India Stakes. Distance 1½ miles.—

Capt. Sydney Smith's Twinko (7st. 11lbs.), Alford 1

Capt. Crawford's Main Line (7st. 12lbs.), Hoyt 2

Capt. Barker's St. Bee (8st. 3lbs.), Jones .. 3

Mr. Fawcett's Pure Gem (7st, cd. 7st. 1lb.), Bona 4

Won by a neck, a head; two lengths. Time.—2 mins. 44 secs.

Ambala.

Ambala Cup. Distance 7 furlongs.—

Mr. Garrow's Hitana (8st. 12lbs.), Captain Bernard 1

Mr. King's Toddy (9st. 12lbs.), Buckley .. 2

Major Vanrennen's Mallard (8st. 10lbs.), Alford 3

Won by half a length; half a length. Time 1 min. 35 secs.

Commissioner's Cup. Distance 1 mile 7½ furlongs (Steeplechase).—

Captain George's Jou Jou (10st. 13lbs.), Captain Cox 1

Captain Barker's St. Bee (11st. 5lbs.), Mr. Weber 2

Mr. Wadia's Kintail (12st.), Edwards .. 3

Won by three lengths; two lengths. Time—2 mins. 45 secs.

Punjab Country-Bred Cup. Distance 1 mile 5 furlongs.—

Sirdar Fateh Singh's Miss Lielee (11st. 3lbs.), J. Harrison .. .. .. } 1
Major Vanrennen's Generous (10st. 13lbs.), Alford .. .. .. }

Miss Anderson's Sainte Ethelberga (11st. 3lbs.), Captain Cox 3

Won by dead-heaters by two lengths. Time—2 mins. 17 secs.

Leapordstown Cup. Distance 1 mile 1 furlong.—

Mrs. Gordon's Eternity (9st. 9lbs.), Balfour 1

Captain Bernard's Pussyfoot (9st. 12lbs.), Owner 2

Mr. Woodward's Two Gates (9st.) Buckley 3

Won by half a length; half a length. Time—2 mins. 1 sec.

Gwalior.

Galstaun's Cup. Distance 6 furlongs.—

General Nawab Obaidulla Khan's Somali (8st.), Buckley 1

General Nawab Obaidulla Khan's Lady Rita (7st. 4lbs.), Meherjee 2

Mr. Vernon's Some Scribe (9st. 2lbs.), Morris 3

Mr. B. N. Barghava's Sunline (7st. 7lbs., cd. 7st. 8lbs.), Meekings 4

Won by one and a half lengths; a neck; three-quarters of a length. Time—1 min. 14 1-5 secs.

Turf Club Plate. Distance 1 mile 1 furlong.—

Mr. Galstaun's Tete Montee (8st. 12lbs.), Lambert 1

General Nawab Obaidulla Khan's Somali (9st. 7lbs.), Buckley 2

Mr. Kashicharan's King of the Ring (8st. 11lb.), Meekings 3

Mr. Vernon's Cyanite (7st. 8lbs., cd. 7st. 10lbs.), Harrison 4

Won by a short head ; one length ; one length. Time.—1 min. 55 4-5 secs.

N.B.—Owing to paucity of entries due to the clashing of the Kolhapur Races with the second meeting due to be held at Gwalior, the meeting was abandoned.

Kolhapur.

Maharani Cup. Distance 1¼ miles.—

Mr. R. R. S.'s Crown Prince (8st. 11lb.), F. Huxley 1

Mr. A. W. Sulleman's Sinnan (8st. 5lbs.), Morris 2

Mr. Eve's Apollo (10st.), Hardy 3

Mr. Mahomed Mustafa Talib's Rising Star (7st. 9lbs.), Meekings 4

Won by a short head ; half a length ; one and a half lengths. Time—2 mins. 23 2-5 secs.

Maharaja Cup. Distance 1¼ miles.—

Mr. Darcy's Charles William (8st. 5lbs.), Meekings 1

Mr. A. M. Khairaz's Lady Cleopatra (9st. 8lbs.), Burn 2

Mr. Shantidas Askuran's St. Simon's Fancy (7st. 4lbs.), M. Hoyt 3

Mr. Eve's Cracknell (8st. 13lbs.), Bowley 4

Won by a neck ; three-quarters of a length ; a head. Time—2 mins. 11 secs.

S. S. Akkasaheb Maharajah's Cup. Distance 5 furlongs.—

Mr. A. M. Khairaz's Mollah (8st. 5lbs.), Burn 1

Mr. R. R. S.'s Flight Errant (8st. 5lbs.), F. Huxley 2

H. H. the Maharaja of Kolhapur's Poor Anna (7st. 11lbs.), Sheldon 3

Mr. F. A. Tarrant's Deluvian (10st.), Townsend 4

Won by half a length ; half a length ; half a length. Time—1 min. 2 4-5 secs.

Turf Club Purse. Distance 5 furlongs.—

H. H. the Maharaja of Kolhapur's Nurse Bobs (8st. 9lbs.), Hewitt 1

Mr. Darcy's Lady Loo (7st. 8lbs.), Meekings 2

Mr. Tarrant's X. & M. (7st. 12lbs.), Townsend 3

Won by three lengths ; half a length. Time—1 min. 2 3-5 secs.

Palace Stakes. Distance 1¼ miles.—

S. S. Akkasaheb Maharaj's Bathurst (7st. 6lbs.), Clarke 1

Mr. Darcy's Allensmore (8st.), Thompson .. 2

Mr. Darcy's Charles William (8st. 8lbs.), Meekings 3

Mr. Eve's Cracknell (8st. 10lbs.), Bowley 4

Won by half a length ; half a length ; half a length. Time—2 mins. 10 4-5 secs.

W. I. T. C. Plate. Distance 1 mile.—

Mr. R. R. S.'s Crown Prince (8st. 5lbs.), F. Huxley 1

Mr. Mustafa bin Talib's Rising Star (7st. 10lbs.), Clarke 2

Mr. Eve's Gulmarg (8st. 9lbs.), Lambert .. 3

Mr. A. H. Sulleman's Sinnan (8st. 8lbs.), Morris 4

Won by three-quarters of a length ; half a length ; half a length. Time—1 min. 55 secs.

Mysore.

Mysore Cup. Distance 1 mile.—

Mr. Nadir F. M. Garda's Lumination B. (9st. 6lbs.), Trahan 1

Mr. Rahamttullah Sait's Applause (9st. 4lbs.), Bland 2

H. H. the Maharaja of Mysore's Ma Bap (9st. 4lbs.), Callanan 3

Mr. B. Appiah's Venu (9st. 4lbs.), Meherjee 4

Won by one length ; one length ; half a length. Time—1 min. 54 4-5 secs.

H.H. the Maharaja of Mysore's Cup. Distance 1¼ miles.—

H. H. the Maharaja of Mysore's Sandra (7st. 4lbs.), Mitchell 1

Sirdar M. Lakshmikant Raj Urs' Zanzibar (8st. 7lbs.), Bland 2

Mr. E. Dee's Guileless (7st. 12 lbs.) Morris 3

H. H. the Maharaja of Mysore's Alexo (7st.), McQuade 4

Won by three-quarters of a length ; two lengths ; half a length. Time—2 mins. 15 secs.

Hajee Sir Ismail Sait's Cup. Distance 1¼ miles.—

Mr. A. Sattar's Lookhman (8st. 9lbs.), McQuade 1

Messrs. Husain Ali and Contractor's Honeysuckle (8st.), Raymond 2

Mr. M. Ali Askar's Fairy Gold (11st. 2lbs.), Mitchell 3

Mr. S. R. A Wahab's Sultan (8st. 11lb.), Morris 4

Won by two and a half lengths ; two lengths ; one length. Time—2 mins. 38 secs.

Bangalore.

Bangalore Cup. Distance 1¼ miles.—

Mr. A. Sattar's Abajala (7st.), McQuade.. 1

Mr. M. Goculdass' Knight of Clonmel (8st. 11lbs.), Lambert 2

Mr. M. Goculdass' Gipsy's Advice (7st.), Meherjee 3

Nawabzada Abdul Karim Khan's The Lark (9st. 8lbs.), Dobie 4

Won by four lengths; two and a half lengths; two lengths. Time—2 mins. 23 2-5 secs.

Maharaja of Mysore's Cup. Distance 1 mile.—
Messrs. Louvet and Soutar's Lomond's Pride (8st. 7lbs.), Dobie 1
Mr. T. M. Ross' Wee Dote (7st. 13lbs.), McQuade 2
Mr. J. S. Harper's Ship's Biscuit (7st. 6lbs.), S. Meekings 3
Won by a neck; half a length. Time—1 min. 51 1-5 secs.

Yuvaraja of Mysore's Cup. Distance 1 mile.—
Mr. W. J. Soutar's Fair Deal (9st. 2lbs.), Dobie 1
Mr. Nugent Grant's Newhall (7st. 10lbs.), Bona 2
Sirdar M. Lakshmikantaraj Urs' Presteau (7st. 12lbs.), McQuade 3
Mr. A. M. Mahdi's Colby (7st. 11lb.), Hoyt. 4
Won by one and a quarter lengths; a neck; close fourth. Time—1 min. 44 secs.

Desraj Urs' Memorial Cup. Distance 7 furlongs.—
H.H. the Maharaja of Mysore's Ma Bap (10st.), Morris 1
Nawabzada Abdul Karim Khan's Monsoon Jack (7st. 7lbs.), Donnelly 2
Mr. B. Appiah's Venu (7st. 12lbs.), Reynolds 3
Mirza Mahomed Hussain's Black Top (9st. 12lbs.), Babajan 4
Won by one length; half a length good fourth. Time—1 min. 31 2-5 secs.

Haji Sir Ismail Sait's Cup. Distance 6 furlongs.—
Mr. G. M. Khan's Lottie (7st. 6lbs.), Clarke 1
Mrs. F. Ramshaw's Duet (7st. 9lbs.), Hoyt. 2
Mr. A. C. Maclaren's War Rations (9st. 11lbs.), Dobie 3
Mr. A. Mahdi's Colby (7st. 7lbs.), Donnelly 4
Won by one and a half lengths; six lengths; one length. Time—1 min. 21 3-5 secs.

Quetta.

Quetta Cup. Distance 1¼ miles.—
Captain George's Jou Jou (10st 4lbs.), Captain Cox 1
Mr. Sydney Smith's Twinko (9st. 12lbs.), Thompson 2
Major Scott's Sea Plant (9st. 2lbs.), Captain Bernard 3
Lt.-Colonel Stewart's Buff Mail (9st. 4lbs.), Major Glendinning 4
Won by one and a half lengths; three lengths; five lengths. Time—2 mins. 15 2-5 secs.

A. G. G.'s Cup. Distance 1 mile.—
H.H. the Khan of Kalat's Angary (7st. 5lbs.), Balfour 1
Mrs. Gordon's Eternity (10st. 2lbs), Buckley 2
Captain Bernard's Pussyfoot (11st.), Owner 3
Won by two lengths; five lengths. Time—1 min. 41 2-5 secs.

Kalat Cup. Distance 6 furlongs.—
Mr. F. Hearson's Sandoola (11st. 7lbs.), Buckley 1
Mr. Sydney Smith's Little King (7st. 3lbs.), L. Jones 2
Major W. Johnston's Lady Avidity (9st. 5lbs.), Captain Bernard 3
Won by three-quarters of a length; eight lengths. Time—1 min. 19 secs.

Draper's Cup. Distance 1 mile.—
Captain J. B. Browne's First Impressions (8st. 3lbs.), Balfour 1
Mr. A. H. Sulleman's Wilson (9st. 12lbs.), Buckley 2
Major W. G. Elphinstone's Chungiz (9st. 12lbs.), Captain Cox 3
Won by one length; one and a half lengths. Time—1 min. 56 4-5 secs.

Hindubagh Cup. Distance round course.—
Major G. P. Knott's Delcassina (9st. 3lbs.), Balfour 1
Mr. Mir Ahmed Khan's Cheho (8st. 3lbs.), L. Jones 2
Malik Shah Jehan's Mujloon (9st. 12lbs.), Abdulla 3
Won by three lengths; half a length. Time—2 mins. 11 2-5 secs.

Baluchistan Chase. Distance 2½ miles (Steeplechase)—
Captain Cox's Mr. Jinks (11st. 7lbs.), Owner 1
Mr. Wansbrough Jone's Sultan (11st.), Owner 2
Major Glendinning's Republican (9st.), Thompson 3
Won by one length; distance. Time—5 mins. 24 2-5 secs.

POLO.

Indian Polo Association Championship, Calcutta—
Viceroy's Staff .. .. ..3 goals
16th-15th Lancers .. .. ..1 goal

Carmichael Cup, Calcutta—
Northern Bengal Mounted Rifles ..4 goals
Assam Valley Light Horse .. ..3 goals

Murree Brewery Tournament, Rawalpindi—
P. A. V. O. Cavalry "A" Team ..8 goals
25th Pack Artillery Brigade .. ..7 goals

Subsidiary Tournament, Rawalpindi—
I. A. S. C. .. ..14 goals
Remnants .. ..1 goal

Royal Dragoons' Challenge Cup, Lucknow—
16th-5th Lancers " B " Team ..4 goals
16th-5th Lancers " A " Team ..3 goals

Subsidiary Tournament, Lucknow—
15th Lancers " B " Team .. ..4 goals
Rifle Brigade .. ..2 goals

Inter-Regimental Tournament, Meerut—
15th Lancers .. ..7 goals
11th Hussars .. ..1 goal

Subalterns' Tournament, Meerut—
7th Hussars .. ..4 goals
Hodson's Horse .. .. ..*Nil*

Autumn Cup, Meerut—
21st Brigade, R. F. A. .. ..5 goals
Probyn's Horse " A " Team ..3 goals

Subsidiary Tournament, Meerut—
11th Hussars .. .. ..3 goals
Probyn's Horse " B " Team ..1 goal

Radha Mohan Cup, Delhi—
102nd Battery, R. F. A. .. ..6 goals
Viceroy's Staff .. .. ..2 goals

Subsidiary Tournament, Delhi—
Snowdon .. ..7 goals
Muttra Gymkhana .. .. ..4 goals

Prince of Wales' Commemoration Cup, Delhi—
The Tigers .. ..9 goals
Viceroy's Staff .. .. ..5 goals

Low Aggregate Tournament, Delhi—
19th Lancers " A " Team .. ..4 goals
Delhi Duds " B " Team .. ..2 goals

Indian Cavalry Tournament, Lahore—
Central India Horse .. .. ..3 goals
15th Lancers .. .. ..2 goals

Sir Pratab Singh Challenge Cup, Poona—
Maharaja of Jodhpur's Team ..10 goals
Poona Horse .. ..1 goal

General Richardson's Cup, Poona—
Poona Horse .. .. ..5 goals
Jodhpur .. ..3 goals

Beresford Cup, Simla—
United Service Club .. ..3 goals
Snowdon .. ..2 goals

Viceroy's Staff Cup, Simla—
The Lambs .. ..6 goals
United Service Club .. .. ..2 goals

Rajpipla Challenge Cup, Bombay—
7th Hussars .. ..7 goals
Alirajpur .. ..2 goals

Obaidulla Khan's Challenge Cup, Bombay—
7th Hussars .. ..8 goals
Governor's Staff .. .. ..1 goal

Infantry Tournament, Bareilly—
2nd Batt., Somerset Light Infantry. 3 goals
1st Batt., Rifle Brigade .. ..2 goals

Tradesmen's Challenge Cup, Rawalpindi—
Q. V. O. Corps of Guides .. ..11 goals
25th Pack Artillery Brigade ..1 goal

Subsidiary Tournament, Rawalpindi—
Royal Artillery .. .. ..5 goals
Peshawar Gymkhana .. .. ..4 goals

Connell Cup, Allahabad—
Star and Crescent .. .. ..5 goals
Panna State .. ..2 goals

Manda Cup, Allahabad—
48th Battery, R. F. A. ..4 goals
Allahabad Gymkhana .. ..3 goals

Wallach Cup, Allahabad—
Durham Light Infantry .. ..7 goals
Allahabad Gymkhana .. ..3 goals

Payagpur Tournament, Naini Tal—
7th Light Cavalry .. .. ..9 goals
Pirates .. ..3 goals

Raja Venugopal Cup, Madras—
Mysore Cavalry .. .. ..5 goals
Queen's Bays " B " Team .. ..4 goals

Willingdon Commemoration Cup, Madras—
Venkatagiri Gymkhana .. ..7 goals
Mysore Cavalry .. .. ..6 goals

Novices Tournament, Madras—
Mysore Lancers .. .. ..8 goals
Governor's Staff .. .. ..4 goals

Senior Tournament, Quetta—
Central India Horse .. .. ..13 goals
Staff College .. ..3 goals

Junior Tournament, Quetta—
Dodos .. ..4 goals
Central India Horse .. .. ..3 goals

Subsidiary Tournament, Quetta—
Evergreens .. ..7 goals
Bats .. ..5 goals

Desraj Urs' Challenge Cup, Bangalore—
Mysore Lancers .. .. ..4 goals
Queen's Bays " B " Team .. ..*Nil*

July Tournament, Bangalore—
Mysore Cavalry " B " Team.. ..7 goals
Mysore Cavalry " A " Team.. ..4 goals

Subsidiary Tournament, Bangalore—
Queen's Bays " B " Team .. ..4 goals
Royal Artillery .. .. ..*Nil*

Junior Tournament, Hyderabad—
Futteh Maidan " C " Team .. ..14 goals
Robots .. ..5 goals

Novices Tournament, Secunderabad—
Futteh Maidan " A " Team .. ..3 goals
3rd Cavalry .. ..2 goals

Egerton Cup, Secunderabad—
Royal Deccan Horse .. .. ..8 goals
4th-7th Dragoon Guards .. ..3 goals

Frontier Cup, Peshawar—
K. G. O. Cavalry, " A " Team ..5 goals
Peshawar Gymkhana " A " Team ..3 goals

Subsidiary Tournament, Peshawar—
K. G. O. Cavalry " B " Team ..6 goals
Peshawar Gymkhana " B " Team ..4 goals

Coronation Challenge Cup, Pachmarhi—
7th Hussars .. ..9 goals
7th Brigade .. ..3 goals

Dhar Challenge Cup, Dhar—
Umedwars .. ..5 goals
Paternosters .. ..3 goals

TENNIS.

All-India Tournament, Allahabad—

Ladies' Doubles.—Mrs. O'Neill and Mrs. Hasler beat Mrs. Freemantle and Mrs. Holmes.

Ladies' Championship Singles—Mrs. Keayes beat Mrs. O'Neill.

Men's Doubles—Powell and Bobb beat Colonel Davies and Bishamber Dayal.

Men's Championship Singles—S. K. Mukerji beat Bobb.

Allahabad Plate—Colonel Davies.

Markers' Event—Abdul Latif beat Saiyid Akbar.

Western India Championship Tournament, Bombay—

Men's Singles—S. Okamoto beat U. D. Ranga Rao.

Men's Doubles—U. D. Ranga Rao and R. A. Wagle beat R. D. England and A. Hosie.

Mixed Doubles—Mrs. Swinhoe and E. Annett beat Lady Tata and J. A. D. Naoroji.

Bengal Championship Tournament, Calcutta—

Ladies' Singles—Mrs. Berthoud beat Mrs. Keayes.

Men's Singles—S. Okamoto beat G. Perkins.

Men's Doubles—S. Okamoto and V. Kitagama beat G. Sarma and D. K. Mandal.

Mixed Doubles—Mrs. Keayes and S. Okamoto beat Mrs. Williams and Dr. Brandon.

Simla Championship Tournament, Simla—

Ladies' Singles.—Miss L. Tollinton beat Miss K. Tollinton.

Men's Singles—Jagat Mohan Lal beat Raghubir Dayal.

Men's Doubles—Cleophas and Raghubir Dayal beat Jagat Mohan Lal and Gupta.

Mixed Doubles—Miss L. Tollinton and Jagat Mohan Lal beat Captain and Mrs. Norris.

Delhi Tournament, Delhi—

Ladies' Doubles.—Mrs. O'Neill and Mrs. Hasler beat Mrs. Wright and Mrs. Ansorge.

Men's Singles—Jagat Mohan Lal beat Green.

Men's Doubles.—Knowles and Dillon beat Jagat Mohan Lal and Green.

Mixed Doubles.—Mrs. Hasler and Jagat Mohan Lal beat Mrs. Sutherland and Davies.

Ladies' Handicap Singles.—Mrs. Hasler beat Mrs. O'Neill.

Mixed Handicap Doubles.—Mrs. Stanborough and Bishambar Dayal beat Mrs. Hasler and Sir Henry Moncrieff Smith.

Men's Handicap Singles—H. Davies beat Devi Singh.

Men's Handicap Doubles.—Grindal and Wilkins beat Postance and Casement.

Quetta Tournament, Quetta—

Ladies' Singles.—Mrs. M. G. Anderson beat Miss T. Robinson.

Ladies' Doubles.—Mrs. and Miss Robinson beat Mrs. R. R. Conningham and Mrs. H. R. Williams.

Men's Singles.—Major A. G. J. Copeland beat Captain M. G. Rowcroft.

Men's Doubles.—Major-General Sir David Campbell and Major A. G. J. Copeland beat Captain M. G. Rowcroft and Mr. F. W. J. White.

Mixed Doubles.—Major and Mrs. M. G. Anderson beat Miss M. Robinson and Mr. F. W. J. White.

Mussoorie Tournament, Mussoorie—

Ladies' Singles.—Miss Mackinnon beat Mrs. Cockson.

Men's Singles.—Dr. E. B. Andreae beat A. Minck.

Men's Doubles.—Dr. E. B. Andreae and A. Minck beat Schofield and Plomer.

Mixed Doubles.—Mrs. Vane Percy and Dr. C. B. Andreae.

Ladies' Handicap Singles.—Miss Mackinnon beat Miss Bellairs.

Ladies' Handicap Doubles.—Mrs. Ross and Mrs. Cockson beat Mrs. Densham-Smith and Mrs. Scroggie.

Men's Handicap Singles.—A. Pilcher beat Bishambar Das.

Men's Handicap Doubles.—Pilcher and Alderton beat Andreae and Minck.

Mixed Handicap Doubles.—Mrs. Vane Percy and Andreae beat Mrs. Ross and Plomer.

Sind Tournament, Karachi—

Ladies' Singles.—Mrs. Bayley beat Miss T. Robinson.

Ladies' Doubles.—Mrs. Bayley and Mrs. Lewis beat Mrs. Wildes and Mrs. Cox.

Men's Singles.—Captain Tishton beat R. S. Hiranandani.

Men's Doubles.—Parsram and S. S. Shahani beat Kewalram and R. S. Hiranandani.

Mixed Doubles.—Mrs. Stephens and E. J. Dickson beat Miss T. Robinson and R. N. Nicholls.

Central India Invitation Tournament, Indore—

Men's Singles (Holkar Challenge Cup)—Chunilal beat Uttam Narain.

Men's Doubles (Dhar Challenge Cup).—Uttam Narain and Ram Narain beat S. C. Dass and K. N. Dass.

Mixed Doubles (Dewas Challenge Cup).—Miss Glennie and Captain Fraser beat Mr. and Mrs. Greene.

Gulmarg Tournament, Gulmarg—

Ladies' Singles.—Mrs. Landale beat Mrs. Stow.

Ladies' Doubles.—Mrs. Gracey and Mrs. Stow beat Mrs. Minchin and Mrs. Glancey.

Men's Singles.—Dharpur Singh beat Captain Churchill.

Men's Doubles.—Atkinson and Major Condon beat Bharpur Singh and Capt. Palin.

Mixed Doubles.—Mrs. Gracey and Atkinson beat Mrs. Stow and Colonel Davies.

Ladies' Handicup Singles.—Miss McLeod beat Miss Furness.

Ladies' Handicap Doubles.—Mrs. Furness and Mrs. Jones beat Lovell and Mrs. Keeling.

Men's Handicap Singles.—Bharpur Singh beat Captain Hamilton.

Men's Handicap Doubles.—Shephard and Crewe beat the Raja of Mandi and Bharpur Singh.

Mixed Handicap Doubles.—Mrs. Stow and Abbott beat Major and Mrs. Condon.

HOCKEY.

All-India Tournament, Delhi—

North Western Railway, Lahore ..4 goals
Punjab Rifles (A.F.I.), Lahore.. ..*Nil*

All-India Auxiliary Force Tournament, Allahabad—

Allahabad Rifles "A" Team .. ..1 goal
G.I.P. Railway Rifles, Jubbulpore ..*Nil*

All-India Scindia Tournament, Gwalior—

G.I.P. Railway, Jubbulpore .. ..1 goal
"The Tigers", Patiala .. .. ..*Nil*

All-India Mercantile and Trades Charity Tournament, Delhi—

Nondescripts, Delhi .. .. ..1 goal
Telegraph Recreation Club, Delhi ..*Nil*

Aga Khan Tournament, Bombay—

Poona Rangers .. ..1 goal
Bengali Young Men's Association, Lucknow .. ..*Nil*

Junior Aga Khan Tournament, Bombay—

St. Mary's High School, Bombay ..2 goals
Catholic Educational Institute, Bombay *Nil*

Aga Khan Tournament, Poona—

Shropshire Light Infantry, Poona ..3 goals
Staff and Departmental, Poona ..1 goal

Belghton Cup Tournament, Calcutta—

Lucknow .. ..5 goals
Customs .. ..3 goals

Punjab Championship Tournament, Lahore—

Punjab Rifles .. ..2 goals
North Western Railway Apprentices "A" Team .. ..1 goal

Northern India Tournament, Murree—

Railway .. ..1 goal
Postal .. ..*Nil*

Trades Cup Tournament, Naini Tal—

St. Joseph's College .. .. . 5 goals
Philander Smith's College .. ..1 goal

Madras Hockey Tournament, Madras—

Anglo-Indian Sports Club .. ..6 goals
Medical College .. ..*Nil*

Madras District Tournament, Bangalore—

1st Suffolk Regiment .. .. ..1 goal
Royal Engineers .. .. ..*Nil*

Lahore Gymkhana Tournament, Lahore—

North Western Railway Regiment "A" Team .. ..3 goals
Punjab Rifles .. ..1 goal

Subsidiary Tournament, Lahore—

58th Northamptonshire Regiment ..2 goals
North Western Railway Regiment "B" Team .. ..1 goal

Murree Tournament, Murree—

27th Brigade, R.F.A. .. .. ..1 goal
Oxfordshire and Bucks Regiment ..*Nil*

FOOTBALL.

Indian Association Challenge Shield, Calcutta—

Calcutta .. ..3 goals
Mohan Bagan .. ..*Nil*

Durand Cup Tournament, Simla—

1st Batt. the Cheshire Regiment ..1 goal
2nd Batt. the Essex Regiment ..*Nil*

Murree Brewery Cup Tournament—

2nd Batt. the Gloucester Regiment..1 goal
27th Brigade, R. F. A. .. ..*Nil*

O. E. R. Railway Challenge Cup Tournament, Cawnpore—

55th Battery, R. F. A. .. ..3 goals
17th Lancers .. .. ..*Nil*

Rovers Tournament, Bombay—

Durham Light Infantry .. ..4 goals
Mohan Bagan .. ..1 goal

Harwood League, Bombay—

Royal Inniskilling Fusiliers 1st
Royal Garrison Artillery 2nd

Madras Gymkhana Tournament—

Queen's Bays .. .. ..1 goal
Madras Gymkhana .. .. ..*Nil*

Salarjang Tournament, Aligarh—

Usmania University .. .. ..1 goal
Quetta .. ..*Nil*

Narayan Shield Tournament, Cawnpore—

26th Brigade, R. F. A. .. ..3 goals
"K" Battery, R. H. A. .. ..*Nil*

Majeed Tournament, Secunderabad—

Merry-go-Round Team .. ..1 goal
Osmania University .. .. ..*Nil*

Kelkar Cup Tournament, Nagpur—

Morris College .. .. ..1 goal
Catholic Institute .. .. ..*Nil*

RUGBY FOOTBALL.

Poona Tournament, Poona—

Bombay Gymkhana .. .. ..3 points
King's Shropshire Light Infantry ..*Nil*

Madras Tournament, Madras—

Madras Gymkhana 'A" .. ..11 points

Ceylon Rugger Union .. ..5 points

Calcutta Cup Tournament, Calcutta—

Calcutta Football Club "A" ..24 points
Calcutta Football Club "B" ..*Nil*

CRICKET.

All-India Tournament, Nagpur—

Bombay beat Bengal by an innings and 58 runs.

Bombay Quadrangular Tournament—

Hindus beat Europeans by nine wickets.

Hyderabad Quadrangular Tournament—

Mahomedans beat Europeans by 111 runs.

Sind Pentangular Tournament, Karachi—

Hindus and Parsis draw.

C. P. Quadrangular Tournament—

Hindus beat Parsis by ten wickets.

Ahmedabad Quadrangular Tournament—
Europeans beat Parsis by two wickets and 210 runs.

Northern India Quadrangular Tournament, Lahore—
Europeans beat Mahomedans by 167 runs.

Daly Shield, Indore—
Yeshwant Club beat Maharaja Shivaji Rao High School by an innings and 128 runs.

Gackwar Cup, Junagad—
Baroda College beat Bahauddin College by 209 runs.

Giles Shield, Bombay—
B.E.S. School beat J. N. Petit Orphanage, Parel.

BOXING.

All-India Army Championships, Mussoorie—
Heavy Weight—Bdr. Pritchard, 2nd Bde., R.F.A.
Light-Heavy Weight—Pte. Jones, Leicester Regiment.
Middle Weight—Sergt. Lewry, Leicester Regiment.
Welter Weight—Cpl. Munroe, Royal Fusiliers.
Light Weight—Cpl. Bevan, Royal Warwicks.
Feather Weight—Pte. Bridges, Royal Warwicks.
Bantam Weight—Pte. Symns, Sherwood Foresters.
Fly Weight—Fuslr. Evans, Royal Welch Fusiliers.
First Aggregate Prize—Royal Fusiliers.
Best Cavalry Unit—Royal Scots Greys.
Best Artillery Unit—2nd Brigade, R.F.A.
Best Small Unit—14th Mountain Battery, R.A.G.
Best Auxiliary Force (India) Unit—B.B. and C.I. Railway Regiment.
Cadet Competition—Cadet Hardy, St. George's College.

A. S. C. B. Tournament, Rawalpindi.
Heavy Weight—Sergt. Maccreae, 60th Rifles.
Light-Heavy Weight—Pte. Wilkinson, 52nd Light Infantry.
Middle Weight—Signmn. Grey, Royal Corps of Signals.
Welter Weight—Bdr. Scott, 24th Bde., R.F.A.
Light Weight—Cpl. Odell, 60th Rifles.
Feather Weight—Rfmn. Honeywood, 60th Rifles.
Fly Weight—Sergt. Archer, 60th Rifles.

Officers' Tournament, Rawalpindi—
Catch Weight—Lt. Osborne, 60th Rifles.
Middle Weight—Capt. Slater, R.F.A.
Welter Weight—Lt. Fletcher, 60th Rifles.
Light Weight—Capt. Wall, 60th Rifles.

GOLF.

Amateur Championship of India—G.D. Forester beat A. E. H. Killick by 15 up and 13 to play.
Western India Championship. Nasik—J. R. Abercrombie beat R. C. Lowndes.
South India Championship, Ootacamund—Carrick beat Peebles.
South India Ladies' Championship, Ootacamund—Mrs. Cruickshank beat Mrs. Dallas Smith.
Gulmarg (Kashmir) Championship—H. S. Malik beat D. Johnstone.

Bombay.

Golfer's Cup—W. F. Duke beat G. C. Thow.
Blackheath Gold Medal—L. P. S. Bourne. Runner-up.—J. W. Jessop.
St. George's Medal—W. F. Duke.
Calcutta Medal—W. B. Whiteside. Runners-up.—C. Q. Wilkinson and A. G. Pearson.
Merchants' and Bankers' Cup—Messrs. Mackinnon Mackenzie & Co.

Nasik.

Nasik Cup—W de C. Walsh.
Bombay Cup—W. J. Jenkins.
President's Cup—J. R. Abercrombie.
Peace Cup—J. L. Hamilton.
Captain's Cup—J. T. Alexander. Runner-up—W. Inder.
Advani Cup—D. V. Wanostrocht.
Challenge Shield and Gold Medal—J. R. Abercrombie. Runner-up—R. C. Lowndes.
Consolation Cup—J. L. Hamilton. Runner-up—David Walker.
Bombay Bangle—Mrs. Butterworth. Runner-up—Mrs. Sandilands.
Ladies' Consolation Cup—Mrs. Bullock. Runner-up—Mrs. Clayton.
Ladies' Medal—Miss Angela Forbes-Smith. Runner-up—Mrs. Butterworth.

Pali Hill.

Greaves Memorial Cup—A. G. O'Neill.
President's Cup—A. N. F. Moore.
Gold Medal—C. F. Morris.
Pali Hill Cup—C. F. Morris.
Electric Competition—C. H. Hewlett

Poona.

H. E. the Governor's Cup—Rajkumar Desaraj Runner-up—Major Warren.
Leach and Webomey Cup—Colonel Melhuish.
W. I. T. C. Challenge Cup—Jessop.
Mr. Hatch's Cup—Captain Alcock. Runners-up—Pooley and Rajkumar Desaraj.
H. E. Lady Lloyd's Cup—Mrs. Warren and Mrs. McLeod.
Ladies' Electric—Mrs. Palmer. Runners-up—Mrs. Warren and Mrs. Whitworth.
Whiteaway Laidlaw Cup—J. Sharples Run.

Quetta.

Inter-Regimental Cup—Major C. A. L. Brownlow and Lt. J. B. Jones.
Staff College Cup—Lt.-Col. D. C. Cowie and Major W. A. H. Bird.
A. G. G.'s Cup—Lt.-Col. L. Carr.
Calcutta Cup, Ootacamund—Rajkumar beat French.
Ladies' Electric Competition, Ootacamund—Mrs. Palin.
Merchants' Cup, Karachi—J. R. Baxter and W. E Petrie.

ATHLETICS.

All-India Amateur Meeting, Bombay—

Marathon Race—(1922) N. V. R. Naidu. Time—56 mins. 21 4-5 secs. (1923) Bds. Turner, 2nd Middlesex Regiment.
100 Yards—(1922) Lce.-Cpl. Roberts, K. R. R. C. Time—10 2-5 secs. (1923) H. S. Lynn, Customs. Time—10 4-5 secs.
120 Yards Hurdles—(1922) H. S. Lynn, Y.M.C.A. Time—16 3-5 secs. (1923) P. A. D'Avoine, B. E. S. School. Time—17 secs.
220 Yards Dash—(1922) Lce.-Cpl. Roberts, K. R. R. C. Time—24 4-5 secs. (1923) A. M. B. L. Pinto, Baroda. Time—24 secs.
440 Yards Race—(1922) Sergt. Thompson, Ahmednagar. Time—55 4-5 secs. (1923) P. Powell, Bombay. Time—58 secs.
Half Mile Race—(1922) Lce.-Cpl. Dixon, 2nd D. L. I. Time—2 mins. 11 secs. (1923) Bds. Turner, 2nd Middlesex Regt. Time—2 mins. 12 secs.
One Mile Race—(1922) N. V. R. Naidu, Bangalore. Time—4 mins. 53 2-5 secs. (1923) Bds. Turner, 2nd Middlesex Regt. Time—5 mins. 4 secs.
Broad Jump—(1922) Lce.-Cpl. Roberts, K. R. R. C. Length—20ft. 4in. (1923) H. S. Lynn, Customs. Length—19ft. 11½in.
High Jump—(1922) Bdm. Waddcups, Inniskillings. Height—5ft. 2in. (1923) Bdm. Waddcups, Inniskillings. Height—4ft. 10in.
Half Mile Relay Race—(1922) Inniskilling Fusiliers. (1923) Y. M. C. A., Bombay. Time—1 min. 43 secs.
Half Mile Cycle Race—(1922) M. Gerard, Customs. Time—1 min. 25 4-5 secs. (1923) M. Gerard, Customs. Time—1 min. 23 2-5 secs.
Two Mile Cycle Race—(1922) M. Gerard, Customs. Time—6 mins. 37 3-5 secs. (1923) M. Gerard, Customs. Time—6 mins. 33 3-5 secs.
100 Yards (School Boys)—(1923) P. A. D'Avoine, B. E. S. Time—11 secs.
440 Yards (School Boys)—(1923) G. A Johnstone, Bishop Cotton School. Time—57 2-5 secs.

YACHTING AND BOATING.

Royal Bombay Yacht Club Regatta—
Commodore's Cups—Colonel Gillespie (Sheila) in "A" Class. Mr. Durkin (Kelpie) in "B" Class. Mr. Rich (Loon) in Sea Birds Class. Mr. Scott (Rosalind) in Tomtits Class.
Captain Gentles' Cup—Colonel Gillespie (Sheila).
Captain Gentles' Cup—Mr. Durkin (Kelpie).
Gordon Bennett Cup—(Bat).
Lord Curzon Cup—Mr. MacBeth (Puffin).
Naini Tal Yacht Club Regatta—
All-India Cup—Naini Tal Y. C. beat Royal Bombay Y. C. by 12 points.
Royal Connaught Boat Club Regatta, Poona—
Junior Fours (½ mile)—R. F. A. Time—3 mins. 21 secs.
Mixed Double Sculls (½ mile)—Mrs. A. S. M. Winder, A. S. M. Winder and Miss O'Gorman (cox). Time—1 min. 59 secs.
Service Fours (½ mile)—Signal School. Time—4 mins. 47 secs.
Junior Sculls (½ mile)—R. E. Lines. Time—4 mins. 1 sec.
Canoe Race—Captain and Mrs. Dobbie.
Junior Pairs (½ mile)—Royal Sappers and Miners. Time—4 mins. 9 secs.
Senior Scull,—(½ mile)—D. H. Dawson. Time—5 mins. 3 secs.
Senior Pairs (½ mile)—Royal Sappers and Miners. Time—3 mins. 33 secs.
Challenge Fours (½ mile)—Royal Connaught Boat Club. Time—4 mins. 47 secs.

MOTOR CYCLING.

BOMBAY SPEED CHAMPIONSHIPS.

Under 250 c.c.—A. F. Soundy (Triumph Junior).
Under 350 c.c.—H. Harmer (Matador-Bradshaw).
Under 600 c.c.—D. V. Vartak (Norton).
Unlimited—S. A. Palkhiwalla (Harley Davidson).
Championship Finals—S. A. Palkhiwalla (Harley Davidson).

Banking.

An event of great importance in the history of Indian banking was the formation on the 27th January 1921 of the Imperial Bank of India by amalgamation of the three Presidency Banks of Bengal, Bombay and Madras.

The idea of a Central Banking establishment for British India was mooted as early as 1836, and was the subject of a minute by Mr. James Wilson, when Finance Member, in 1859. Again, in 1867 Mr. Dickson, the well-known Secretary of the Bank of Bengal, submitted detailed proposals for an amalgamation of the three Presidency Banks. On various later occasions the matter was brought forward without result and it was discussed by the Chamberlain Commission on Indian Finance and Currency in 1913. The present scheme which has come to fruition was however the result of a *rapprochement* on the part of the Banks themselves as a result of the experience gained during the war and the realisation of the desirability of strengthening and extending the Banking system in India.

The Presidency Banks:—The history of the Presidency Banks in their relationship with Government falls into three well-defined stages. Prior to 1862 the Presidency Banks had the right of note issue, but were directly controlled by Government and the scope of their business was restricted by their charters. The second period was from 1862 to 1876. In 1862 the Banks were deprived of the right of note issue, though by their agreements of that year they were authorised to transact the paper currency business as agents of Government. As compensation for the loss of their right of issue, they were given the use of the Government balances and the management of the treasury work at the Presidency towns and at their branches. The old statutory limitations on their business were at the same time greatly relaxed, though the Government's power of control remained unchanged. In 1866 the agreements were revised and the paper currency business was removed from their control and placed under the direct management of Government. The third period dates from the Presidency Banks Act of 1876 by which nearly all the most important limitations of the earlier period were reimposed. Put very briefly, the principal restrictions imposed by this Act prohibited the Banks from conducting foreign exchange business, from borrowing or receiving deposits payable out of India, and from lending for a longer period than six months, or upon mortgage or on the security of immovable property or upon promissory notes bearing less than two independent names or upon goods, unless the goods of the title to them were deposited with the Bank as security. At the same time Government abandoned direct interference in the management, ceasing to appoint official directors and disposing of their shares in the Banks. The Banks no longer enjoyed the full use of the Government balances. Reserve Treasuries were constituted at the Presidency towns into which the surplus revenues were drawn and the balances left at the disposal of the Banks were strictly limited.

This system continued with only minor modifications until 1920. During the war, however, the policy was deliberately adopted of reducing the amount of the balances held in the Reserve Treasuries and leaving much larger balances with the Headquarters of the Presidency Banks in order to assist the money market.

The Imperial Bank:—Under the Imperial Bank of India Act (XLVII of 1920), the control of the Bank is entrusted to a Central Board of Governors with Local Boards at Calcutta, Bombay and Madras and such other places as the Central Board, with the previous sanction of the Governor-General in Council may determine. The Central Board of Governors consists of—

(*a*) Managing Governors not exceeding two in number, appointed by the Governor-General in Council on recommendation by the Central Board;
(*b*) the Presidents, Vice-Presidents and Secretaries of the Local Boards;
(*c*) the Controller of the Currency, or other officer nominated by the Governor-General in Council; and
(*d*) not more than four non-officials, nominated by the Governor-General in Council.

Representatives of any new Local Boards, which may be constituted, may be added at the discretion of the Central Board.

The Controller of the Currency and the Secretaries of the Local Boards are entitled to attend the meetings of the Central Board but not to vote under the agreement with Government. The Governor-General in Council is entitled to issue instructions to the Bank in respect of any matter which in his opinion vitally affects his financial policy or the safety of the Government balances, and if the Controller of the Currency or such other officer of Government as may be nominated by the Governor-General in Council to be a Governor of the Central Board shall give notice in writing to the Managing Governors that he considers that any action proposed to be taken by the Bank will be detrimental to the Government as affecting the matters aforesaid, such action shall not be taken without the approval in writing of the Governor-General in Council. Under the Imperial Bank of India Act provision was made for the increase of the capital of the Bank. The capital of the three Presidency Banks consisted of 3½ crores of rupees in shares of Rs. 500 each, fully subscribed. The additional capital authorised was 7½ crores in shares of Rs. 500 each, of which Rs. 125 has been called up, making the present capital of the Bank Rs. 11¼ crores, of which Rs. 5,62,50,000 has been paid up. The reserve fund of the Bank is 4 crores 35 lacs and the balance sheet of 30th June 1923 showed the Government Balance at Rs. 12,56,70,782, other Deposits at Rs. 70,47,71,973 and cash Rs. 29,13,48,654 with a percentage of cash to liabilities of 34,86.

Class of Business:—The Imperial Bank of India Act follows the Presidency Banks Act of 1876 in defining absolutely the class of business in which the Bank may engage, though the older limitations are modified in some minor points. It permits for the first time the constitution of a London Office and the borrowing of money in England for the purpose of the Bank's business upon the security of assets of the Bank, but not the opening of cash credits, keeping cash accounts or receiving deposits in London except from former customers of the Presidency Banks. The Act provides for an agreement between the Bank and the Secretary of State, and this agreement, which was signed on the 27th January 1921 and is for a period of ten years determinable thereafter by either party with one year's notice, provides, *inter alia*, for the following important matters:—

(1) All the general banking business of the Government of India is to be carried out by the Imperial Bank.

(2) The Bank will hold all the Treasury Balances at Headquarters and at its branches. This involves the abolition of the Reserve Treasury system.

(3) Within five years the Bank undertakes to open 100 new branches of which the Government of India may determine the location of one in four. The branches and agencies of the three Presidency Banks prior to the date of amalgamation numbered 69, including the Colombo branch of the Bank of Madras. The Bank of Bengal had no branches prior to the proposal to transfer Government business to the Bank in 1861-62 but no less than 18 branches were established before 1868.

(4) The management of the Public Debt will continue to be conducted by the Bank for specified remuneration.

THE DIRECTORATE.

Managing Governors .. .. .. Sir Bernard Hunter, Kt.
S. A. H. Sitwell, Esq.

Presidents, Vice-Presidents and Secretaries of the Local Boards.

CALCUTTA—

Sir Alexander R. Murray, KT., C.B.E.	President.
A. d'A. Willis, Esq., M.L.C.	*Vice*-President.
D. S. McClure, Esq.	(*Offg.*) Secretary.

BOMBAY—

E. J. Bunbury, Esq	President.
Sir Jamsetjee Jejeebhoy, Bart., K.C.S.I.	*Vice*-President.
R. A. Don, Esq.	Secretary.

MADRAS—

C. E. Wood, Esq.	President.
R. C. M. Strouts, Esq...	*Vice*-President.
N. M. Murray, Esq.	Secretary.

Controller of Currency .. .. H. Denning, Esq., I.C.S. (*Offg.*)

Nominated by Government.

The Hon'ble Sir Maneckji B. Dadabhoy Kt., C.I.E., Nagpore;
The Hon'ble Sir Dinsha E. Wacha, Kt., J.P., Bombay;
The Hon'ble Sir S. R. M. Annamalai Chettiar, Kt., Madras;
Rai Sir Onkar Mull Jatia Bahadur, Kt., O.B.E., Calcutta.

MANAGER IN LONDON.

Sir Norcot Warren, Kt., K.C.I.E.

LOCAL HEAD OFFICES.	BRANCHES.	
Calcutta.	Burra Bazaar, Calcutta.	Akola.
	Clive Street, Calcutta.	Akyab.
Bombay.	Park Street, Calcutta.	Allahabad.
	Byculla, Bombay.	Alleppey.
Madras.	Mandvi, Bombay.	Amballa.
	Sandhurst Road, Bombay.	Amraoti.
LONDON OFFICE.	Mount Road, Madras.	Amritsar.
	Abbottabad.	Bangalore.
No. 5, Whittington Avenue, E. C. 3.	Agra.	Bareilly.
	Ahmedabad.	Bassein.
	Ahmedabad City.	Bellary.
	Ahmednagar.	Benares.
	Ajmer.	Berhampur.
		Bezwada.
		Bhopal.

Broach.
Calicut.
Cawnpore.
Chittagong.
Coconada.
Cochin.
Coimbatore.
Colombo.
Cuddalore.
Cuddapah.
Cuttack.
Dacca.
Dalhousie.
Darjeeling.
Dehra Dun.
Delhi.
Dhulia.
Dibrugarh.
Erode.
Ferozepore.
Fyzabad.
Guntur.
Gwalior.
Hubli.
Hyderabad (Deccan).
Hyderabad (Sind.)
Indore.
Jalgaon.
Jalpaiguri.
Jamshedpur.
Jubbulpore.
Jullundur.
Karachi.
Kasauli.
Khandwa.
Kumbakonum.
Lahore.
Larkana.
Lucknow.
Lyallpur.
Madura.
Mandalay.
Mangalore.
Masulipatam.
Meerut.
Moradabad.
Moulmein.
Multan.
Murree.
Mussoorie.
Muttra.
Muzuffarpur.
Mymensingh.
Nadiad.
Nagpur.
Naini Tal.
Nandyal.
Naraingunge.
Nasik.
Negapatam.
Nellore.
Nowshera.
Ootacamund.
Parbhani (Sub-Agency).
Patna.
Peshawar.
Poona.
Poona City.
Quetta.
Rajahmandry.
Rajkot.
Rangoon.
Rangpur.
Rawalpindi.
Saharanpur.
Salem.
Sargodha.
Secunderabad.
Serajgunge.
Sholapur.
Sialkot.
Simla.
Simla Town.
Srinagar (Kashmir).
Sukkur.
Surat.
Tellicherry.
Tinnevelly.
Trichinopoly.
Trivandrum.
Tuticorin.
Ujjain.
Vellore.
Vizagapatam
Vizianagram.

In Schedule 1 Part 1 of the Act, the various descriptions of business which the Bank may transact are laid down, and in Part 2 it is expressly provided that the Bank shall not transact any kind of banking business other than that sanctioned in Part 1.

Briefly stated, the main classes of business sanctioned are :—

(1) Advancing money upon the security of :—

(*a*) Stocks, &c., in which a trustee is authorised by Act to invest trust monies.

(*b*) Securities issued by State aided Railways, notified by the Governor-General-in-Council.

(*c*) Debentures, or other securities issued under Act, by, or on behalf of, a District Board.

(*d*) Goods, or documents of title thereto, deposited with, or assigned to the Bank.

(*e*) Accepted Bills of Exchange or Pro. Notes.

(*f*) Fully paid shares and debentures of Companies with limited liability or immoveable property or documents of title relating thereto, as collateral security where the original security is one of those specified in *a*, *b*, *c*, *d* and, if authorised by the Central Board, in *e*.

(2) With the sanction of the Local Government, advancing money to Courts of Wards upon security of estates in their charge.

(3) Drawing, accepting, discounting, buying and selling bills of exchange and other negotiable securities payable in India and Ceylon, and subject to the directions of the Governor-General in Council, the discounting, buying and selling of bills of exchange payable outside India for and from or to such Banks as may be approved.

(4) Investing the Banks' funds in the securities referred to in (1) *a*, *b*, *c*.

(5) Making Bank Post Bills and Letters of Credit payable in India and Ceylon.

(6) Buying and selling gold and silver.

(7) Receiving deposits.

(8) Receiving securities for safe custody.

(9) Selling such properties as may come into the Bank's possession in satisfaction of claims.

(10) Transacting agency business on commission.

(11) Acting as Administrator, for winding up estates.

(12) Drawing bills of exchange and granting letters of credit payable out of India for the use of principles in connection with (11) and also for private constituents for *bona fide* personal needs.

(13) Buying, for the purpose of meeting such bills, &c., bills of exchange payable out of India at any usance not exceeding six months.

(14) Borrowing money in India.

(15) Borrowing money in England upon security of assets of the Bank, but not otherwise.

The principal restrictions placed on the business of the Bank in Part 2 are as follows :—

(1) It shall not make any loan or advance :—

(*a*) For a longer period than six months.

(*b*) upon the security of stock or shares of the Bank ;

(*c*) save in the case of estates specified in Part 1 (Courts of Ward) upon mortgage or security of immoveable property or documents of title thereof.

(2) The amount which may be advanced to any individual or partnership is limited.

(3) Discounts cannot be made or advances on personal security given, unless such discounts or advances carry with them the several responsibilities of at least two persons or firms unconnected with each other in general partnership.

The Balance Sheet of the Bank as at 30th June 1923 was as follows :—

Liabilities.	Rs.	a.	p.	Assets.	Rs.	a.	p.
Subscribed Capital ..	11,25,00,000	0	0	Government Securities ..	8,02,63,672	4	0
				Other Authorized Securities under the Act ..	1,23,89,682	12	0
Capital Paid up	5,62,50,000	0	0	Loans	15,87,06,221	0	9
Reserve	4,35,0 ,000	0	0	Cash Credits	30,40,29,515	12	4
Public Deposits	12,56,70,782	2	3	Inland Bills discounted and purchased. ..	5,30,92,540	0	2
Other Deposits	70,47,71,973	0	5	Foreign Bills discounted and purchased ..	1,53,321	11	4
Loans against Securities per contra	....			Bullion	....		
Loans from the Government of India under Section 19A of the Paper Currency Act, against Inland Bills discounted and purchased per contra ..	....			Dead Stock	2,39,65,983	8	9
				Liability of Constituents for Contingent Liabilities per contra ..	....		
Contingent Liabilities ..	....			Sundries	35,34,699	6	7
Sundries	50,24,775	8	8	Balances with other Banks	77,33,239	4	8
					64,38,68,875	12	7
				Cash	29,13,18,654	14	9
Rupees ..	93,52,17,530	11	4	Rupees ..	93,52,17,530	11	4

The above Balance Sheet includes.—

Deposits in London £ 6,99,104-17-3 ; Advances, in London £ 2,44,883-15-0; Cash and Balances at other Banks in London £ 5,08,599-15-11.

Government Deposits.

The following statement shows the Government deposits with each Bank at various periods during the last 40 years or so :—

In Lakhs of rupees.

—	Bank of Bengal.	Bank of Bombay.	Bank of Madras.	Total.	—	Bank of Bengal.	Bank of Bombay.	Bank of Madras.	Total.
30 June									
1881 ..	230	61	53	344	1913 ..	247	167	68	482
1886 ..	329	82	39	450	1914 ..	290	197	93	580
1891 ..	332	97	53	482	1915 ..	263	187	102	552
1896 ..	225	88	57	370	1916 ..	336	263	115	714
1901 ..	187	90	63	340	1917 ..	1338	716	209	2263
1906 ..	186	93	46	325	1918 ..	664	549	213	1426
1911 ..	198	129	77	404	1919 ..	346	298	142	786
1912 ..	210	155	75	440	1920 ..	801	663	170	1634
					26 January 1921.	364	206	138	708

Imperial Bank.

30th June 1921	2,220
„ 1922	1,672
„ 1923	1,256

Government Deposits.

The proportions which Government deposits have borne from time to time to the total Capital Reserve and deposit of the three Banks are shown below :—

In Lakhs of Rupees.

—	1 Capital.	2 Reserve.	3 Government deposits.	4 Other deposits.	Proportion of Government deposits to 1, 2, 3 & 4.
31st December.					
1891	350	97	297	1412	13·7 per cent.
1896	350	158	299	1292	14·2 ,,
1901	360	213	340	1463	14·3 ,,
1906	360	279	307	2745	8·3 ,,
1907	360	294	335	2811	8·8 ,,
1908	360	309	325	2861	8·4 ,,
1909	360	318	307	3265	7·4 ,,
1910	360	331	339	3234	9·7 ,,
1911	360	340	438	3419	9·6 ,,
1912	375	361	426	3578	9·0 ,,
1913	375	370	587	3644	11·8 ,,
1914	375	386	561	4002	10·5 ,,
1915	375	369	487	3860	9·5 ,,
1916	375	358	520	4470	9·0 ,,
1917	375	363	771	6771	9·3 ,,
1918	375	340	864	5097	12·9 ,,
1919	375	355	772	7226	8·8 ,,
1920	375	375	901	7725	9·6 ,,
30th June (Imperial Bank.)					
1921	547	371	2220	7016	21·8 ,,
1922	562	411	1672	6336	18·6 ,,
1923	562	435	1256	7047	13·5 ,,

Recent Progress.

The following statements show the progress made by the three Banks prior to their amalgamation into the Imperial Bank :—

In Lakhs of Rupees.

BANK OF BENGAL.

—	Capital.	Reserve.	Govt. deposits.	Other deposits.	Cash.	Investments.	Dividend for year.
31st December.							
1895	200	68	184	377	422	132	10 per cent.
1900	200	103	155	582	243	136	11 ,,
1905	200	140	167	1204	396	181	12 ,,
1906	200	150	160	1505	528	149	12 ,,
1907	200	157	187	1573	460	279	12 ,,
1908	200	165	178	1575	507	349	13 ,,
1909	200	170	168	1760	615	411	14 ,,
1910	200	175	198	1609	514	368	14 ,,
1911	200	180	270	1677	729	321	14 ,,
1912	200	185	234	1711	665	310	14 ,,
1913	200	191	301	1824	840	319	14 ,,
1914	200	200	287	2160	1169	621	16 ,,
1915	200	*204	265	1978	785	793	16 ,,
1916	200	*213	274	2143	772	768	16 ,,
1917	200	†221	448	2934	1482	773	17 ,,
1918	200	‡189	584	2392	894	779	17 ,,
1919	200	‡200	405	3254	997	864	17 ,,
1920	200	‡210	434	3398	1221	910	19½ ,,

* Includes Rs. 68 lakhs as a reserve for depreciation of investments.
† ,, 67 ,, ,, ,, ,,
‡ ,, 25 ,, ,, ,, ,,

BANK OF BOMBAY.

	Capital.	Reserve.	Govt. deposits.	Other deposits.	Cash.	Investments.	Dividend for year.
1895	100	51	76	358	228	105	11 per cent.
1900	100	70	87	432	129	89	11 ,,
1905	100	87	92	676	259	158	12 ,,
1906	100	92	101	832	354	177	12 ,,
1907	100	96	112	821	324	164	13 ,,
1908	100	101	94	832	377	149	13 ,,
1909	100	103	120	1035	415	163	13 ,,
1910	100	105	152	1053	436	149	14 ,,
1911	100	106	107	1104	463	208	14 ,,
1912	100	106	117	1124	315	210	14 ,,
1913	100	106	200	1015	477	232	14 ,,
1914	100	110	183	1081	646	202	15 ,,
1915	100	100	136	1079	423	276	15 ,,
1916	100	90	142	1367	667	312	15 ,,
1917	100	92	235	2817	1398	744	17½ ,,
1918	100	101	177	1749	542	353	18½ ,,
1919	100	110	262	2756	928	315	19½ ,,
1920	100	120	349	2748	876	298	22 ,,

BANK OF MADRAS.

1895	50	16	45	278	144	45	10 per cent.
1900	60	22	35	260	82	67	8 ,,
1905	60	30	41	344	140	71	10 ,,
1906	60	32	54	355	151	81	10 ,,
1907	60	36	35	416	162	84	10 ,,
1908	60	40	52	447	153	84	11 ,,
1909	60	44	49	506	141	79	12 ,,
1910	60	48	72	567	184	85	12 ,,
1911	60	52	59	625	165	104	12 ,,
1912	75	70	75	743	196	113	12 ,,
1913	75	73	86	805	219	117	12 ,,
1914	75	76	91	761	267	134	12 ,,
1915	75	65	86	803	256	184	12 ,,
1916	75	55	104	960	286	161	12 ,,
1917	75	50	87	1020	496	94	12 ,,
1918	75	50	102	954	271	139	12 ,,
1919	75	45	104	1215	436	175	12 ,,
1920	75	45	118	1579	505	211	18 ,,

IMPERIAL BANK.

30th June.							
1921..	547	371	22,20	70,16	34,34	16,52	16 per cent.
1922..	562	411	16,72	63,36	33,95	900	16 ,,
1923..	562	435	12,56	70,47	29,13	925	16 ,,

THE EXCHANGE BANKS.

The Banks carrying on Exchange business in India are merely branch agencies of Banks having their head offices in London, on the Continent, or in the Far East and the United States. Originally their business was confined almost exclusively to the financing of the external trade of India; but in recent years most of them, while continuing to finance this part of India's trade, have also taken an active part in the financing of the internal portion also at the places where their branches are situated.

At one time the Banks carried on their operations in India almost entirely with money borrowed elsewhere, principally in London—the home offices of the Banks attracting deposits for use in India by offering rates of interest much higher than the English Banks were able to quote. Within recent years however it has been discovered that it is possible to attract deposits in India on quite as favourable terms as can be done in London and a very large proportion of the financing done by the Exchange Banks is now carried through by means of money actually borrowed in India. No information is available as to how far *each* Bank has secured deposits in India, but the following statement published by the Director-General of Statistics in India shows how rapidly such deposits have grown in the aggregate within recent years.

TOTAL DEPOSITS OF ALL EXCHANGE BANKS SECURED IN INDIA.

In Lakhs of Rupees.

1895	1030
1900	1050
1901	1183
1902	1370
1903	1614
1904	1632
1905	1704
1906	1808
1907	1917
1908	1951
1909	2027
1910	2479
1911	2816
1912	2953
1913	3103
1914	3014
1915	3354
1916	3803
1917	5337
1918	6185
1919	7435
1920	7480
1921	7519

Exchange Banks' Investments.

Turning now to the question of the investment of the Banks' resources, so far as it concerns India, this to a great extent consists of the purchase of bills drawn against imports and exports to and from India.

The financing of the import trade originated and is carried through however for the most part by Branches outside India, the Indian Branches' share in the business consisting principally in collecting the amount of the bills at maturity and in furnishing their other branches with information as to the means and standing of the drawees of the bills, and it is as regards the export business that the Indian Branches are more immediately concerned. The Exchange Banks have practically a monopoly of the export finance in India and in view of the dimensions of the trade which has to be dealt with the Banks would under ordinary circumstances require to utilise a very large proportion of their resources in carrying through the business. They are able however by a system of rediscount in London to limit the employment of their own resources to a comparatively small figure in relation to the business they actually put through. No definite information can be secured as to the extent to which rediscounting in London is carried on but the following figures appearing in the balance sheets dated 31st December 1922 of the undernoted Banks will give some idea of this.

LIABILITY ON BILLS OF EXCHANGE RE-DISCOUNTED AND STILL CURRENT.

	£
Chartered Bank of India, Australia and China.	7,045,000
Eastern Bank, Ld.	296,000
Hongkong and Shanghai Banking Corporation.	4,682,000
Mercantile Bank of India, Ld. ..	2,675,000
National Bank of India, Ld... ..	5,225,000
P. & O. Banking Corporation, Ld...	14,047,000
	33,970,000

The above figures do not of course relate to re-discounts of Indian bills alone, as the Banks operate in other parts of the world also, but it may safely be inferred that bills drawn in India form a very large proportion of the whole.

The bills against exports are largely drawn at three months' sight and may either be "clean" or be accompanied by the documents relating to the goods in respect of which they are drawn. Most of them are drawn on well known firms at home or against credits opened by Banks or financial houses in England and bearing as they do an Exchange Bank endorsement they are readily taken up by the discount houses and Banks in London. Any bills purchased in India are sent home by the first possible Mail so that presuming they are rediscounted as soon as they reach London the Exchange Banks are able to secure the return of their money in about 16 or 17 days instead of having to wait for three months which would be the case if they were unable to rediscount. It must not be assumed however that all bills are rediscounted as soon as they reach London as at times it suits the Banks to hold up the bills in anticipation of a fall in the London discount rate while on occasions also the Banks prefer to hold the bills on their own account as an investment until maturity.

The Banks place themselves in funds in India for the purpose of purchasing export bills in a variety of ways of which the following are the principal:—

(1) Proceeds of import bills as they mature.

(2) Sale of drafts and telegraphic transfers payable in London and elsewhere out of India.

(3) Purchase of Council Bills and Telegraphic Transfers payable in India from the Secretary of State.

(4) Imports of bar gold and silver bullion.

(5) Imports of sovereigns from London, Egypt or Australia.

The remaining business transacted by the Banks in India is of the usual nature and need not be given in detail.

An interesting event in Indian Banking history is the recent entry in the Banking field here of one of the English "Big Five. This has been brought about by the acquisition of the business of Cox & Co., by Lloyds Bank.

The following is a statement of the position of the various Exchange Banks carrying on business in India as at 31st December 1922 :—

In Thousands of £.

Name.	Capital.	Reserve.	Deposits.	Cash and Investments.
Chartered Bank of India, Australia & China, Ltd.	3000	3800	42408	16674
Comptoir National D'Escompte de Paris	10000	2821	147706	18059
Eastern Bank, Ld.	1000	300	5433	4025
Hongkong & Shanghai Banking Corpn...	2229	7119	55988	20874
Imperial Bank of Persia	650	340	3996	4554
International Banking Corpn.	1000	2100	12145	4578
Lloyds Bank Ltd.	14372	10000	330556	153079
Mercantile Bank of India, Ltd.	1050	1200	13112	5805
National Bank of India, Ld.	2000	2600	32267	13635
National Bank of South Africa, Ltd. ..	2965	....	39551	17008
Yokohama Specie Bank, Ltd.	10000	6500	50676	26080
Sumitomo Bank, Ltd.	5000	2150	34059	9891
Bank of Taiwan, Ltd.	5250	1218	22023	9789
P. & O. Banking Corpn., Ltd.	2594	115	10360	5150
Netherlands Trading Society	6666	3535	27612	11621
Banco Nacional Ultramarino	5333	6711	62054	23037

JOINT STOCK BANKS.

Previous to 1906 there were few Banks of this description operating in India, and such as were then in existence were of comparatively small importance and had their business confined to a very restricted area. The rapid development of this class of Bank, which has been so marked a feature in Banking within recent years, really had its origin in Bombay and set in with the establishment of the Bank of India and the Indian Specie Bank in 1906. After that time there was a perfect stream of new flotations, and although many of the new Companies confined themselves to legitimate banking business, on the other hand a very large number engaged in other businesses in addition and can hardly be properly classed as Banks.

These Banks made very great strides during the first few years of their existence, but it was generally suspected in well informed circles that the business of many of the Banks was of a very speculative and unsafe character and it was a matter of no great surprise to many people when it became known that some of the Banks were in difficulties.

The first important failure to take place was that of the People's Bank of India and the loss of confidence caused by the failure of that Bank resulted in a very large number of other failures, the principal being that of the Indian Specie Bank

Since those events of ten years ago, confidence has been largely restored. But in April 1923 the Alliance Bank of Simla suspended payment and is now in voluntary liquidation. The effect of the failure of this old established Bank might have been disastrous but for the prompt action of the Imperial Bank which dealt with the situation in close association with the Government of India. The Imperial Bank undertook to pay the depositors of the Alliance Bank 50 per cent. of the amounts due to them. A panic was averted and a critical period was passed through with little difficulty

During 1923 the Tata Industrial Bank, which was established in 1918, was merged in the Central Bank of India.

The following shows the position of the better known existing Banks as it appears in the latest available Balance Sheets :—

In Lakhs of Rupees.

Name.	Capital.	Reserve.	Deposits.	Cash and Investments.
Allahabad Bank, Ld., affiliated to P. & O. Banking Corporation, Ltd.	35	35	1093	424
Bank of Baroda, Ld.	29	18	476	247
Bank of India, Ld.	100	72	932	373
The Bank of Morvi, Ld.	55	....	14	4
Bank of Mysore, Ld.	20	9	161	84
Central Bank of India, Ld.	50	30	1416	559
Karachi Bank, Ld.	2	1	28	18
Oudh & Commercial Bank, Ld.	5	2	6	½
Punjab National Bank, Ld.	27	18	514	210
Union Bank of India, Ld.	59	....	70	42

Growth of Joint Stock Banks.

The following figures appearing in the Report of the Director-General of Statistics shew the growth of the Capital, Reserve and Deposits of the principal Joint Stock Banks registered in India:—

In Lakhs of rupees.

	Capital.	*Reserve.*	*Deposits.*
1870 ..	9	1	13
1875 ..	14	2	27
1880 ..	18	3	63
1885 ..	18	5	94
1890 ..	33	17	270
1895 ..	63	31	566
1900 ..	82	45	807
1906 ..	133	56	1155
1907 ..	229	63	1400
1908 ..	239	69	1626
1909 ..	266	87	2049
1910 ..	275	100	2565
1911 ..	285	126	2529
1912 ..	291	134	2725
1913 ..	231	132	2259
1914 ..	251	141	1710
1915 ..	281	156	1787
1916 ..	287	173	2471
1917 ..	303	162	3117
1918 ..	436	165	4059
1919 ..	539	224	5899
1920 ..	837	255	7114
1921 ..	938	300	7689

LONDON OFFICES, AGENTS OR CORRESPONDENTS OF BANKS AND FIRMS (DOING BANKING BUSINESS) IN INDIA.

Name of Bank.	London Office—Agents or Correspondents.	Address.
Imperial Bank of India	London Office	5, Whittington Avenue, E. C. 3.
Other Banks & Kindred Firms.		
Allahabad Bank	National Provincial & Union Bank of England	15, Bishops Gate, E.C. 2.
	P. and O. Banking Corporation.	122, Leaden Hall Street, E. C. 3
Bank of Baroda	Eastern Bank	4, Crosby Sq., E. C. 3.
Bank of Morvi	National Provincial & Union Bank of England	15, Bishops Gate, E. C. 2.
Bank of Mysore	Eastern Bank	4, Crosby Sq., E. C. 3.
Calcutta Industrial Bank ..	Barclays Bank	168, Fenchurch Street, E.C.3.
Central Bank of India	London Joint City & Midland Bank.	5, Threadneedle Street, E.C. 2.
Grindlay & Co.	London Office	54, Parliament Street.
Karnani Industrial Bank ..	Barclays Bank	168, Fenchurch Street, E.C.3.
Punjab National Bank	London Joint City & Midland Bank.	5, Threadneedle Street, E.C. 2.
Simla Banking & Industrial Co.	Grindlay & Co.	54, Parliament Street.
Thomas Cook & Son	London Office	Ludgate Circus, E. C. 4.
Union Bank of India	London County Westminster & Parr's Bank	Bartholomew Lane, E.C. 2.
Exchange Banks.		
Banco Nacional Ultramarino ..	London Office.	27, B Throgmorton Street, E. C. 2
Bank of Taiwan	Ditto	25, Old Broad Street, E.C.2.
Chartered Bank of India, Australia and China	Ditto	38, Bishops Gate, E. C. 2.
Comptoir National d'Escompte de Paris	Ditto	8-13, King William St., E.C. 4.
Eastern Bank	Ditto	4, Crosby Sq., E. C. 3.
Hongkong & Shanghai Banking Corporation	Ditto	9, Grace Church St., E.C.3.
Imperial Bank of Persia	Ditto	25, Abchurch Lane, E. C. 4.
International Banking Corporation	Ditto	36, Bishops Gate, E. C. 2.
Mercantile Bank of India ..	Ditto.	15, Grace Church St., E.C.3.
National Bank of India	Ditto.	26, Bishops Gate, E. C. 2.
National Bank of South Africa ..	London Offices	Circus Place, and London Wall, E.C. 2 25 Cockspar Street, S. W. 1.
Nederlandsche Handel-Maatschappij	National Provincial & Union Bank of England	15, Bishops Gate, E. C. 2.
Nederlandsch Indische Handelsbank	London Joint City & Midland Bank.	5, Threadneedle Street, E. C. 2.
P. & O. Banking Corporation ..	London Office	122, Leaden Hall St., E.C.3.
Sumitomo Bank	Ditto.	67, Bishops Gate, E. C. 2.
Yokohama Specie Bank	Ditto.	7, Bishops Gate, E. C. 2.

INDIAN PRIVATE BANKERS AND SHROFFS.

Indian private Bankers and Shroffs flourished in India long before Joint Stock Banks were ever thought of, and it seems likely that they will continue to thrive for some very considerable time to come. The use of the word "Shroff" is usually associated with a person who charges usurious rates of interest to impecunious people, but this is hardly fair to the people known as "shroffs" in banking circles, as there is no doubt that the latter are of very real service to the business community and of very great assistance to Banks in India. Under present conditions the Banks in India can never hope to be able to get into sufficiently close touch with the affairs of the vast trading community in India to enable them to grant accommodation to more than a few of these traders direct, and it is in his capacity as middleman that the shroff proves of such great service. In this capacity also he brings a very considerable volume of business within the scope of the Presidency Banks Act, and enables the Presidency Banks to give accommodation which, without his assistance, the Banks would not be permitted to give. The shroff's position as an intermediary between the trading community and the Banks usually arises in something after the following manner. A shopkeeper in the bazaar, with limited means of his own, finds that, after using all his own money, he still requires say Rs. 25,000 to stock his shop suitably. He thereupon approaches the shroff, and the latter after very careful inquiries as to the shopkeeper's position grants the accommodation, if he is satisfied that the business is safe. The business, as a rule, is arranged through a hoondee broker, and in the case referred to the latter may probably approach about ten shroffs and secure accommodation from them to the extent of Rs. 2,500 each. A hoondee usually drawn at a currency of about 2 months is almost invariably taken by the shroffs in respect of such advances.

A stage is reached however when the demands on the shroffs are greater than they are able to meet out of their own money, and it is at this point that the assistance of the Banks is called into requisition. The shroffs do this by taking a number of the bills they already hold to the Banks for discount under their endorsement, and the Banks accept such bills freely to an extent determined in each case by the standing of the shroff and the strength of the drawers. The extent to which any one shroff may grant accommodation in the bazaar is therefore dependent on two factors, *viz.*, (1) the limit which he himself may think it advisable to place on his transactions, and (2) the extent to which the Banks are prepared to discount bills bearing his endorsement. The shroffs keep in very close touch with all the traders to whom they grant accommodation, and past experience has shewn that the class of business above referred to is one of the safest the Banks can engage in.

The rates charged by the shroffs are usually based on the rates at which they in turn can discount the bills with the Banks and necessarily vary according to the standing of the borrower and with the season of the year. Generally speaking, however, a charge of two annas per cent. per mensem above the Bank's rate of discount, or 1¼ % is a fair average rate charged in Bombay to a first class borrower. Rates in Calcutta and Madras are on a slightly higher scale due in a great measure to the fact that the competition among the shroffs for business is not so keen in these places as it is in Bombay.

The shroffs who engage in the class of business above described are principally Marwaries and Multanis having their Head Offices for the most part in Bikanir and Shikarpur, respectively, the business elsewhere than at the Head Offices being carried on by "Moonims" who have very wide powers.

It is not known to what extent native bankers and shroffs receive deposits and engage in exchange business throughout India, but there is no doubt that this is done to a very considerable extent.

THE BANK RATE.

Formerly each Presidency Bank fixed its own Bank Rate, and the rates were not uniform. Now the Imperial Bank fixes the rate for the whole of India. The rate fixed represents the rate charged by the Banks on demand loans against Government securities only and advances on other securities or discounts are granted as a rule at a slightly higher rate. Ordinarily such advances or discounts are granted at from one-half to one per cent. over the official rate; but this does not always apply and in the monsoon months, when the Bank rate is sometimes nominal, it often happens that such accommodation is granted at the official rate or even less.

The following statement shows the average Bank Rate since the Imperial Bank was constituted:—

Year.	1st Half-year.	2nd Half-year.	Yearly average.
1921	6·038	5·108	5·573
1922	7·132	4·510	5·821
1923	7·419	....	....

BANKERS' CLEARING HOUSES.

The principal Clearing Houses in India are those of Calcutta, Bombay, Madras, Rangoon, Colombo and Karachi, and of these the first two are by far the most important. The members at these places consist of the Imperial Bank, most of the Exchange Banks and English Banking Agency firms, and a few of the better known of the local Joint Stock Banks. No Bank is entitled to claim to be a member as of right and any application for admission to a Clearing must be proposed and seconded by two members and be subject thereafter to ballot by the existing members.

The duties of settling Bank are undertaken by the Imperial Bank at each of the places mentioned and a representative of each member attends at the office of that Bank on each business day at the time fixed to deliver all cheques he may have negotiated on other members and to receive in exchange all cheques drawn on him negotiated by the latter. After all the cheques have been received and delivered the representative of each Bank advises the settling Bank of the difference between his total receipts and deliveries and the settling Bank thereafter strikes a final balance to satisfy itself that the totals of the debtor balances agrees with the total of the creditor balances. The debtor Banks thereafter arrange to pay the amounts due by them to the settling Bank during the course of the day and the latter in turn arranges to pay on receipt of those amounts the balances due to the creditor Banks. In practice however all the members keep Bank accounts with the settling Bank so that the final balances are settled by cheques and book entries thus doing away with the necessity for cash in any form.

The figures for the Clearing Houses in India above referred to are given below:—

Total amount of Cheques Cleared Annually.

In lakhs of Rupees.

——	Calcutta.	Bombay.	Madras.	Rangoon.	Colombo.	Karachi.	Total.
1901	Not available	6511	1338	Not available	..	178	8027
1902	..	7013	1295	..	..	268	8576
1903	..	8762	1464	..	..	340	10566
1904	..	9492	1536	..	..	365	11393
1905	..	10927	1560	..	..	324	12811
1906	..	10912	1583	..	..	400	12895
1907	22444	12645	1548	..	..	530	37167
1908	21281	12585	1754	..	..	643	36263
1909	19776	14375	1948	..	..	702	36801
1910	22238	13652	2117	4765	..	755	46527
1911	25763	17605	2083	5599	..	762	51612
1912	28831	20831	1152	6043	..	1159	58016
1913	33133	21890	2340	6198	..	1219	64780
1914	28031	17696	2127	4989	..	1315	54158
1915	32266	16462	1887	4069	..	1352	56036
1916	48017	24051	2495	4853	..	1503	80919
1917	47193	33655	2339	4966	..	2028	90181
1918	74397	53362	2528	6927	..	2429	139643
1919	90241	76250	3004	8837	..	2266	180598
1920	153388	126353	7500	10779	..	3120	301140
1921	91672	89788	3847	11875	..	3579	200761
1922	94426	86683	4279	12220	9681	3234	210523

TABLE OF WAGES, INCOME, &c

Showing the amount for one or more days at the rates of 1 to 16 Rupees per Month of 31 Days.

Rupees.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Days.	Rs.a. p.	Rs.a. p.	Rs.a. p.	Rs.a. p.	Rs.a. p.	Rs.a. p.	Rs.a. p.	Rs.a. p.	Rs.a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
1	0 0 6	0 1 0	0 1 6	0 2 0	0 2 6	0 3 1	0 3 7	0 4 1	0 4 7	0 5 1	0 5 8	0 6 2	0 6 9	0 7 3	0 7 9	0 8 3
2	0 1 0	0 2 0	0 3 1	0 4 1	0 5 1	0 6 2	0 7 2	0 8 3	0 9 3	0 10 3	0 11 4	0 12 4	0 13 5	0 14 5	0 15 6	1 0 6
3	0 1 6	0 3 1	0 4 7	0 6 2	0 7 8	0 9 3	0 10 10	0 12 4	0 13 11	0 15 5	1 1 0	1 2 6	1 4 2	1 5 8	1 7 3	1 8 9
4	0 2 0	0 4 1	0 6 2	0 8 3	0 10 3	0 12 4	0 14 5	1 0 6	1 2 6	1 4 7	1 6 9	1 8 9	1 10 10	1 12 11	1 15 0	2 1 0
5	0 2 6	0 5 1	0 7 8	0 10 3	0 12 10	0 15 5	1 2 0	1 4 7	1 7 2	1 9 9	1 12 5	1 14 10	2 1 7	2 4 2	2 6 9	2 9 3
6	0 3 1	0 6 2	0 9 3	0 12 4	0 15 5	1 2 6	1 5 8	1 8 9	1 11 10	1 14 11	2 2 1	2 5 0	2 8 3	2 11 4	2 14 5	3 1 6
7	0 3 7	0 7 2	0 10 10	0 14 5	1 2 0	1 5 8	1 9 3	1 12 10	2 0 6	2 4 1	2 7 9	2 11 3	2 15 0	3 2 7	3 6 2	3 9 9
8	0 4 1	0 8 3	0 12 4	1 0 6	1 4 7	1 8 9	1 12 10	2 1 0	2 5 1	2 9 3	2 13 5	3 1 6	3 5 8	3 9 10	3 13 1	4 2 0
9	0 4 7	0 9 3	0 13 11	1 2 6	1 7 2	1 11 10	2 0 6	2 5 1	2 9 9	2 14 5	3 3 1	3 7 8	3 12 5	4 1 0	4 5 8	4 10 3
10	0 5 1	0 10 3	0 15 5	1 4 7	1 9 9	1 14 11	2 4 1	2 9 3	2 14 5	3 3 7	3 8 9	3 13 10	4 3 1	4 8 3	4 13 5	5 2 6
11	0 5 8	0 11 4	1 1 0	1 6 8	1 12 4	2 2 0	2 7 8	2 13 4	3 3 1	3 9 9	3 14 5	4 4 0	4 9 10	4 15 6	5 5 2	5 10 9
12	0 6 2	0 12 5	1 2 6	1 8 9	1 14 11	2 5 8	2 11 4	3 3 1	3 6 7	3 13 11	4 4 2	4 10 4	5 0 6	5 6 9	5 12 11	6 3 0
13	0 6 8	0 13 5	1 4 1	1 10 10	2 1 2	2 6 8	2 11 3	3 8 3	3 12 4	4 3 1	4 9 10	5 0 6	5 7 3	5 13 11	6 4 8	6 11 4
14	0 7 2	0 14 5	1 5 8	1 12 10	2 4 4	2 11 11	3 4 3	3 12 4	4 3 1	4 9 10	4 15 6	5 6 8	5 13 11	6 5 2	6 12 5	7 3 6
15	0 7 8	0 15 6	1 7 2	1 14 11	2 6 8	2 14 5	3 6 2	3 13 11	4 5 8	4 13 4	5 5 2	5 12 10	6 4 8	6 12 4	7 4 2	7 11 10
16	0 8 3	1 0 6	1 8 9	2 1 0	2 9 3	3 1 6	3 9 9	4 2 0	4 10 3	5 2 6	5 10 5	6 3 0	6 11 4	7 3 7	7 11 10	8 4 0
17	0 8 9	1 1 6	1 10 3	2 2 3	2 10 3	3 3 4	3 11 4	4 3 13	4 11 6	5 3 13	5 11 12	6 4 2	6 12 5	7 4 8	8 1 4	8 9 4
18	0 9 3	1 2 6	1 11 10	2 3 5	2 11 2	3 4 7	3 12 7	4 4 10	4 12 10	5 4 3	5 12 10	6 5 2	6 13 4	7 5 7	8 1 11	8 10 0
19	0 9 9	1 3 7	1 13 4	2 4 1	2 12 1	3 5 4	3 13 4	4 5 8	4 13 11	5 5 5	6 0 6	6 11 10	7 6 3	7 15 6	8 9 3	9 3 1
20	0 10 3	1 4 7	1 14 11	2 6 2	2 13 3	3 6 3	3 14 3	4 6 11	4 15 3	5 6 2	6 1 7	6 13 0	7 7 11	8 1 8	8 9 4	9 9 10
21	0 10 9	1 5 8	2 0 6	2 7 11	2 15 4	3 7 13	3 15 2	4 7 11	4 15 6	5 7 8	6 2 8	6 13 5	7 8 2	8 2 9	8 10 2	9 10 3
22	0 11 4	1 6 8	2 0 2	2 8 12	2 16 5	3 8 14	3 16 5	4 8 13	5 0 6	5 8 9	6 3 9	6 14 2	7 8 12	8 3 1	8 10 13	9 11 2
23	0 11 10	1 7 8	2 1 3	2 9 13	2 17 6	3 9 15	3 17 6	4 9 14	5 1 7	5 9 10	6 4 10	6 15 3	7 9 13	8 4 2	8 11 5	9 12 4
24	0 12 4	1 8 9	2 2 5	2 10 14	2 18 7	3 10 16	3 18 7	4 10 15	5 2 8	5 10 11	6 5 11	6 16 4	7 10 14	8 5 3	8 12 6	9 13 5
25	0 12 10	1 9 9	2 3 8	2 11 15	2 19 8	3 11 17	3 19 8	4 11 16	5 3 9	5 11 12	6 6 12	6 17 5	7 11 15	8 6 4	8 13 7	9 14 6
26	0 13 4	1 10 10	2 4 13	2 13 0	3 1 9	3 13 2	3 21 9	4 13 1	5 4 10	5 12 13	6 7 13	6 18 6	7 12 16	8 7 5	8 14 8	9 15 7
27	0 13 11	1 11 11	2 5 14	2 14 1	3 2 10	3 14 3	3 22 10	4 14 2	5 5 11	5 13 14	6 8 14	6 19 7	7 13 17	8 8 6	8 15 9	9 16 8
28	0 14 5	1 12 12	2 6 15	2 15 2	3 3 11	3 15 4	3 23 11	4 15 3	5 6 12	5 14 15	6 9 15	6 20 8	7 14 18	8 9 7	8 16 10	9 17 9
29	0 14 11	1 13 13	2 7 16	2 16 3	3 4 12	3 16 5	3 24 12	4 16 4	5 7 13	5 15 16	6 10 16	6 21 9	7 15 19	8 10 8	8 17 11	9 18 10
30	0 15 5	1 14 14	2 8 17	2 17 4	3 5 13	3 17 6	3 25 13	4 17 5	5 8 14	5 16 17	6 11 17	6 22 10	7 16 20	8 11 9	8 18 12	9 19 11
31	1 0 0	2 0 0	3 0 0	4 0 0	5 0 0	6 0 0	7 0 0	8 0 0	9 0 0	10 0 0	11 0 0	12 0 0	13 0 0	14 0 0	15 0 0	16 0 0

The Railways.

The history of Indian Railways very closely reflects the financial vicissitudes of the country. Not for some time after the establishment of Railways in England was their construction in India contemplated, and then to test their applicability to Eastern conditions three experimental lines were sanctioned in 1845. These were from Calcutta to Raniganj (120 miles), the East Indian Railway; Bombay to Kalyan (33) miles, Great Indian Peninsula Railway; and Madras to Arkonam (39 miles), Madras Railway. Indian Railway building on a serious scale dates from Lord Dalhousie's great minute of 1853, wherein, after dwelling upon the great social, political and commercial advantages of connecting the chief cities by rail, he suggested a great scheme of trunk lines linking the Presidencies with each other and the inland regions with the principal ports. This reasoning commended itself to the Directors of the East India Company, and it was powerfully reinforced when, during the Mutiny, the barriers imposed on free communication were severely felt. As there was no private capital in India available for railway construction, English Companies, the interest on whose capital was guaranteed by the State, were formed for the purpose. By the end of 1859 contracts had been entered into with eight companies for the construction of 5,000 miles of line, involving a guaranteed capital of £52 millions. These companies were (1) The East Indian; (2) the Great Indian Peninsula; (3) the Madras; (4) the Bombay, Baroda and Central India; (5) the Eastern Bengal; (6) the Indian Branch, now the Oudh and Rohilkund State Railway; (7) the Sind, Punjab and Delhi, now merged in the North Western State Railway; (8) the Great Southern of India, now the South Indian Railway. The scheme laid the foundations of the Indian Railway system as it exists to-day.

Early Disappointments.

The main principle in the formation of these companies was a Government guarantee on their capital, for this was the only condition on which investors would come forward. This guarantee was five per cent. coupled with the free grant of all the land required; in return the companies were required to share the surplus profits with the Government, after the guaranteed interest had been met; the interest charges were calculated at 22*d.* to the rupee; the Railways were to be sold to Government on fixed terms at the close of twenty-five years and the Government were to exercise close control over expenditure and working. The early results were disappointing. Whilst the Railways greatly increased the efficiency of the administration, the mobility of the troops, the trade of the country, and the movement of the population, they failed to make profits sufficient to meet the guaranteed interest. Some critics attributed this to the unnecessarily high standard of construction adopted, and to the engineers' ignorance of local conditions: the result was that by 1869 the deficit on the Railway budget was Rs. 166½ lakhs. Seeking for some more economical method of construction; the Government secured sanction to the building of lines by direct State Agency, and funds were allotted for the purpose, the metre gauge being adopted for cheapness. Funds soon lapsed and the money available had to be diverted to converting the Sind and Punjab lines from metre to broad-gauge for strategic reasons. Government had therefore again to resort to the system of guarantee, and the Indian Midland (1882-85), since absorbed by the Great Indian Peninsula; the Bengal-Nagpur (1883-87), the Southern Maratha (1882), and the Assam-Bengal (1891) were constructed under guarantees, but on easier terms than the first companies. Their total length was over 4,000 miles.

Famine and Frontiers.

In 1879, embarrassed by famine and by the fall of the exchange value of the rupee, Government again endeavoured to enlist unaided private enterprise. Four companies were promoted:—the Nilgiri, the Delhi-Umballa-Kalka, the Bengal Central, and the Bengal North-Western. The first became bankrupt; the second and third received guarantees, and the Tirhut Railway had to be leased to the fourth. A step of even greater importance was taken when Native States were invited to undertake construction in their own territories, and the Nizam's Government guaranteed the interest on 330 miles of line in the State of Hyderabad. This was the first of the large system of Native State Railways. In the first period up to 1870, 4,255 miles were opened, of which all save 45 were on the broad gauge; during the next ten years there were opened 4,239, making the total 8,494 (on the broad gauge 6,562, the metre 1,865, and narrow 67). Then ensued a period of financial ease. It was broken by the fall in exchange and the costly lines built on the frontier. The Penjdeh incident, which brought Great Britain and Russia to the verge of war, necessitated the connection of our outposts at Quetta and Chaman with the main trunk lines. The sections through the desolate Harnai and Bolan Passes were enormously costly; it is said that they might have been ballasted with rupees; the long tunnel under the Khojak Pass added largely to this necessary, but unprofitable outlay.

Rebate Terms Established.

This induced the fourth period—the system of rebates. Instead of a gold subsidy, companies were offered a rebate on the gross earnings of the traffic interchanged with the main line, so that the dividend might rise to four per cent. but the rebate was limited to 20 per cent. of the gross earnings. Under these conditions, there were promoted the Ahmedabad-Prantej, the South Behar, and the Southern Punjab, although only in the case of the first were the terms strictly adhered to. The Barsi Light Railway, on the two feet six inches gauge, entered the field without any guarantee, and with rolling stock designed to illustrate the carrying power of this gauge. The rebate terms being found unattractive in view of the competition of 4 per cent. trustee stocks; they were revised in 1896 to provide for an

absolute guarantee of 3 per cent. with a share of surplus profits, or rebate up to the full extent of the main line's net earnings in supplement of their own net earnings, the total being limited to 3½ per cent. on the capital outlay. Under these terms, a considerable number of feeder line companies was promoted, though in none were the conditions arbitrarily exacted. As these terms did not at first attain their purpose, they were further revised, and in lieu was substituted an increase in the rate of guarantee from 3 to 3½ per cent. and of rebate from 3½ to 5 per cent. with equal division of surplus profits over 5 per cent. in both cases. At last the requirements of the market were met, and there has since been a mild boom in feeder railway construction and the stock of all the sound companies promoted stands at a substantial premium.

Railway Profits Commence.

Meantime a much more important change was in progress. The gradual economic development of the country vastly increased the traffic, both passenger and goods. The falling in of the original contracts allowed Government to renew them on more favourable terms. The development of irrigation in the Punjab and Sind transformed the North-Western State Railway. Owing to the burden of maintaining the unprofitable Frontier lines, this was the Cinderella Railway in India—the scapegoat of the critics who protested against the unwisdom of constructing railways from borrowed capital. But with the completion of the Chenab and Jhelum Canals, the North-Western became one of the great grain lines of the world, choked with traffic at certain seasons of the year and making a large profit for the State. In 1900 the railways for the first time showed a small gain to the State. In succeeding years the net receipts grew rapidly. In the four years ended 1907-08 they averaged close upon £2 millions a year. In the following year there was a relapse. Bad harvests in India, accompanied by the monetary panic caused by the American financial crisis, led to a great falling off in receipts just when working expenses were rising, owing to the general increase in prices. Instead of a profit, there was a deficit of £1,240,000 in the railway accounts for 1908-09. But in the following year there was a reversion to a profit, and the net Railway gain has steadily increased. For the year ended March 1919 this gain amounted to £ 10,858,379. Although in a country like India, where the finances are mainly dependent upon the character of the monsoon, the railway revenue must fluctuate, there is no reason to anticipate a further deficit, but every ground for hoping that the railway profits will fill the vacuum in the Indian revenues caused by the cessation of the opium trade with China.

Contracts Revised.

A very important factor in this changed position is the revision of the original contracts under which the guaranteed lines were constructed. The five per cent. dividend, guaranteed at 22*d.* per rupee, and the half-yearly settlements made these companies a drain on the State at a time when their stock was at a high premium. The first contract to fall in was the East Indian; the great line connecting Calcutta with Delhi and the Northern provinces. When the contract lapsed, the Government exercised their right of purchasing the line, paying the purchase-money in the form of terminable annuities, derived from revenue, carrying with them a sinking fund for the redemption of capital. The railway thus became a State line; but it was released to the Company which actually works it. Under these new conditions the East Indian Company brought to the State in the ten years ended 1909 after meeting all charges, including the payments on account of the terminable annuity by means of which the purchase of the line was made, and interest on all capital outlay subsequent to the date of purchase, a clear profit of nearly ten millions. At the end of seventy-four years from 1880, when the annuity expires, the Government will come into receipt of a clear yearly income of upwards of £2,700,000, equivalent to the creation of a capital of sixty to seventy millions sterling. No other railway shows results quite equal to the East Indian, because, in addition to serving a rich country by an easy line, it possesses its own collieries and enjoys cheap coal. But with allowance for these factors, all the other guaranteed companies which have been acquired under similar conditions as their contracts expired, have proportionately swelled the revenue and assets of the State. It is difficult to estimate the amount which must be added to the capital debt of the Indian railways in order to counterbalance the loss during the period when the revenue did not meet the interest charges. According to one estimate it should be £50 millions. But even if that figure be taken Government have a magnificent asset in their railway property.

Improving Open Lines.

These changes induced a corresponding change in Indian Railway policy. Up to 1900 the great work had been the provision of trunk lines. But with the completion of the Nagda-Muttra line, providing an alternative broad gauge route from Bombay to Delhi through Eastern Rajputana, the trunk system was virtually complete. A direct broad gauge route from Bombay to Sind is needed, but chiefly for strategic purposes. The poor commercial prospects of the line and the opposition of the Rao of Cutch to any through line in his territories, keep this scheme in the background. There does not exist any through rail connection between India and Burma, although several routes have been surveyed; the mountainous character of the region to be traversed, and the easy means of communication with Burma by sea, rob this scheme of any living importance. Further Survey work was undertaken in November 1914, the three routes to be surveyed being the coast route, the Manipur route, and the Hukong valley route. The metre gauge systems of Northern and Southern India must also be connected and Karachi given direct broad-gauge connection with Delhi, a project that is now under investigation. But these works are subordinate to the necessity for bringing the open lines up to their traffic requirements and providing them with feeders. The sudden

increase in the trade of India found the main lines totally unprepared. Costly works were necessary to double lines, improve the equipment, provide new and better yards and terminal facilities and to increase the rolling stock. Consequently the demands on the open lines have altogether overshadowed the provision of new lines. Even then the railway budget was found totally inadequate for the purpose, and a small Committee sat in London, under the chairmanship of Lord Inchcape, to consider ways and means. This Committee found that the amount which could be remuneratively spent on railway construction in India was limited only by the capacity of the money market. They fixed the annual allotment at £12,000,000 a year. Even this reduced sum cannot always be provided.

Government Control.

As the original contracts carried a definite Government guarantee of interest, it was necessary for Government to exercise strong supervision and control over the expenditure during construction, and over management and expenditure after the lines were open for traffic. For these purposes a staff of Consulting Engineers was formed, and a whole system of checks and counterchecks established, leading up to the Railway Branch of the Public Works Department of the Government of India. As traffic developed, the Indian Railways outgrew this dry nursing, and when the original contracts expired, and the interests of Government and the Companies synchronised, it became not only vexatious but unnecessary. Accordingly in 1901-02 Mr. Thomas Robertson was deputed by the Secretary of State to examine the whole question of the organisation and working of the Indian Railways, and he recommended that the existing system should be replaced by a Railway Board, consisting of a Chairman and two members with a Secretary. The Board was formally constituted in March 1905. The Board is outside, but subordinate to the Government of India in which it is represented by the Department of Commerce and Industry. It prepares the railway programme of expenditure and considers the greater questions of policy and economy affecting all the lines. Its administrative duties include the construction of new lines by State agency, the carrying out of new works on open lines, the improvement of railway management with regard both to economy and public convenience, the arrangements for through traffic, the settlement of disputes between lines, the control and promotion of the staff on State lines, and the general supervision over the working and expenditure of the Company's lines. Two minor changes have taken place since the constitution of the Railway Board. In 1908, to meet the complaint that the Board was subjected to excessive control by the Department of Commerce and Industry, the powers of the Chairman were increased and he was given the status of a Secretary to Government with the right of independent access to the Viceroy; he usually sits in the Imperial Legislative Council as the representative of the Railway interest. In 1912 in consequence of complaints of the excessive interference of the Board with the Companies, an informal mission was undertaken by Lord Inchcape to reconcile differences. The constitution of the Board is now undergoing further inquiry, and the development generally favoured in the establishment of a Railway Member of the Viceroy's Executive Council.

Management.

The Railways managed by Companies have Boards of Directors in London. They are represented in India by an Agent, who has under him a Traffic Manager, a Chief Engineer, a Locomotive Superintendent, a Storekeeper, a Police Superintendent, (who is appointed by Government), and an Auditor. The State Railways are similarly organised.

Clearing House.

Proposals have several times been made for the establishment of a Clearing House but the distances are too great. The work which would ordinarily be done by the Clearing House is done by the Audit Office of each Railway.

The Railway Conference.

In order to facilitate the adjustment of domestic questions, the Railway Conference was instituted in 1876. This Conference was consolidated into a permanent body in 1903 under the title of the Indian Railway Conference Association. It is under the direct control of the railways, it elects a President from amongst the members, and it has done much useful work.

The Indian Gauges.

The standard gauge for India is five feet six inches. When construction was started the broad gauge school was strong, and it was thought advisable to have a broad gauge in order to resist the influence of cyclones. But in 1870, when the State system was adopted it was decided to find a more economical gauge, for the open lines had cost £17,000 a mile. After much deliberation, the metre gauge of 3 feet 3⅜ inches was adopted, because at that time the idea of adopting the metric system for India was in the air. The original intention was to make the metre gauge lines provisional; they were to be converted into broad gauge as soon as the traffic justified it: consequently they were built very light. But the traffic expanded with surprising rapidity, and it was found cheaper to improve the carrying power of the metre gauge lines than to convert them to the broad gauge. So, except in the Indus Valley, where the strategic situation demanded an unbroken gauge, the metre gauge lines were improved and they become a permanent feature in the railway system. Now there is a great metre gauge system north of the Ganges connected with the Rajputana lines and Kathiawar. Another System in Southern India embracing the Southern Maratha and the South India Systems. These are not yet connected, but the necessary link from Khandwa by way of the Nizam's Hyderabad-Godaveri Railway, cannot be long delayed. All the Burma lines are on the metre gauge. Since the opening of the Barsi line, illustrating the capacity of the two feet six inch gauge; there has been developed a tendency to construct feeders on this rather than on the metre gauge.

The following statement brings out the more important features of the operation of Indian railways during the year 1922-23 together with similar information for the year 1921-22 :—

		1922-23.	1921-22.
Mileage open on the 31st March—			
1.	Single line	34,453.07	34,201.89
2.	Double line or more	3,164.84	3,063.78
3.	Total route mileage	37,617.91	37,265.67
4.	Total track mileage	50,219.74	49,498.73
Capital and Revenue Earnings and Expenditure—			
5.	Total capital outlay including ferries and suspense on open line .. Rs.	6,69,39,19,000	6,47,97,17,000
6.	Gross earnings .. „	1,05,65,19,000	92,88,67,000
7.	Gross earnings per train mile .. „	6.44	5.85
8.	Working expenses .. „	72,99,49,000	70,79,95,000
9.	Working expenses per train mile .. „	4.45	4.46
10.	Net earnings .. „	32,65,70,000	22,08,72,000
11.	Percentage of working expenses to gross earnings.	69.09	76.22
12.	Percentage of net earnings on total capital outlay.	4.88	3·41
Equipment—			
13.	Locomotives ..	9,740	9,673
14.	Passenger carriages ..	*19,663	*18,934
15.	Other passenger vehicles ..	*5,032	*5,315
16.	Goods stock ..	†209,134	†203,796
Passenger Traffic—			
17.	Number of passengers carried ..	572,695,400	569,084,300
18.	Passenger miles ..	18,923,943,000	19,808,613,000
19.	Average journey .. Miles.	33.04	34.77
20.	Earnings from passengers carried .. Rs.	37,59,22,000	34,29,32,000
21.	Average rate charged per passenger per mile .. Pies.	3.81	3.32
22.	Total coaching earnings .. Rs.	43,82,67,000	40,33,63,000
Goods Traffic—			
23.	Number of tons carried ..	93,704,000	90,142,000
24.	Net ton miles ..	18,324,825,000	17,712,901,000
25.	Average haul ..	195.56	196.50
26.	Earnings from tonnage carried .. Rs.	57,87,55,000	49,05,81,000
27.	Average rate charged for carrying a ton of goods one mile .. Pies.	6.11	5.37
28.	Total goods earnings ..	58,30,04,000	49,52,31,000
Number of employees ..		753,472	739,846

At the close of the year 1922-23 the total capital invested in railways was Rupees 6,69,39,19,000 represented by a property which in terms of route mileage amounted to 37,618 miles of railway. This property brought in to the owners a return of 4.88 per cent. on the

* Excluding departmental vehicles.

† Excluding Railway service wagons.

capital outlay. Similar figures for the railways owned by the State are :—

	Rs.
Total capital outlay ..	5,93,53,35,000
Total route mileage ..	27,005
Roturn on capital outlay	4·54

After providing for interest, annuity and other similar charges the working of the State-owned railways resulted in a net gain of Rs. 1,21,99,000 as compared with a net deficit of Rs. 9,27,80,000 in the previous year. This result was largely due to enhancements of rates and fares brought into force during the year, the average rate charged for carrying a passenger one mile having risen from 3.32 pies to 3.81 pies and the average rate for carrying a ton of goods from 5.37 pies to 6.11 pies.

Railway Board Reorganised.—The machinery by which the Government of India controls the railways of the country has been frequently under review in the past. The basis of the present system was evolved in 1904 as a result of the investigations of Mr. Robertson and the Railway Board was established in the following year. Some of the difficulties involved in the constitution of a controlling authority for the railways of India may be realised from a study of the "Notes on the Relation of the Government to Railways in India" printed as an appendix to the latest Railway Administration report. These notes bring out the great diversity of conditions prevailing which involve the Railway Department in the exercise of the functions of—

(*a*) the directly controlling authority of the three State-worked systems aggregating 9,028 miles,

(*b*) the representative of the predominant owning partner in systems aggregating 22,949 miles,

(*c*) the guarantor of many of the smaller companies, and

(*d*) the statutory authority over all railways in India.

Moreover in all questions relating to railways or extra municipal tramways in which Provincial Governments are concerned, the Railway Department is called upon to watch the interests of the Central Government and is frequently asked to advise the Local Governments. Its duties do not end there. The future development of railways depends largely on the Government of India and the Railway Department is therefore called upon to plan out schemes of development, to investigate and survey new lines and to arrange for financing their construction. The statement of the varied responsibilities of the Government of India in regard to railways might be extended almost indefinitely. It will perhaps be sufficient to mention only the complications that may and do arise owing to the very considerable railway mileage in Indian States. In the exercise of all these functions the Railway Department is a Department of the Government of India, its policy must be in accord with the policy of the Government as a whole and every decision must be made with that consideration in mind. The evolution of a satisfactory authority for the administration of these varied functions has proved extremely difficult and the question was one of those referred to the Railway Committee (1920-21) presided over by Sir William Acworth who expressed the unanimous opinion that material changes were necessary in the constitution of the Railway Board. Amongst their recommendations they advised the early appointment of a Chief Commissioner of Railways whose first duty should be to prepare a definite scheme for the reorganisation of the Railway Department.

The principal constitutional change involved in this appointment is that the Chief Commissioner who takes the place of the President of the Railway Board is solely responsible—under the Government of India—for arriving at decisions on technical matters and for advising the Government of India on matters of railway policy and is not, as was the President, subject to be out-voted and over-ruled by his colleagues on the Board. The detailed re-organisation of the Railway Board in accordance with the Chief Commissioner's proposals was under the consideration of Government at the close of the year, but one of the most important of his recommendations namely the appointment of a Financial Commissioner was considered of particular urgency and the Secretary of State's sanction was therefore obtained to the appointment of Mr. G. G. Sim, C.I.E., I.C.S., who joined the Board on April 1st, 1923. While in the person of the Chief Engineer the Railway Board has always had available the technical advice of a senior Civil Engineer in Mechanical Engineering questions it has had to depend on outside assistance. The disadvantages of this arrangement have become increasingly evident and it was therefore decided with effect from November 1st, 1922, to create the new appointment of Chief Mechanical Engineer with the Railway Board.

State versus Company Management.—The relative advantages and disadvantages of State and Company management of the railways owned by Government which comprise the great bulk of the railway mileage in India have been the subject of discussion in official circles and the public press for many years. In India the question is complicated by the fact that the more important companies have not in recent years been the owners of the railways which they manage and the headquarters of their Boards are in London. The subject was one, perhaps the most important, of the terms of reference of the Acworth Railway Committee. That Committee was, unfortunately, unable to make a unanimous recommendation on this point, their members being equally divided in favour of State management and Company management. They were, however, unanimous in recommending that the present system of management by Boards of Directors in London should not be extended beyond the terms of the existing contracts and this recommendation has met with general public acceptance. During the year 1922-23, the question was again referred to certain Local Governments and public bodies and opinions collected and discussed. The approaching termination of the East Indian Railway contract on 31st December 1924 and of that of the Great Indian Peninsula Railway on 30th June 1925 rendered an early decision on this question imperative. When the question was debated in

the Legislative Assembly in February 1923, the non-official Indian Members were almost unanimously in favour of State management and indeed were able to carry a resolution recommending the placing of the East Indian Railway and the Great Indian Peninsula Railway under State management at the close of their present contracts. The Government of India, however, expressed themselves as being so convinced by the almost universal failure of this method in other countries that they proposed, while accepting the necessity for taking over the management of the East Indian Railway and the Great Indian Peninsula Railway to continue their efforts to devise a satisfactory form of Company domiciled in India to take these railways over eventually on a basis of real Company management. The position at the close of the year under review was that arrangements had been instituted for bringing both these railways under State management at the termination of their contracts.

Re-organisation problems.—The growing complexity of railway administration in India and the evolution of new methods of controlling traffic have given a stimulus to the efforts of various railways to revise their organisations. The general direction in which this re-organisation is being considered is that of consolidation into one department the operating or transportation work of the railway, including the provision of power. The advisability of adopting the divisional system in place of the present rather highly centralised departmental system has also been receiving attention.

On the Great Indian Peninsula Railway, re-organisation has taken place during the year the details of which are as follows—

(*a*) the separation of the commercial and operative duties of the Traffic Department,

(*b*) the separation of the mechanical and running duties of the Locomotive Department,

(*c*) the fusion of the operative duties of the Traffic Department with the running duties of the Locomotive Department.

Under the new organisation there is now—

(1) a Chief Transportation Superintendent in charge of all operating functions,

(2) a Chief Traffic Manager in charge of the commercial side of the railway,

(3) a Chief Mechanical Engineer in charge of the design and construction of engines and of all repairs and renewals of engines carried out in the central workshops.

This organisation is more or less similar to the divisional organisation found on most American Railways with the exception that the Engineering Department still works on a departmental basis.

Revision of Railway statistics.—A Committee consisting of one officer from the Traffic Department and one from the Audit Department of the North Western Railway was appointed in October 1922 to suggest alterations in the existing administrative statistics furnished by railways to the Railway Board and to bring them into line with present up-to date practice. For many years after the first railways were opened, such statistics as were produced were primarily directed towards showing the return on capital invested, although commodity statistics were also prepared to some extent for trade purposes. It was only when comparisons between different railway systems came to be a matter of interest that statistics of actual working were found to be necessary and even then the tabulation and examination of these figures were directed primarily towards ascertaining the ultimate cost of transportation as a marketable commodity. The introduction of scientific methods of railway working in recent years, however, has shown that properly prepared statistics form a most valuable portion of the machinery whereby the railway management is able to improve efficiency in the details of working and effect economies in working costs.

The existing statistics are based on the report of a Committee which sat in 1880 to revise the form of the statistics. Considerable changes have been introduced since then, and certain individual railway administrations have made considerable progress in the introduction of modern railway statistics, but the Acworth Committee which sat in 1921 criticised the figures prepared and used for the purposes of the Railway Board as being out of date and not in conformity with present-day practice.

The main changes recommended by the Committee of 1922 and accepted by the Railway Board are :—

(1) The introduction of monthly statistics in addition to the yearly statistics at present furnished to the Railway Board.

(2) The classification of railways under three classes for statistical purposes.

The former change will ensure the supply of up-to-date information of the working of railways to the Railway Board and will enable railways to compare their own working with that of other railways month by month as is done in England and America. The second change will relieve the smaller railways of the necessity for compiling the detailed statistics which larger railways have to prepare.

The total capital expenditure incurred on all railways, including those under construction, in India up to the end of March 1923 amounted to Rs. 680·23 crores of which Rs. 602·95 crores represented outlay on the State-owned railways inclusive of premia paid in the purchase of Companies' lines, the balance having been provided by Indian States, Companies and District Boards.

The actual liability incurred by Government in regard to State-owned railways may be stated at Rs. 633·49 crores at end of 1922-23.

The outlay during the year 1922-23 was Rs. 22·58 crores, of which Rs. 18·86 crores represented expenditure incurred on State-owned lines.

Capital Programme.—The Government of India has decided definitely to provide the sum of Rs. 150 crores for expenditure on the rehabilitation of railways during the quinquennium commencing with 1922-23. The programme of works on which that sum was based was prepared in 1921 at a time when prices of materials were still high and unstable. Moreover

the position of the general Revenues of India rendered impossible the provision of the full amount, chargeable to revenue expenditure, which the capital programme involved. These conditions coupled with the fact that 1922-23 was the first year of the quinquennium and many of the larger works were therefore in the preliminary stages explain why less than 2-3rds of the annual quota of the Rs. 150 crores were actually expended. The original programme provided for a general increase in facilities which had long been recognised as essential if the railways were to render a reasonably efficient service. While many of these works would certainly give an adequate and immediate return, in the case of others it was found difficult without further examination to justify the proposed expenditure. In March 1923 the report of the Inchcape Committee was received. In dealing with the capital programme that Committee recommended that, except in the case of commitments already entered upon, no further capital expenditure should be incurred on certain lines classed by the Committee as unremunerative, until the whole position has been examined by the Financial Adviser and reviewed by Government. And further that if the full amount of the capital could not be immediately employed on remunerative works on open lines, it would be a matter for consideration whether some portion of it could not with advantage be devoted to the construction of new lines promising an adequate return. In view of these recommendations it was decided that the capital expenditure proposed for 1923-24 must be re-examined and that as regards the years 1924-25 to 1926-27 the whole programme must be recast. The re-examination is now being actively undertaken.

Trade review.—The earnings of railways are dependent on the general prosperity of the country which in the case of India is most easily measured by the agricultural position and the returns of foreign trade. Judged by the usual criteria, conditions were favourable in 1922-23 for an exceptionally good year for the railways. The actual results, however, fell in some respects short of what might have been expected. The following statement shows in detail by commodities the traffic lifted during the last two years:-

Commodity.	1921-22.		1922-23.	
	Tons originating on Home line in Millions.	Rs. in crores.	Tons originating on Home line in Millions.	Rs. in crores.
(1) Coal	13·75	7·30	14·97	8·53
(2) Railway stores	20·01	2·78	20·60	3·00
(3) Wheat and wheat flour	1·53	1·83	1·63	2·37
(4) Rice	3·91	3·37	3·95	3·76
(5) Other grains	3·36	4·21	2·82	3·75
(6) Stone	2·28	0·69	2·10	0·77
(7) Metals	2·18	2·10	2·89	3·29
(8) Salt	1·39	1·61	1·57	2·10
(9) Wood	1·86	1·12	1·82	1·30
(10) Sugar	1·42	2·52	1·33	2·45
(11) Oils and oil seeds	2·07	3·10	3·12	5·31
(12) Cotton and yarn	1·46	4·81	1·60	5·96
(13) Lime, chalk, etc.	1·12	0·40	1·15	0·48
(14) Jute and gunny bags	96	1·29	·98	1·54
(15) Fodder	·98	0·80	·75	0·58
16) Other Commodities	5·25	11·59	8·74	13·11
Total	63·53	49·52	70·11	58·30

It will be noticed that of a total increase of 6½ million tons something over half occurred in various minor commodities not separately detailed and of the rest the only important increases occurred in oils and coal.

Enhancement of rates and fares.—With a view to obtaining an increase in the general revenues a surcharge was imposed on railway traffic in 1917 and enchanced in 1921. The determination of railway rates and fares is a very intricate business requiring careful consideration of local conditions and of the rates which a particular traffic will bear. The complete readjustment of rates and fares involves, therefore, considerable delay and it was largely for this reason that the surcharge remained in force up to the close of 1921-22 when it was replaced by a general enhancement of rates and fares which were brought into force from different dates on the various railway systems. This enhancement differed materially from the surcharge. The control of the Railway Board over rates and fares consists in the imposition of maxima and minima between which individual administrations are generally speaking at liberty to vary their rates. With effect from 1st April 1922, these maxima were increased in the case of passenger fares by from 25 to 33 per cent. and of goods rates by from 15 to 25 per cent. These increases did not necessarily mean that all railways raised all or any of their rates and fares by these percentages. It is not yet possible to say to what extent this revision of rates and fares in replacement of the surcharge has affected

the volume of traffic. The position is being closely watched by all railway administrations from a business point of view with the object of arriving as nearly as possible at such rates and fares as will result in the maximum of net receipts.

Passenger earnings increased by about 9½ per cent. and represented approximately 30 per cent. of the total earnings.

The working expenses—for all railways rose from Rs. 70·80 crores in 1921-22 to Rs. 72·99 crores in 1922-23. The summary below shows the distribution of this expenditure between the various departments:—

Department.	Work.	Amount spent in 1922-23.	Amount spent in 1921-22.
		Rs. in crores.	Rs. in crores.
Engineering	Maintenance of way, works and stations ..	14·54	14·33
Locomotive	Maintenance and renewing of engines and cost of fuel and running stores and other expenses attached to provision of motive power	25·47	25·42
Carriage and Wagon ..	Maintenance and running of carriages and wagons	9·85	9·39
Traffic	Working of trains from a business standpoint, i.e., booking of passengers and goods and arrangements for transport	11·58	11·24
Agency and others ..	Agent's office expenses, Audit, Stores, Medical and Police charges, etc.	5·64	5·16
Ferry	Steam boat expenses	·35	·34
Miscellaneous	Law charges, compensation, contribution to Provident Fund, etc.	5·56	4·92
	Total ..	72·99	70·80

The figures under Engineering, Locomotive and Carriage and Wagon comprise not only the ordinary cost of maintenance and working of the line and equipment in these departments but also the proportion of the expenditure on betterments and replacements which is debited to Revenue. The ordinary expenditure on the ten principal railways shows decreases of Rs. 48 lakhs under Engineering, Rs. 13 lakhs under Locomotive and Rs. 23 lakhs under Carriage and Wagon coupled with increased Revenue expenditure on betterments and replacements of Rs. 69 lakhs under Engineering and Rs. 64 lakhs under Carriage and Wagon. The figures quoted indicate that so far as these departments are concerned, the cost of the ordinary working was somewhat less than in the previous year and that in the Engineering and Carriage and Wagon Departments some advance was made in replacing worn-out and obsolete equipment..

Open Mileage—The total route mileage on March 31st, 1923, was 37,617·91 made up of—

5′ 6″ gauge	18,389·30	miles.
Metre gauge	15,507·65	,,
Narrow gauge	3,720·96	,,

Under the new classification adopted for statistical purposes, this mileage is divided between the three classes of railways as follows:—

Class I	34,332·09 Miles	=91¼	per cent.
Class II	1,710·34 ,,	= 4½	,,
Class III	1,575·48 ,,	= 4¼	,,

Class I includes all the 5′ 6″ gauge mileage 14,014·35 or about 90 per cent. of the metre-gauge and 1928·44 or 52 per cent. of the narrow-gauges.

The State-owned 27,005·27 miles or about 72 per cent. and directly managed 7,678·59 miles or 20 per cent. of the total.

During the year 1922-23 381·69 miles of new lines were opened for public traffic. Of this mileage 192·90 miles belong to Class I, 66·18 miles to Class II and 122·61 miles to Class III railways.

Programme of Future Construction.—The continued fall in the prices of railway materials coupled with the insistence by the Railway Board of more adequate financial justification of the proposals of railway administrations have resulted in making it improbable that the whole of the Rs. 150 crores originally provided for rehabilitation could be economically expended on open line works alone within the period originally intended. This in conjunction with the somewhat more favourable terms on which money can now be obtained has led to a careful reconsideration of the position regarding new railway construction. While no final decision was arrived at, steps have been taken to push on with the investigation of the more important projects. The investigations of railway requirements in Southern India were completed and, as a result of these, a Traffic Survey of the important Villupuram-Trichinopoly Chord line was carried out. Good progress was also made with the Central Indian Coal Fields Survey.

Of the lines dismantled to provide material required in theatres of war, approximately 262 miles of those which it is proposed to restore remained unreplaced at the close of the financial year.

Additions to Equipment.—Statements No. V—Statement of Equipment—and No. VI—Statement of net additions to Equipment—summarise the equipment and the net additions to equipment during 1922-23 on Indian Railways. Statements Nos. 6 and 18 give this information in more detail for individual lines.

It will be seen that on Class I railways there were additions of 49 and 11 Broad and Metre-gauge Locomotives bringing the respective totals up to 6,396 and 2,650.

In the case of passenger vehicles on Class I railways net additions of 141 to the stock of broad gauge vehicles brought the total up to 9,854 and similar figures for the metre gauge were net additions 271 and total 7,450. The following table shows these total figures comprise in seating accommodation under the four classes:

Class I Railways.	Number of seats in passenger carriages.			
	1st.	2nd.	Inter.	Third.
5' 6" ..	21,278	39,345	45,755	536,959
3' 3¾" ..	9,633	12,627	9,650	306,637

The additions to the goods stock of Class I railways were 1,645 covered and 2,440 open broad gauge and 1,171 covered and 86 open metre gauge wagons.

In 1921-22, the net addition to the stock of broad gauge engines was 199 as compared with 49 in 1922-23. The lower figure in the last year is accounted for as follows. In the year 1918-19 it was anticipated that the close of the war would be followed by a great increase in trade activity which, coupled with the arrears into which the supply of engines had of necessity fallen during the war, would result in the need for a very large increase in power. Orders were, therefore, placed for engines to meet this demand, but owing to labour troubles in England deliveries were delayed until 1920-21 and 1921-22. In these two years a total of 442 broad gauge engines were brought into use. During 1921-22 the position was reviewed with the result that, in view of the failure of traffic to come up to expectations, it was necessary to slow down very considerably the process of increasing the stock of engines.

Purchase of Rolling Stock.—The following table shows the value of rolling stock purchased by Indian Railways in 1922-23:—

	Value of imported materials.			Value of indigenous materials.	Total purchases, 1922-23.	Total purchases, 1921-22.
	Purchased direct.	Purchased through Indian firms.	Total imported materials.			
	Rs. crores.	Rs. crores.	Rs. crores.	Rs. crores.	Rs. crores.	Rs. crores.
Locomotive and spare parts	3.53	.08	3.61	.06	3.67	6.14
Coaching stock ..	.50	.02	.52	.14	.66	.56
Goods stock	1.35	.04	1.39	.21	1.60	3.45
Spare parts, coaching and goods stock	3.89	.46	4.35	.16	4.51	5.00
Motor cars	.01	.02	.03	..	.03	.04
Total ..	9.28	.62	9.90	.57	10.47	15.19

Without going into details beyond the scope of this report, it is impossible to connect these figures with the number of locomotives and rolling stock brought into use during the year. The expenditure on locomotives, etc., besides including the cost of spare parts for repairs represents payments for f.o.b. deliveries at foreign ports of engines which at the close of the year may have been still at sea or under erection in India. In the case of wagon contracts too the position is complicated. It has, for example, the practice in the case of wagons purchased in India to make advance payments for raw material when received by the contractors.

In regard to Locomotives and Rolling-stock the year 1922-23 has been marked by a very considerable further fall in prices. The highest prices since the War were recorded in the middle of 1920. In February 1923 orders were placed for standard 0-6-0 Superheated Engines at £4,041 as compared with £11,000 in 1920 and £3,910 before the War. Standard covered goods wagons were ordered at £250 as against £750 in 1920 and £210 before the War.

Financial Results of Working.—The total gross earnings of all railways in India during the year 1922-23 amounted to Rs. 105·65 crores as compared with 92.89 crores in 1921-22. These

figures, however include railways owned by Indian States and companies for which the Govt. of India has no direct financial responsibility.

The figures of receipts and expenditure for railways with which the Government are directly concerned are as follows:—

	Rs.
Traffic receipts from Government Railways	93,22,14,218
Government share of surplus profits from subsidised companies' railways ..	26,40,884
Total ..	93,48,55,102

	Rs.	
Working Expenses	65,96,16,125	
Surplus Profits paid to Companies	69,40,501	
Interest on Government debt	16,34,47,349	
Interest on Capital contributed by Companies	3,35,55,612	
Annuities in purchase of railways	5,13,39,387	
Sinking Funds	47,13,837	
Land and subsidy to Companies	9,43,460	
Miscellaneous	20,99,602	
Total charges ..		92,26,55,873
Net gain ..		1,21,99,229

After meeting all interest and annuity charges Government therefore received a net profit of 1.22 crores as against a loss of 9.27 crores in 1921-22. The figures in the previous administration reports showing the percentage of return on capital at charge were worked out on a total capital representing the total capital expenditure *plus* the premia paid to companies; it did not represent the capital actually raised by the State in order to acquire railways from companies. On the actual Capital so raised the net receipts that is the gross receipts *minus* the working expenses have in recent years given the following return:—

	Per cent.
1913-14	5.01
1918-19	6.77
1919-20	5.62
1920-21	4.23
1921-22	2.47
1922-23	4.37

Up to date figures of the results of working of other countries are not available, but the following table compares the latest available figures of average receipts per ton mile of those countries which have published statistics of working later than 1919:—

	Receipts per ton mile Pies.
United States of America, 1921 ..	6.77
United Kingdom, 1921	25.0
Sweden, 1920	28.0
Norway, 1921	32.0
Switzerland, 1920	36.9
New South Wales, 1922	17.0
South Australia, 1921	21.7
Japan, 1921	6.2
Canada, 1921	7.3
India, 1922-23	6.1

In the case of receipts per passenger mile the figures for United States of America and India are as follows:—

United States of America, 1921. 18.7 pies
India, 1922-23 .. .. .. 3.8 ,,

while in England the present fare charged per mile third class is 18 pies.

From the above it will be seen that railway transportation of freight in India is probably the cheapest in the world and still more so in the case of passenger traffic.

An examination of the latest available figures of operating ratios of foreign countries brings out results not unfavourable to Indian Railways.

	Year.	Operating Ratio.
United States of America	1921	100·47 per cent.
France—State Lines only	1922	115 ,, ,,
All Lines	1922	89 ,, ,,
15 English Railways	1922	80·6 ,, ,,
Tasmanian Railways	1921-22	91·46 ,, ,,
South African Railways	1921-22	82.7 ,, ,,
Argentine Railways	1921-22	74·34 to 85·20 ,, ,,
India	1921-22	76·22 ,, ,,
	1922-23	69·09 ,, ,,

Value of Railway Materials Purchased.—The value of materials purchasd by Indian railways in 1922-23 (excluding coal, coke, stone, bricks, lime, ballast, etc.) showed the considerable decrease of Rs. 7.75 crores as compared with the value of materials purchased in 1921-22.

	Value of imported materials.			Value of indigenous materials.	Total purchases, 1922-23.	Total purchases, 1921-22.
	Purchased direct.	Purchased through Agents in India.	Total imported materials.			
	Rs. crores.	Rs. crores.	Rs. crores.	Rs. crores.	Rs. crores.	Rs. crores.
Rolling stock	9·28	·62	9·90	·57	10·47	15·10
Tools and stores	2·65	3·57	6·22	3·91	10·13	13·34
Permanent-way	2·77	·25	3·03	4·51	7·54	6·54
Electrical plant	·57	·28	·85	·01	·86	·95
Buildings and station materials and fencing ..	·24	·21	·45	·13	·58	·62
Bridge work	·50	·01	·51	0·2	·53	·96
Workshop machinery ..	·40	·11	·51	·01	·52	·66
Engineer's plant	·15	·08	·22	·01	·23	·24
Total ..	16·56	5·13	21·69	9·17	30·86	38·61

Railway Collieries.—Steps were taken during 1922-23 to increase the facilities of existing collieries owned by railways and to enable further properties to be acquired. Estimates have been sanctioned for the electrification of the Kargali Colliery of the Great Indian Peninsula Railway and for the acquisition and equipment of a colliery in the Bokharo-Ramgarh area for the Madras and Southern Mahratta and Bombay, Baroda and Central India Railways. Progress has also been made with the investigation of collieries for several railways in the Karanpura, Bokharo-Ramgarh and Talchir Coalfields. The outturn of the Railway owned collieries during 1922-23 was 1,628,034 tons out of a total of 6,186,370 tons consumed on Railways . The cost of raising compares very favourably with the market price and these collieries afford a regular and assured supply independent of market variations which is a great asset to those Railways which draw the supplies from their own collieries.

Stores Balances.—The value of stores held by the Railways at the close of 1922-23 was over 20 crores of rupees or nearly double the figure for the year 1913-14. The increase is largely due to the rise in prices, but also to certain difficulties connected with the purchase of stores at the close of the war period. The Railway Board took up the question of reducing these balances as far as possible and a close examination was made of their stocks with a view to determine the best means by which reductions could be effected. The large amount rof capital locked up in stores was very unfavouably commented on by the Retrenchment Committee.

In connection with the decision of Government to spend the sum of Rs. 150 crores on capital rehabilitation and improvement during the quinquennium 1922-23—1926-27, there has been a widely expressed and natural desire that as much as possible of this sum should be spent in India. As recommendend by the Legislative Assembly in a resolution adopted on March 2nd, 1922, a Railway Industries Committee was appointed to advise the Government of India as to the steps to be taken to encourage the establishment of the necessary industries and further to advise the Government of India in regard to the revision of Indian Stores Rules.

Number of Staff.—The total number of railway employees at the end of the financial year 1922-23 was 753,472 as compared with 759,846 for the previous year. This is a decrease of 6,374 in number in spite of an increase in mileage of 352.24 miles during the year. Of the 753,472 railway employees, 6,880 were Europeans, 12,201 Anglo-Indians and 734,391 Indians. Similar figures for 1913-14 were Europeans 7,986, Anglo-Indians 10,437 and Indians 614,882 which make up a total of 633,305.

The position regarding the more extended employment of Indians in the higher grades of railway service was reviewed in considerable detail in the Administration Report for 1921-22. Throughout the year 1922-23 the public interest in this question has been maintained, finding voice in the press and by interpellations in the Legislature. The Government of India have throughout maintained the attitude that every reasonable means should be adopted to increase the number of Indians in the higher grades in so far as such increase is consistent with efficiency and economy. In a resolution adopted in the Legislative Assembly in February 1923, particular attention was directed to the case of Traffic Inspectors and Railway administrations have been called upon to make special endeavours to recruit and train Indians with a view to their becoming qualified for advancement to these posts. Railway administrations have also been instructed to bear in mind the policy recom-

mended by the Assembly that the claims of all communities and provinces should be considered in recruiting for posts under their control. On the State-worked railways the figures for 1922-23 show a considerable advance as regards officers, Indians comprising 24 per cent. of the Engineer (officers), 29 per cent. of the Superior Traffic and 15 per cent. of the Superior Stores Establishments as compared with percentages of 20, 25 and 8 respectively for 1921-22.

Fatalities and Injuries.—During 1922-23, there was a decrease of 565 in the total number of persons killed and 139 in the number injured as compared with the figures for 1921-22. The following table shows the numbers killed and injured separately under passengers, railway servants and others for 1922-23 as compared with 1921-22 :—

	Killed.		Injured.	
	1922-23.	1921-22.	1922-23.	1921-22.
A. Passengers—				
(1) Accidents to trains, rolling-stock, permanent-way, etc.	30	181	154	228
(2) Accidents caused by the movement of vehicles used exclusively on railways	364	455	1,170	1,299
(3) Accidents on Railway premises not due to Train accidents or to the movement of vehicles	11	92	44	42
B. Servants—				
(1) Accidents to trains, rolling stock, permanent-way, etc.	30	28	125	134
(2) Accidents caused by the movement of vehicles used exclusively on railways	345	417	671	739
(3) Accidents on Railway premises not due to Train accidents or to the movement of vehicles	47	58	554	457
C. Others—				
(1) Accidents to trains, rolling-stock, permanent-way, etc.	17	18	24	32
(2) Accidents caused by the movement of vehicles used exclusively on railways	1,890	2,040	712	669
(3) Accidents on Railway premises not due to Train accidents or to the movement of vehicles	6	16	15	
Total ..	2,740	3,305	3,469	3,608

In this statement the figures include the number of persons killed and injured by accidents on Railway premises of due to train accidents or to the movements of vehicles whereas in the figures quoted in the 1921-22 report these were excluded. This explains the difference of 184 in the total number of persons shown as killed and of 539 in the total number of persons shown as injured during 1921-22. Out of the total of 2,740 persons killed, 1,852 or over 67 per cent. were trespassers on railway property. Of the remaining 888 persons killed, 405 were passengers and of these only 30 were killed in accidents to trains, rolling stock, permanent way, etc. As approximately 572,000,000 passengers were carried during 1922-23, the chance of any passenger being killed in accident to a train, rolling stock or permanent-way is less than 1 in 19 millions and of being injured less than 1 in 3 millions.

Local advisory Committees.—During 1922-23 the views of railway administrations were obtained, rules were drafted and were discussed at a meeting of the Central Advisory Council in September, and in October orders were issued to the North Western and Oudh and Rohilkhand Railways to take preliminary steps for the formation of Committees and to the Eastern Bengal Railway for the necessary alterations in the constitution of their existing Committee. Company worked railways were, at the same time, requested to take similar action. The Oudh and Rohilkhand Railway Committee met for the first time in February and on several other railways the formation of Committees was completed although no meetings actually took place before the 31st March.

Compensation for loss and damage to goods in transit.—The rise in the amount of these payments has been the subject of most serious consideration by the Railway Board and receive the special attention of the Inchcape Committee. Not only do the claims paid in full represent a very large item of working expenses, but the claims not presented or which are repudiated must involve considerable loss to the trading community. During 1922-23, a considerable advance was made both in the methods of preventing thefts and in the more expeditious settlement of claims. Noteworthy among the former are the introduction of rivetting or other forms of securing wagon doors and schemes for the reorganisation of watch and ward.

Revision of forms of Risk Notes.—Closely related to the subject of the prevention of thefts of railway consignments is the extent of liability imposed on railway administrations in respect to goods in transit. This liability is governed by Chapter VII of the Indian Railways Act IX of 1890 which, *inter alia*, provides for

agreements limiting the responsibility of the administration. In practice such agreements, commonly referred to as risk notes, are executed in consideration of the acceptance by the railways of a rate of freight materially lower than the standard of railway risk rate and in certain other special cases. The degree of immunity afforded to the railways by the existing forms of risk notes is considerable and has been frequently quoted as encouraging carelessness and dishonesty among the railway staff. The commercial community have constantly pressed for a material revision of these forms. The matter was the subject of a debate in the Legislative Assembly in March 1922 and a resolution was adopted as a result of which a Committee was appointed to consider this revision. The recommendations of this Committee, received in September 1922, involved considerable changes in the form of risk notes aiming chiefly at imposing on the railways the onus of proof in cases where losses appeared to be *prima facie* due to misconduct of railway staff. After obtaining the views of Local Governments, Railway Administrations and Chambers of Commerce on these recommendations, the revised forms were referred to the legal advisers of Government and were at the close of the year under review, still under consideration by them.

Conditions of 3rd Class Travel.—The desirability of improving the conditions of travel of third class passengers has been constantly referred to in the press and in the Legislature, and in September 1922, the Legislative Assembly adopted a resolution on the subject. Definite schemes of improvements directed towards the removal of these grievances have been adopted by all railways, but these have, in common with all other railway activities, come under review as the result of the Retrenchment Committee's report. It is anticipated that the discussions by Local Advisory Committees will be of special utility in this matter.

THE CHIEF RAILWAYS IN INDIA.

The Assam-Bengal Railway, which is constructed on the metre gauge, starts from Chittagong and runs through Surma Valley across the North Cachar Hills into Assam. It is worked under a limited guarantee by a company.

Mileage open	1,029·90.
Capital outlay ..	Rs. 18,21,82,000.
Net earnings ..	Rs. 1,62,06,000.
Earnings per cent.	0·90.

Bengal and North-Western.

The Bengal and North-Western Railway was constructed on the metre gauge system by a company without any Government assistance other than free land and was opened to traffic in 1885. The system was begun in 1874 as the Tirhut State Railway. In 1890 this line was leased by Government to the Bengal and North-Western Railway. Since then extensive additions have been made in both sections. It is connected with the Rajputana metre gauge system at Cawnpore and with the Eastern Bengal State Railway at Khatihar and the Oudh and Rohilkhand Railway at Benares.

Mileage open	2,061·98.
Capital outlay ..	Rs. 18,21,82,000.
Net earnings ..	Rs. 1,62,06,000.
Earnings per cent.	8·90.

Bengal-Nagpur.

The Bengal-Nagpur Railway was commenced as a metre gauge from Nagpur to Chhatisgarh in the Central Provinces in 1887. A company was formed under a guarantee which took over the line, converted it to the broad gauge and extended it to Howrah, Cuttack and Katni. In 1901 a part of the East Coast State Railway from Cuttack to Vizagapatam was transferred to it and in the same year sanction was given for an extension to the coal fields and for a connection with the Branch or the East Indian Railway at Hariharpur.

Mileage open ..	2,829·71
Capital outlay ..	Rs. 52,78,86,000.
Net earnings ..	Rs. 1,93,55,000
Earnings per cent. ..	3·57.

Bombay Baroda.

The Bombay, Baroda and Central India Railway is one of the original guaranteed railways. It was commenced from Surat *via* Baroda to Ahmedabad, but was subsequently extended to Bombay. The original contract was terminable in 1880, but the period was extended to 1905; and then renewed under revised conditions. In 1885 the Rajputana Malwa metre gauge system of State railways was leased to the Company and has since been incorporated in it. On the opening of the Nagda-Muttra, giving broad gauge connection through Eastern Rajputana with Delhi the working was entrusted to this Company. On the acquisition of the Company in April 1907 the purchase price was fixed at £11,685,581.

Mileage open	1,299·18.
Capital outlay ..	Rs. 35,63,55,000.
Net earnings ..	Rs. 1,37,58,000.
Earnings per cent.	3·86.

Burma Railways.

The Burma Railway is an isolated line, and although various routes have been surveyed there is little prospect of its being connected with the Railway system of India in the near future. In reply to a question in the Imperial Legislative Council in 1919, Sir Arthur Anderson said:—"During 1914-15 extensive survey operations were carried out to ascertain the best alignment for a railway connection along the coast route between Chitagong and certain stations on the Burma Railways south of Mandalay. A rival route via the Hukong Valley between the northern section of the Assam Bengal Railway and the section of the Burma Railways north of Mandalay was to have been surveyed during the following year but was postponed because of the war. It is now proposed to commence this survey during the coming cold weather, and on its completion, Government will have sufficient information to enable them to decide which route shall be adopted. Thus no arrangements for the construction of a line have yet been made nor has any concession been granted, but it is probable that the line selected will be built at the cost of Government and worked by one or other of the main lines which it will connect." It was commenced as a State Railway and transferred in 1896 to a Company under a guarantee.

Mileage open	1,622·63.
Capital outlay ..	Rs. 22,64,67,000.
Net earnings ..	Rs. 1,06,83,000.
Earnings per cent.	4·72.

Eastern Bengal.

The Eastern Bengal State Railway was promoted under the original form of guarantee and was constructed on the broad gauge. The first portion of the line running to Calcutta over the Ganges was opened in 1862. In 1874 sanction was granted for the construction on the metre gauge of the Northern Bengal State Railway, which ran from the north bank of the Ganges to the foot of the Himalayas on the way to Darjeeling. These two portions of the line were amalgamated in 1884 into one State Railway.

Mileage open	..	1,118 75.
Capital outlay	.. Rs.	13,85,69,000.
Net earnings	.. Rs.	30,33,000.
Earnings per cent.	..	2·19.

The East Indian.

The East Indian Railway is one of the three railways sanctioned for construction as experimental lines under the old form of guarantee. The first section from Howrah to Pandua was opened in 1854 and at the time of the Mutiny ran as far as Raniganj. It gives the only direct access to the port of Calcutta from Northern India and is consequently fed by all the large railway systems connected with it. In 1880 the Government purchased the line, paying the shareholders by annuities, but leased it again to the company to work under a contract which is terminable in 1919.

Mileage open	..	2,773·34.
Capital outlay	.. Rs.	92,86,90,000.
Net earnings	.. Rs.	5,12,34,000.
Earnings per cent.	..	5·52·

Great Indian Peninsula.

The Great Indian Peninsula Railway is the earliest line undertaken in India. It was promoted by a Company under a guarantee of 5 per cent. and the first section from Bombay to Thana was open for traffic in 1853. Sanction was given for the extension of this line *via* Poona to Raichur, where it connects with the Madras Railway, and to Jubbulpore where it meets the East Indian Railway. The feature of the line is the passage of the Western Ghats, these sections being 15¾ miles on the Bhore Ghat and 9¼ miles on the Thul Ghat which rise 1,131 and 972 feet. In 1900, the contract with the Government terminated and under an arrangement with the Indian Midland Railway that line was amalgamated and leased to a Company to work.

Mileage open	..	3,335·38.
Capital outlay	.. Rs.	95,08,53,000.
Net earnings	.. Rs.	1,24,80,000.
Earnings per cent.	..	1·31.

Madras Railway.

The Madras Railway was the third of the original railways constructed as experimental lines under the old form of guarantee. It was projected to run in a north-westerly direction in connection with the Great Indian Peninsula Railway and in a south-westerly direction to Calicut. On the expiry of the contract in 1907 the line was amalgamated with the Southern Mahratta Railway Company, a system on the metre gauge built to meet the famine conditions in the Southern Mahratta Country and released to a large Company called the Madras and Southern Mahratta Railway Company. The mileage is 3,169·01.

Mileage open	..	1,071·94.
Capital outlay	.. Rs.	24,69,24,000.
Net earnings	.. Rs.	1,17,38,000.
Earnings per cent.	..	4·75

The North-Western.

The North-Western State Railway began its existence at the Sind-Punjab-Delhi Railway, which was promoted by a Company under the original form of guarantee and extended to Delhi, Multan and Lahore and from Karachi to Kotri. The interval between Kotri and Multan was unbridged and the railway traffic was exchanged by a ferry service. In 1871-72 sanction was given for the connection of this by the Indus Valley State Railways and at the same time the Punjab Northern State Railway from Lahore towards Peshawar was begun. In 1886 the Sind-Punjab-Delhi Railway was acquired by the State and amalgamated with these two railways under the name of the North-Western State Railway. It is the longest railway in India under one administration.

Mileage open	..	5,682·58.
Capital outlay	.. Rs.	1,15,11,58,000.
Net earnings	.. Rs.	1,11,49,000.
Earnings per cent.	..	0·97.

Oudh and Rohilkhand.

Oudh and Rohilkhand Railway was another of the lines constructed under the original form of guarantee. It began from the north bank of the Ganges running through Rohilkhand as far as Saharanpur where it joins the North-Western State Railway. It was not until 1887 that the bridge over the Ganges was completed and connected with the East Indian Railway. To effect a connection between the metre gauge systems to the North and those to the South of the Ganges, a third rail was laid between Bhuriwal and Cawnpore. The Company's contract expired in 1889 when the Railway was purchased by the State and has since been worked as a State Railway.

Mileage open	..	1,625·43.
Capital outlay	.. Rs.	24,84,09,000.
Net earnings	.. Rs.	91,48,000.
Earnings per cent.	..	3·69.

The South Indian.

The South Indian Railway was one of the original guaranteed railways. It was begun by the Great Southern India Railway Company as a broad gauge line; but was converted after the seventies to the metre gauge. This line has been extended and now serves the whole of the Southern India, south of the south-west line of the Madras Railway. Between Tuticorin and Ceylon a ferry service was formerly maintained, but a new and more direct route to Ceylon *via* Rameshwaram was opened at the beginning of 1914. As the original contract ended in 1907, a new contract was entered upon with the Company on the 1st of January 1908.

Mileage open	..	449·80.
Capital outlay	.. Rs.	7,91,48,000.
Net earnings	.. Rs.	19,98,000.
Earnings per cent.	..	2 52.

The Native States.

The principal Native State Railways are The Nizam's, constructed by a company under a guarantee from the Hyderabad State; the

Kathiawar system of railways, constructed by subscriptions, among the several Chiefs in Kathiawar; the Jodhpur-Bikaner Railway, constructed by the Jodhpur and Bikaner Chiefs; the system of railways in the Punjab, constructed by the Patiala, Jind, Maler Kotla, and Kashmir Chiefs; and the railways in Mysore, constructed by the Mysore State.

INDIA AND CEYLON.

The possibility of connecting India and Ceylon by a railway across the bank of sand extending the whole way from Rameswaram to Mannar has been reported on from time to time, since 1895 various schemes having been suggested.

The South Indian Railway having been extended to Dhanushkodi, the southernmost point of Rameswaram Island, and the Ceylon Government Railway to Talaimannar, on Mannar Island, two points distant from each other about 21 miles across a narrow and shallow strait, the project has again been investigated with the idea of connecting these two terminal stations by a railway constructed on a solid embankment raised on the sand bank known as "Adam's Bridge", to supersede the ferry steamer service which has been established between these two points.

In 1913, a detailed survey was made by the South Indian Railway Company, and a project has now been prepared. This project contemplates the construction of a causeway from Dhanushkodi Point on the Indian side to Talaimannar Point on the Ceylon side, a length of 20.05 miles of which 7.10 will be upon the dry land of the various lands, and 12.86 will be in water. The sections on dry land will consist of low banks of sand pitched with coral and present no difficulty. The section through the sea will be carried on a causeway which it is proposed to construct in the following way. A double row of reinforced concrete piles, pitched at 10 feet centres and having their inner faces 14 feet apart, will first be driven into the sand. These piles will then be braced together longitudinally with light concrete arches and chains and transversely with concrete ties, struts and chains. Behind the piles slabs of reinforced concrete will be slipped into position, the bottom slabs being sunk well into the sand of the sea bottom. Lastly, the space enclosed by the slabs will be filled in with sand.

The top of the concrete work will be carried to six feet above high water level, and the rails will be laid at that level. The sinking of the piles and slabs will be done by means of water jets. This causeway, it is expected, will cause the suspended sand brought up by the currents, to settle on either side bringing about rapid accretion and eventually making one big island of Rameswaram island and Mannar island.

If this method of construction is adopted, it is estimated that the total cost of the causeway and works at the two terminal points, *viz*:—Dhanushkodi and Talaimannar will be approximately 111 lakhs.

Indo-Burma Connection.

The raids of the Emden in the Bay of Bengal in 1914, and the temporary interruption of communications between India and Burma, stimulated the demand for a direct railway connection between India and Burma. Government accepted the position and appointed Mr. Richards, M. Inst. C.E., to be the engineer-in-charge of the surveys to determine the best route for a railway from India to Burma. The coast route appears to be the favoured one. This would start from Chittagong, which is the terminus and head-quarters of the Assam-Bengal Railway and a seaport for the produce of Assam. The route runs southwards through the Chittagong district, a land of fertile rice fields intersected by big rivers and tidal creeks and it crosses the Indo-Burma frontier, 94 miles from the town of Chittagong. For about 160 miles further it chiefly runs through the fertile rice lands of Arrakan and crosses all the big tidal rivers of the Akyab delta. These include the Kalidan river which drains 4,700 miles of country and even at a distance of about 30 miles from its mouth is more than half a mile wide. About 260 miles from Chittagong the railway would run into the region of mangrove swamps which fringe the seacoast north and south of the harbour of Kaukkphu stretching out into the mangrove swamps like ribs from the backbone. Innumerable spurs of the Arrakan Yoma have to be crossed. Yoma is a mountain ridge which extends from Cape Negrais northwards until it loses itself in a mass of tangled hills east of Akyab and Chittagong. At its southern end the height of the ridge is insignificant but it has peaks as high as 4,000 feet before it reaches the altitude of Sandway and further north it rises much higher. It is a formidable obstacle to railway communication between India and Burma. This route is estimated to cost about £7,000,000 and would have to be supplemented by branch lines to Akyab where there is at present a considerable rice traffic and the cost of this would have to be added to the £7,000,000 already referred to.

The other routes examined have been the Hukong Valley route and the Manipur route which were surveyed by the late Mr. R. A. Way many years ago. The Manipur route is estimated to cost about £5,000,000 as it has to cross three main ranges of hills with summit levels of 2,650, 3,600 and 8,900 feet long. Altogether there would be about four miles of tunnelling through the three main ridges and through other hills and more than 100 miles of expensive undulating railway with grades as steep as 1 in 50 and 11,000 feet of aggregate rise and fall. The Hukong valley route seems to be the cheapest one as it is estimated to cost £3,500,000. This line is only about 284 miles long and it presents fewer engineering difficulties than either the Coast or the Manipur route. One hundred and fifty miles of this route lie in open country capable of cultivation though at present it is only very thinly populated. Only one range of hills has to be crossed and this can be negotiated with a summit tunnel of 5,000 feet long at a height of 2,500 feet. There are less than fifty miles of very heavy work and only about 4,500 ft. aggregate of rise and fall.

It is understood that the construction of this line will constitute one of the first changes on the Railway Budget when normal conditions are restored.

Main results of working of all Indian Railways treated as one system.

—	Particulars.		1913-14.	1914-15.	1915-16	1916-17.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
1	Mileage open at close of the year	Miles	34,652	35,285	35,833	36,286	36,334	36,616	36,735	37,029	37,266
2	Total Capital outlay, including ferries and suspense, on open lines (in thousands of rupees) ..	Rs.	4,95,08,64	5,19,22,13	5,29,98,29	5,35,27,97	5,41,79,90	5,49,74,45	5,66,37,77	6,26,80,53	6,47,97,17
3	Gross earnings (in thousands of rupees)	,,	63,58,56	60,42,01	64,66,04	70,68,42	77,36,39	86,28,68	89,15,32	91,98,76	92,88,67
4	Gross earnings per mile open ..	,,	18,350	17,123	18,041	19,480	21,292	23,56	24,269	24,842	24,925
5	Gross earnings per mile open per week	,,	353	329	347	375	409	453	467	478	479
6	Gross earnings per train-mile ..	,,	4·07	6·84	4·07	4·32	4·93	5·44	5·50	5·69	5·80
7	Total working expenses (in thousands of rupees)..	,,	32,93,04	32,74,10	32,91,95	33,40,32	35,36,87	41,80,17	50,65,65	60,29,04	70,79,95
8	Working expenses per mile open .	,,	9,504	92,79	9,185	9,206	9,734	11,416	13,789	16,274	18,998
9	Working expenses per train-mile.	,,	2·11	2·08	2·07	2·04	2·25	2·64	3·13	3·73	4·42
10	Percentage of working expenses to gross earnings ..	Per cent.	51·79	54·19	50·91	47·26	45·72	48·45	56·81	65·54	76 22
11	Net earnings (in thousands of rupees)	Rs.	30,65,52	27,67,91	31,74,09	37,28,10	41,99,52	44,48,51	33,49,67	31,69,72	22 08,72
12	Net earnings per mile open ..	,,	8,846	7,844	8,856	10,274	11,558	12,149	10,480	8,556	5,927
13	Net earnings per train-mile ..	,,	1·96	1·76	2·00	2·28	2·68	2·80	2·37	1·96	1·38
14	Percentage of net earnings on total capital outlay (item 2)..	Per cent.	6·19	5·33	5·99	6·96	7·75	8·09	6·80	5·06	3·41
15	Coaching train-miles (in thousands)	Train-miles	55,972	58,569	56,364	55,719	44,407	44,117	52,092	58,016	60,617

Main results of working of all Indian Railways treated as one system—*contd.*

	Particulars.		1913-14.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
16	Goods train-miles (in thousands)	Train-Miles	57,933	56,359	62,766	68,083	72,528	74,283	70,061	67,010	63,180
17	Mixed train-miles (in thousands)..	,,	34,581	35,514	34,471	34,874	34,618	34,240	34,169	32,254	30,402
18	Total, including miscellaneous train-miles (in thousands) ..	,,	156,276	157,142	159,038	163,604	157,036	158,588	162,161	161,802	160,155
19	Unit-mileage of passengers (in thousands)	Unit-miles	16,614,088	16,022,849	16,528,646	17,846,064	16,204,392	18,039,577	20,614,612	20,985,008	19,794,595
20	Freight ton-mileage of goods (in thousands)	Ton-miles	15,623,235	15,225,957	17,157,841	19,825,901	21,015,126	22,140,806	20,401,656	19,920,888	17,733,009
21	Average miles a ton of goods was carried	Miles	189·11	188·04	207·98	230·08	245·87	242·88	232·33	227·56	205·57
22	Average rate charged for carrying a ton of goods one mile ..	Pies	4·64	4·43	4·34	4·01	4·05	4·26	4·43	4·62	5·36
	Average miles a passenger was carried.										
23	1st class	Miles	112·46	123·88	113·18	126·60	124·99	133·83	139·16	130·55	120·98
24	2nd class	,,	74·58	80·04	93·44	106·88	96·58	90·64	85·63	77·81	74·03
25	Intermediate class..	,,	51·13	49·72	50·20	52·17	71·54	75·37	75·85	71·66	72·08
26	3rd class	,,	37·40	36·59	36·60	37·56	38·91	40·68	40·73	38·73	36·58
27	Season and Vendors' tickets ..	,,	8·71	8·50	8·52	8·46	8·54	8·81	9·18	9·16	8·89
28	Total	,,	36·30	35·52	35·59	36·82	37·66	39·24	39·64	37·52	35·26
	Average rate charged per passenger per mile.										
29	1st class	Pies	14·48	12·79	13·68	13·32	16·58	15·28	16·04	16·72	20·25
30	2nd class	,,	6·60	6·23	5·50	5·07	6·76	7·15	7·59	7·84	9·13
31	Intermediate class..	,,	3·14	3·16	3·16	3·14	4·02	4·17	4·21	4·36	4·45
32	3rd class	,,	2·29	2·29	2·29	2·32	2·78	2·86	2·84	2·92	3·04
33	Season and Vendors' tickets ..	,,	1·42	1·42	1·42	1·43	1·50	1·49	1·54	1·60	1·71
34	Total	,,	2·45	2·44	2·44	2·48	2·99	3·08	3·09	3·18	3·33

§ Mileage of Railway Lines in India open for Traffic at end of year.

Railways.	1913-14.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
STATE LINES.									
Aden	..	..	..	..	..	..	29	29	29
Agra Delhi Chord*	126	126	126	126	126	126	126	126	126
Alnavar Dandeli (Provincial)	..	..	..	..	..	19	19	19	19
Assam-Bengal*	812	848	808	823	869	869	869	869	869
Bangalore-Harihar	..	..	..	..	..	..	210†	210	210
Baran-Kotah*	40	40	40	40	40	40	40	40	40
Bengal-Nagpur*	1,877	1,877	1,889	1,889	1,889	1,889	1,889	1,891	1,902
Bezwada Extension*	21	21	21	21	21	21	21	21	21
Bhopal-Itarsi* (British Section) ..	12	12	12	12	13	13	13	(*b*) 57	(*b*) 57
Bombay, Baroda & Central India* ..	2,812	2,812	2,818	2,818	2,818	2,819	2,819	2,819	2,819
Broach-Jambusar*	..	30	30	30	30	30	30	30	30
Burma*	1,529	1,529	1,529	1,529	1,529	1,535	1,536	1,536	1,536
Cawnpore-Banda*	33	76	76	76	76	76	76	76	76
Cawnpore-Burhwal	80	80	80	80	80	80	80	80	80
Dhone-Kurnool*	32	32	32	32	32	32	32	32	32
East Indian*	2,424	2,446	2,448	2,495	2,464	2,459	2,461	2,459	2,462
Eastern Bengal	1,581	1,639	1,639	1,628	1,582	1,581	1,633	1,632	1,630
Gondia-Chanda*	216	216	217	217	217	217	217	217	217
Great Indian Peninsula*	2,484	2,500	2,554	2,552	2,553	2,562	2,562	2,562	2,562
Jakhal-Hissar*	51	50	50	..	..	..	..	..	..
Jodhpur-Hyderabad*(British Section) ..	124	124	124	124	124	124	124	124	124
Jorhat Provincial State	32	32	32	32	32	32	32	32	32
Jubbulpore-Gondia* Extension	311	312	312	312	312	312	312	312	312
Kalka-Simla	60	60	60	60	60	60	60	60	60
Khanai-Hindubagh	..	..	..	..	..	..	..	..	..
Kohat-Thal	62	62	62	62	62	62	62	62	62
Lucknow-Bareilly*	298	313	313	313	312	312	312	316	316
Madras and Southern Mahratta* ..	2,553	2,552	2,568	2,567	2,550	2,550	2,550	2,566	2,559
Morappur-Hosur*	74	74	74	73	73	73	73	73	73
Mysore Section of Madras & Southern Mahratta Railway.*	296	296	296	296	296	296	(*a*)	(*a*)	(*a*)
Nagpur Chhindwara*	98	94	94	97	97	97	97	97	97

* Worked by a Company.

† Formerly worked as part of the Mysore Section of M. & S. M. Railway.

(*a*) Split up into two railways, *viz.*, (1) Bangalore-Harihar Railway, and (2) Mysore-Bangalore Railway, figures of which have been shown separately.

(*b*) Includes figures for Indian State Section.

§ These are the latest figures published in 1923.

‡ Mileage of Railway Lines in India open for Traffic at end o year—*contd.*

Railways.	1913-14.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22
STATE LINES—*contd.*									
Nilgiri*	29	29	29	29	29	29	29	29	29
North-Western	3,710	3,709	3,758	3,761	3,690	3,805	3,785	3,984	4,084
Nowshera-Durgai	40	40	40	40	40	40	40	40	†
Oudh and Rohilkhand	1,525	1,526	1,527	1,527	1,512	1,512	1,512	1,497	1,513
Palanpur-Deesa*	17	17	17	17	17	17	17	17	17
Purulia-Ranchi*	115	115	115	115	115	115	115	115	115
Raipur-Dhamtari*	57	57	57	57	57	57	57	57	57
South Indian*	1,326	1,327	1,327	1,327	1,327	1,327	1,327	1,327	1,327
Southern Shan States	23	70	70	70	70	70	70	87	87
Tinnevelly-Quilon* (Travancore) British section	50	50	50	50	50	50	50	50	50
Tirhoot*	788	788	826	812	804	819	815	815	814
Tirupattur-Krishnagiri*	25	25	25	25	25	25	25	25	25
Trans Indus (Kalabagh-Bannu)*	89	89	89	135	135	135	135	135	162
Tumsar-Tirodi Light*	..	..	..	51	51	46	46	46	46
ASSISTED COMPANIES									
Ahmedabad-Dholka	34	34	34	34	34	34	34	34	34
Ahmedabad-Parantij	89	89	89	89	89	89	89	89	89
Ahmadpur-Katwa	..	..	..	..	32	32	32	32	32
Amritsar-Patti	54	54	54	54	54	54	54	54	54
Arakan Light	..	..	..	..	..	18	18	18	18
Arrah-Sasaram Light	60	65	65	65	65	65	65	65	65
Bankura-Damoodar River	..	..	..	43	60	60	60	60	60
Baraset-Basirhat Light	51	52	52	52	52	52	52	52	52
Barsi Light	116	116	117	117	117	117	117	117	117
Bengal and North Western	1,240	1,239	1,241	1,241	1,241	1,243	1,249	1,248	1,248
Bengal Dooars	153	153	153	153	153	158	158	158	158
Bezwada-Masulipatam*	52	52	52	52	52	52	52	52	52
Bowringpet-Kolar	11	(*a*)	(*a*)	(*a*)	(*a*)	(*a*)	(*a*)	(*a*)	(*a*)
Bukhtiarpur-Behar Light	33	33	33	33	33	33	33	33	33

* Worked by a Company.
‡ These are the latest figures published in 1923.

† Amalgamated with North Western Railway.
(*a*) Shown under Indian State lines against Kolar District Railway

‡ Mileage of Railway Lines in India open for Traffic at end of year—*contd.*

Railways.	1913-14.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
ASSISTED COMPANIES—*contd.*									
Burdwan Katwa	..	..	33	33	33	33	32	32	32
Champaner-Shivrajpur Pani Light	20	26	25	32	32	32	32	33	33
Chaparmukh-Silghat	..	..	..	..	..	..	51	51	51
Darjeeling-Himalayan	51	51	51	51	51	51	51	51	51
,, ,, Extension	14	54	95	95	95	95	95	95	95
Dasghara-Jamalpurgunj	..	..	..	..	8	8	8	8	8
Delhi-Umballa-Kalka	192	192	192	206	206	206	206	206	206
Dehri-Rohtas Light	..	24	24	24	24	24	24	24	24
Dhond-Baramati*	..	27	27	27	27	27	27	27	27
Dibru-Sadiya	86	86	86	86	86	86	86	86	86
Ellichpur-Yeotmal*	48	67	117	118	118	118	118	118	118
Futwah-Islampur	..	..	..	..	..	..	..	..	27
Godhra-Lunavada	24	25	25	25	25	25	25	25	25
Hardwar-Dehra	32	32	32	32	32	32	32	32	32
Howrah-Amta Light	44	44	44	44	44	44	44	44	44
Howrah-Sheakhala Light	20	20	20	20	20	20	20	20	20
Jacobabad-Kashmor*	..	77	77	77	77	77	77	77	77
Jessore-Jhenidah	37	37	37	37	37	37	37	37	37
Jullundar Doab	103	133	130	130	130	130	130	130	130
Jullundur-Mukerian *	..	45	45	45	45	45	45	45	45
Kalighat Falta	..	..	..	..	25	25	25	26	26
Khulna Bagerhat	..	..	..	..	..	20	20	20	20
Larkana-Jacobabad	..	..	..	..	..	..	..	..	32
Mandra-Bhaun *	..	..	46	46	46	46	46	46	46
Matheran Light *	13	13	13	13	13	13	13	13	13
Mayurbhanj(*c*)	..	..	..	..	..	..	..	71	71
Mirpur Khas-Jhudo	50	50	50	50	50	50	50	50	50
Mirpur Khas-Khadro *	50	50	50	50	50	50	50	50	50
Mymensing-Bhairab Bazar	..	..	..	31	88	101	101	101	101
Mymensingh-Jamalpur-Jagannathganj	55	55	54	56	56	56	(*b*)	(*b*)	(*b*)
Nadiad-Kapadvanj	28	28	28	28	28	28	28	30	30
Pachora-Jamner	..	..	..	..	..	35	35	35	35
Panposh-Raipura	..	..	..	..	..	..	14	14	14
Phagwara-Rahon *	..	..	26	26	45	45	45	45	45

* Worked by a Company.
‡ These are the latest figures published in 1923.
(*a*) Temporarily dismantled.
(*b*) Incorporated with the Eastern Bengal Railway from 1st January 1920.
(*c*) Shown under "Indian State Lines" upto 1919-20.

‡ Mileage of Railway Lines in India open for Traffic at end of year—*contd.*

Railways.	1913-14	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
ASSISTED COMPANIES—*concld.*									
Podanur Pollachi *	..	..	25	25	25	25	25	25	25
Powayen Light	40	40	40	39	39	(*a*)	(*a*)	(*a*)	..
Pulgaon-Arvi	..	..	..	..	22	22	22	22	22
Rohilkhand and Kumaon	256	256	259	259	259	259	259	259	259
Sara-Sirajganj *	..	..	22	53	53	53	53	53	53
Shahdara (Delhi) Saharanpur Light	93	93	93	93	93	93	93	93	93
Sialkot Narowal *	..	..	38	38	38	38	38	38	38
South Behar	79	79	79	79	79	79	79	79	79
Southern Punjab	576	576	576	577	578	578	578	578	577
Suramangalam-Salem	..	..	..	..	4	4	4	4	4
Sutlej Valley	208	208	208	208	..	..	..	..	..
Tanjore District Board*	103	112	112	112	112	112	135	135	135
Tapti Valley	155	155	155	156	156	156	156	156	156
Tarkessur	22	(*a*)	(*a*)	(*a*)	(*a*)	(*a*)	(*a*)	(*a*)	(*a*)
Tenali-Repalli *	..	..	..	21	21	21	21	21	21
Tezpur-Balipara	20	20	20	20	20	20	20	20	20
UNASSISTED COMPANIES.									
Ambaji-Taranga Light	..	..	..	..	..	..	21	..	..
Bengal Provincial	33	33	33	33	33	33	33	33	33
Dehri-Rohtas Light	24	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)	(*b*)
Jagadhri Light	3	3	3	3	3	3	3	3	3
Kulasekarpatnam Light	..	..	18	18	18	32	32	32	18
Ledo and Tikak Margherita Colliery	6	6	6	6	6	6	5	6	6
Madaya Light	8	8	8	8	16	16	16	16	16
Trivellore Light	..	..	..	..	..	..	..	..	2
Total	74	50	68	68	76	90	110	90	78
INDIAN STATE LINES.									
Bangalore-Chik Ballapur Light	..	15	29	35	39	39	39	39	39
Bhavnagar	206	206	206	206	206	206	206	217	240
Bhopal-Itarsi* (Indian State Section)	45	45	45	44	45	45	45	(*c*)	(*c*)

* Worked by a Company.
‡ These are the latest figures published in 1923.
(*a*) Incorporated with the East Indian Railway on the 1st January 1915.
(*b*) Shown under Assisted Companies.
(*c*) Figures included under British Section.

‡ Mileage of Railway Lines in India open for Traffic at end of year—*contd.*

Railways.	1912.	1913-14.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22
INDIAN STATE LINES—*contd.*										
Bhopal-Ujjain*	113	113	113	113	113	113	113	113	113	113
Bikaner	..	470	470	498	498	498	498	498	498	498
Bilimora-Kalamba *	..	..	26	26	26	35	35	35	35	35
Bina-Goona-Baran*	146	146	146	146	146	147	147	147	147	147
Birur-Shimoga*	38	38	38	38	38	38	38	38	38	38
Chickjapur-Chitaldrug	..	..	..	..	..	..	..	..	..	21
Bodeli-Chota Udaipur	..	..	..	..	..	23	23	23	23	23
Cooch-Behar	33	33	33	33	33	33	33	33	33	33
Cutch	37	37	37	37	37	37	37	37	37	37
Dholpur-Bari	20	28	37	37	37	36	36	36	36	36
Dhrangadra	21	21	40	43	43	43	43	40	40	40
Gaekwar's Dabhoi*	118	142	142	147	147	154	187	187	187	199
Gaekwar's Mehsana*	138	138	153	153	163	163	163	163	231	231
Gondal-Porbandar	148	148	148	148	148	148	148	(*b*) 106	(*b*) 106	(*b*) 106
Gwalior Light*	250	250	250	250	250	250	250	250	250	250
Hindupur*	51	51	51	51	51	51	51	51	51	51
Hingoli Branch*	50	50	50	50	50	50	50	50	50	50
Hyderabad-Godavari Valley*	391	391	391	391	391	391	391	391	391	391
Jaipur*	73	73	73	73	107	108	122	122	122	122
Jammu and Kashmir	16	16	16	16	16	16	16	16	16	16
Jamnagar	54	54	54	54	54	54	54	54	54	54
Jetalsar-Rajkot	46	46	46	46	46	46	46	46	46	46
Jind–Panipat *	..	..	..	..	26	26	26	26	26	26
Jodhpur	(*a*)996	587	604	609	609	609	609	609	609	609
Junagad	101	114	114	121	121	121	136	140	141	141
Khanpur-Chachran*	22	22	22	22	22	22	22	22	22	22
Khijadiya-Dhari *	..	26	26	26	37	37	37	37	37	37
Kolar District	..	..	11	41	64	64	64	64	64	64
Kolar Gold Fields*	10	10	10	10	10	10	10	10	10	10
Kolhapur*	29	29	29	29	29	29	29	29	29	29
Kosamba-Zankhvav	26	26	26	26	26	26	26	26	26	26
Ludhiana-Dhuri-Jakhal	79	79	79	79	79	79	79	79	79	79

* Worked by a Company

‡ These are the latest figures published in 1923.

† Formerly worked as part of the Bhavnagar-Gondal-Junagad-Porbandar Railway.

(*a*) Including figures for Bikaner Railway.

(*b*) Gondal only—Figures of Porbandar State Railway have been shown separately.

† Mileage of Railway Lines in India open for Traffic at end of year—*concld.*

Railways.	1912.	1913-14.	1914-15.	1915-16.	1916-17.	1917-18.	1918-19.	1919-20.	1920-21.	1921-22.
INDIAN STATE LINES—*concld.*										
Mohari-Barauli	..	..	..	..	15	15	15	15	15	15
Morvi	93	93	93	93	93	93	93	93	93	93
Mourbhanj*	32	32	32	32	32	32	32	32	(*b*)	(*b*)
Mysore-Arsikere	..	..	..	..	..	103	103	103	204(*a*)	204 (*a*)
Mysore-Bangalore	..	..	..	..	..	..	..	‡ 86		
Mysore-Nanjangud*	16	16	16	16	16	16	16	16		
Mysore Light	..	..	12	12	12	26	26	27	27 (*c*)	27
Nagda-Ujjain*	34	34	34	34	33	33	33	33	33	33
Nizam's Guaranteed*	330	330	330	330	330	330	330	330	330	330
Parlakimedi Light*	25	25	25	25	25	25	25	25	25	25
Petlad-Cambay*	34	34	34	34	34	34	34	34	34	34
Petlad-Vaso	..	..	16	19	19	19	19	19	19	19
Pipar Bilara Light	25	25	25	25	25	25	25	25	25	25
Porbandar-State	..	..	..	..	..	..	..	41	41	41
Rajpipla*	37	37	37	37	37	39	39	39	39	39
Rajpura-Bhatinda	108	108	108	108	108	108	108	108	108	108
Sangli*	5	5	5	5	5	5	5	5	5	5
Secunderabad-Gadwal *	..	..	..	46	103	103	103	104	104	109
Shoranur-Cochin*	65	65	65	65	65	65	65	65	65	65
Tinnevelly-Quilon* (Travancore) Indian Section	58	58	58	58	58	96	96	96	96	96
Udaipur-Chitorgarh	67	67	67	67	67	67	67	67	67	67
Vijapur-Kalol-Kadi*	46	46	46	46	46	46	46	46	(*d*)	..
Total	4,198	4,364	4,504	4,599	4,825	5,027	5,089	5,177	5,154	5,194
FOREIGN LINES.										
Karaikkal-Peralam*	15	15	15	15	15	15	15	15	15	15
Pondicherry*	8	8	8	8	8	8	8	8	8	8
West of India Portuguese*	51	51	51	51	51	51	51	51	51	51
Total	74	74	74	74	74	74	74	74	74	74
Grand Total	33,484	34,656	35,285	35,833	36,286	36,334	36,616	36,735	37,029	37,266

* Worked by a Company.

† These are the latest figures published in 1923.

‡ Formerly worked as part of the Mysore Section of M & S. M. Railway.

(*a*) Now called Mysore Railway.

(*b*) Shown under "Assisted Companies"

(*c*) Formerly called Tarikeri Narasimharajapura up to 1919-20.

(*d*) Included in Gaekwar's Mehsana Railway.

India has been the home of the cotton trade from the earliest times. Its cotton, known as white wool, was well known to the ancients and its cloth was familiar to the West in the days of the overland route. The name Calico comes from the fine woven goods of Calicut, and the products of the Dacca handlooms are still remarkable as the finest muslins human skill can produce.

Indian Cotton.

The exports of Indian cotton began to assume importance with the opening of the sea route. They received an immemense stimulus during the American Civil War, when the close blockade of the Confederate ports produced a cotton famine in Lancashire, and threw the English spinners back on India for their supply of raw material. When the war broke out the shipments of Indian cotton were 528,000 bales, but during the last year of the war they averaged 973,000 bales. Most of this cotton was sold at an enormously inflated price, and induced a flow of wealth into Bombay, the great centre of the trade, for which there was no outlet. The consequence was an unprecedented outburst of speculation known as the "Share Mania," and when the surrender of Lee re-opened the Southern Ports widespread ruin followed. It is estimated that the surplus wealth brought into the country by the American Civil War aggregated £92 millions. Since then the cultivation of Indian cotton, although interrupted by famine, has steadily increased. For the last season for which returns are available 1922-23 the total area in all the territories reported on was computed at 21,154,000 acres which is 2,703,000 acres or 15 per cent. above the revised figures of last year. The total estimated outturn was 5,196,000 bales of 400 lbs. which is 16 per cent. larger than the revised estimates of last year. To this figure may be added some 3,000 bales estimated as the production in Indian States in Bihar and Orissa which make no return.

Bombay, the Central Provinces and Hyderabad are the chief producing centres. The following table gives the rough distribution of the outturn. The figures are the estimated figures for the past season, and are not exact, but they indicate the distribution of the crop :—

Provinces and States.	1922-23. (Provisional estimates.) Area. (1,000 acres).	Yield. (1,000 bales.)
Bombay (*a*)	5,023	1,132
Central Provinces and Berar	4,703	1,200
Madras (*a*)	2,400	443
Punjab (*a*)	1,417	409
United Provinces (*a*)	659	178
Burma	272	45
Sind (*a*)	259	103
Bihar and Orissa (*b*)	80	15
Bengal (*a*)	72	17
North-West Frontier Province	15	3
Ajmer-Merwara	36	15
Assam	40	13
Delhi	2	1
Hyderabad	3,813	1,116
Central India	800	216
Baroda	585	116
Gwalior	523	74
Rajputana	302	76
Mysore	83	24
Total	21,154	5,196

The distribution of the export trade is indicated in the appended table.

Exports of Cotton.—A portion of the Indian crops of the season 1921-22 and a portion of the crop of the season 1922-23 came into the statistical consideration in the exports during the year 1922-23. The exports amounted to 12 million cwts. valued at Rs. 71 crores, against 10½ million cwts. valued at Rs. 54 crores in 1921-22. This represents 45 per cent. of the total value of raw materials exported from India and 24 per cent. of the total exports. The exports showed an increase of 12 per cent. in quantity and 32 per cent. in value. The average declared value per cwt. rose from Rs. 50½ to 16 or by 59 per cent. whereas the total increase was Rs. 17 crores. The principal purchasers of Indian cotton are Japan and China which together took 63 per cent. of the total export during 1922-23. Besides these, Germany, Belgium, the United Kingdom, Italy, and France who are large consumers of Indian raw cotton, had 8, 7, 6, 7, and 4 per cent., respectively.

—	Exports of Raw Cotton. 1920-21. Cwts.	1921-22 Cwts.	1922-23. Cwts.
United Kingdom	342,880	127,800	682,620
Germany	719,180	838,360	939,600
Holland	42,200	49,160	34,340
Belgium	867,560	708,220	900,220
France	137,340	202,440	451,140
Spain	275,500	107,740	234,520
Italy	760,320	551,100	861,880
Austria	121,960	119,560	151,900
Ceylon	13,700	9,080	18,520
Indo-China	32,400	105,500	71,060
China	684,940	1,555,180	1,776,060
Japan	3,358,620	6,286,660	5,789,300
United States of America	33,500	32,780	77,960
Other Countries	28,600	11,580	18,320
Total cwt.	7,411,700	10,676,040	12,007,940
Total =Bales †	2,073,856	2,981,361	3,362,601

(*a*) Includes Indian States. † Bales of 400 lbs. each.
(*b*) Excluding Indian States for which the yield is roughly estimated at 3,000 bales.

Bombay is the great centre of the cotton trade. The **principal varieties** are Dholleras, Broach, Oomras (from the Berars), Dharwar and Coomptas. Broach is the best cotton grown in Western India. Hinganghat cotton, from the Central Provinces, has a good reputation. Bengals is the name given to the cotton of the Gangetic valley, and generally to the cottons of Northern India. The Madras cottons are known as Westerns, Coconadas, Coimbatores and Tinnevellys. The best of these is Tinnevelly. Cambodia cotton has been grown with success in Southern India, but it shows a tendency to revert. The high prices of cotton realised of recent years have given a great impetus to cultivation. Government have also been active in improving the class of cotton produced, by seed selection, hybridization and the importation of exotic cottons. Although these measures have met with a considerable measure of success, they have not proceeded far enough to leaven the whole outturn, which still consists for the most part of a short-staple early maturing variety, suitable to soils where the rainy season is brief.

Reference has been made to the popularity of the Indian handloom cloths in the earliest days of which we have record. This trade grew so large that it excited alarm in England, and it was killed by a series of enactments, commencing in 1701, prohibiting the use or sale of Indian calicoes in England. The invention of the spinning jenny and the power loom and their development in England converted India from an exporting into an importing country, and made her dependent on the United Kingdom for the bulk of her piece-goods. The first attempt to establish a cotton mill in India was in 1838, but the foundations of the industry were really laid by the opening of the first mill in Bombay in 1856. Thereafter, with occasional set backs from famine, plague and other causes, its progress was rapid.

The following statement shows the quantity (in pounds) of yarn of all counts spun in all India for the twelve months, April to March, in each of the past three years:—

	1920-21.	1921-22.	1922-23.
BRITISH INDIA.			
Bombay	469,944,960	492,634,404	497,351,824
Madras	41,240,677	44,387,583	53,425,405
Bengal	33,329,116	33,626,236	28,937,591
United Provinces	37,060,104	40,476,743	41,469,903
Ajmer-Merwara	2,030,944	2,543,906	2,351,619
Punjab	2,780,078	3,564,347	2,717,976
Delhi	3,936,997	2,959,655	3,804,217
Central Provinces and Berar	31,269,565	32,817,846	31,877,488
TOTAL ..	621,655,441	653,010,720	661,936,023
FOREIGN TERRITORY.			
Indian States of Indore, Mysore, Baroda, Nandgaon, Bhavnagar, Hyderabad, Wadhwan, Gwalior (Ujjain) and Pondicherry (*a*)..	38,347,156	40,452,279	43,937,420
GRAND TOTAL ..	660,002,597	693,462,999	705,873,443

(*a*) Including the production of one mill only.

The spinning of yarn is in a large degree centred in Bombay, the mills of that province producing nearly 75 per cent. of the quantity produced in British India. The United Provinces of Agra and Oudh and Madras produced about 6 per cent. and 8 per cent. respectively, while Bengal and the Central Provinces produced 4·4 and 5 per cent. Elsewhere the production is as yet very limited.

BOMBAY SPINNERS.

Here is a detailed statement of the quantity (in pounds) and the counts, or numbers, of yarn spun in Bombay Island :—

	1920-21.	1921-22.	1922-23.
Nos. 1—10	58,241,600	71,273,946	74,226,403
„ 11—20	183,838,880	175,505,096	171,828,510
„ 21—30	94,133,739	94,752,981	95,405,789
„ 31—40	5,178,343	6,000,208	5,586,789
Above 40	921,139	989,043	1,027,621
Wastes, &c.	142,707	173,357	23,992
TOTAL ..	342,456,408	348,694,631	348,099,104

YARN AT AHMEDABAD.

The corresponding figures for Ahmedabad are as follows :—

	1920-21.	1921-22.	1922-23.
Nos. 1—10	1,806,517	2,431,605	1,982,716
„ 11—20	23,615,339	31,695,855	33,783,105
„ 21—30	44,616,889	45,092,715	48,249,942
„ 31—40	6,068,457	5,541,661	5,471,816
Above 40	194,315	726,440	595,296
Wastes, &c.	3,000	109,974	....
TOTAL ..	73,304,517	85,598,250	90,082,875

YARN SPUN THROUGHOUT INDIA.

The grand totals of the quantities in various counts of yarn spun in the whole of India, including Native States, are given in the following table :—

	1920-21.	1921-22.	1922-23.
Nos. 1—10	83,943,074	99,067,099	102,970,415
„ 11—20	359,527,326	371,452,020	375,604,844
„ 21—30	199,085,748	203,161,956	203,958,812
„ 31—40	15,024,389	16,900,186	15,930,367
Above 40	2,067,168	2,389,279	2,195,291
Wastes, &c.	354,892	492,459	213,714
TOTAL ..	660,002,597	693,462,999	705,873,443

In the early days of the textile industry the energies of the millowners were largely concentrated on the production of yarn, both for the China market, and for the handlooms of India. The increasing competition of Japan in the China market, the growth of an indigenous industry in China and the uncertainties introduced by the fluctuations in the China exchanges consequent on variations in the price of silver compelled the millowners to cultivate the Home market. The general tendency of recent years has been to spin higher counts of yarn, importing American cotton for this purpose to supplement the Indian supply; to erect more looms, and to produce more dyed and bleached goods. This practice has reached a higher development in Bombay than in other parts of India, and the Bombay Presidency produces nearly 78.8 per cent. of the cloth woven in India. The United Provinces produces 3·2 per cent.; the Central Provinces 4 per cent. and Madras 4 per cent. Grey and Bleached goods represent nearly 74 per cent. of the whole production.

Analysis of Woven Goods.

The following brief extract is taken from the statement of the quantity (in pounds and their equivalent in yards) and description of woven goods produced in all India, including Native States :—

—	1920-21.	1921-22.	1922-23.
Grey and Bleached piece-goods—			
Pounds	263,564,482	300,036,343	300,342,165
Yards	1,129,882,568	1,284,751,703	1,271,723,244
Coloured piece-goods—			
Pounds	98,387,636	98,432,961	98,634,842
Yards	450,967,178	446,821,593	453,494,469
Grey and coloured goods other than piece-goods—			
Pounds	3,484,852	3,052,986	3,422,967
Dozens	707,449	629,375	1,212,640
Hosiery—			
Pounds	410,784	363,099	438,932
Dozens	117,249	115,081	193,391
Miscellaneous—			
Pounds	1,407,508	1,432,958	2,201,200
Cotton goods mixed with silk or wool—			
Pounds	226,529	177,750	164,726
Total—			
Pounds	367,481,791	403,496,097	405,204,922
Yards	1,580,849,746	1,731,573,296	1,725,217,713
Dozens	824,698	744,456	1,406,031

Bombay Woven Goods.

The output of woven goods during the three years in the Bombay Presidency was as follows. The weight (in pounds represents the weight of all woven goods; the measure in yards represents the equivalent of the weight of the grey and coloured piece-goods.)

—	1920-21.	1921-22.	1922-23.
Pounds	292,370,172	326,614,977	318,781,067
Yards	1,304,806,802	1,455,312,174	1,418,168,780
Dozens	632,757	587,927	660,262

The grand totals for all India are as follows :—

—	1920-21.	1921-22.	1922-23.
Pounds	367,481,791	403,496,097	405,204,922
Yards	1,580,849,746	1,731,573,296	1,725,217,713
Dozens	824,698	744,456	1,406,031

Progress of the Mill Industry.

The following statement shows the progress of the Mill Industry in the whole of India.

Years ending 30th June	Number of Mills.	Number of Spindles.	Number of Looms.	Average No of Hands Employed Daily.	Approximate Quantity of Cotton Consumed.	
					Cwts.	Bales of 392 lbs.
1877	51	12,44,206	10,385	Not	stated. N	ot stated.
1878	53	12,89,706	10,533	D	o.	Do.
1879	56	14,52,794	13,018	42,914	9,36,547	2,67,585
1880	56	14,61,590	13,502	44,410	10,76,708	3,07,631
1881	57	15,13,096	13,707	46,430	13,26,461	3,78,989
1882	65	16,20,814	14,172	48,467	13,91,467	3,97,562
1883	67	17,90,388	15,373	53,476	15,97,946	4,56,556
1884	79	20,01,667	16,262	60,387	18,59,777	5,31,365
1885	87	21,45,646	16,537	67,186	20,88,621	5,96,749
1886	95	22,61,561	17,455	74,383	22,51,214	6,43,204
1887	103	24,21,290	18,536	76,942	25,41,966	7,26,276
1888	114	24,88,851	19,496	82,379	27,54,437	7,86,982
1889	124	27,62,518	21,561	91,508	31,10,289	8,88,654
1890	137	32,74,196	23,412	1,02,721	35,29,617	10,08,462
1891	134	33,51,694	24,531	1,11,018	41,26,171	11,78,906
1892	139	34,02,232	25,444	1,16,161	40,80,783	11,65,938
1893	141	35,75,917	28,164	1,21,500	40,98,528	11,71,008
1894	142	36,49,736	31,154	1,30,461	42,78,778	12,22,508
1895	148	38,09,929	35,338	1,38,669	46,95,999	13,41,714
1896	155	39,32,946	37,270	1,45,432	49,32,613	14,09,318
1897	173	40,65,618	37,584	1,44,335	45,53,276	13,00,936
1898	185	42,59,720	38,013	1,48,964	51,84,648	14,81,328
1899	188	47,28,333	39,069	1,62,108	58,63,165	16,75,190
1900	193	49,45,783	40,124	1,61,189	50,86,732	14,53,352
1901	193	50,06,936	41,180	1,72,883	47,31,090	13,51,740
1902	192	50,06,965	42,584	1,81,031	61,77,633	17,65,038
1903	192	50,43,297	44,092	1,81,399	60,87,690	17,39,340
1904	191	51,18,121	45,337	1,84,779	61,06,631	17,44,766
1905	197	51,63,486	50,139	1,95,277	65,77,354	18,79,244
1906	217	52,79,595	52,668	2,08,616	70,82,306	20,23,516
1907	224	53,33,275	58,436	2,05,696	69,30,595	19,80,170
1908	241	57,56,020	67,920	2,21,195	69,70,250	19,91,500
1909	259	60,53,231	76,898	2,36,924	73,81,500	21,09,000
1910	263	61,95,671	82,725	2,33,624	67,72,535	19,35,010
1911	263	63,57,460	85,352	2,30,649	66,70,531	19,05,866
1912	268	64,63,929	88,951	2,43,637	71,75,357	20,50,102
1913	272	65,96,862	94,136	2,53,786	73,36,056	20,96,016
1914*	271	67,78,895	1,04,179	2,60,276	75,00,041	21,43,126
1915*	272	68,48,744	1,08,609	2,55,346	73,59,212	21,02,632
1916*	266	68,39,877	1,10,268	2,74,361	76,92,013	21,97,718
1917*	263	67,38,697	1,14,621	2,76,771	76,93,574	21,98,164
1918*	262	66,53,871	1,16,484	2,82,227	72,99,873	20,85,678
1919*	258	66,89,680	1,18,221	2,93,277	71,54,805	20,44,230
1920*	253	67,63,076	1,19,012	3,11,078	68,33,113	19,52,318
1921*	257	68,70,804	1,23 783	3,32,175	74,20,805	21,20,230

* Year ending 31st August.

Statement of the amount in rupees of Excise duty realised from goods woven in the Cotton Mills in British India; under the Cotton Duties Act, II of 1896; also the amount of equivalent duty levied in the Native States; in each year from 1901-1902 to 1922-23.

	Bombay.	Madras.	Bengal	United Provinces and Ajmer-Merwara.	Punjab and Delhi.	Central Provinces and Berar.
1902-03	15,84,121	67,813	6,605	74,023	3,031	1,30,620
1903-04	17,64,527	62,350	10,908	89,189	1,104	1,56,371
1904-05	20,43,832	65,379	11,929	96,710	2,607	1,61,368
1905-06	22,78,425	1,10,943	11,165	1,32,364	5,144	1,68,743
1906-07	24,36,265	1,22,603	23,709	1,35,884	7,464	1,64,680
1907-08	28,82,296	1,35,131	31,556	1,66,044	8,746	1,75,944
1908-09	29,51,859	1,42,295	53,351	1,88,345	9,509	1,98,419
1909-10	33,88,658	1,45,333	55,822	1,92,552	6,611	2,17,217
1910-11	36,78,555	1,48,136	56,359	1,82,083	7,300	2,07,818
1911-12	42,17,878	1,65,048	48,631	1,84,653	10,862	2,52,415
1912-13	48,27,698	2,06,862	81,709	2,11,847	17,971	2,71,882
1913-14	45,68,188	2,13,166	78,951	2,55,467	22,353	3,00,919
1914-15	42,31,546	1,83,880	53,046	2,07,454	10,068	2,54,937
1915-16	42,25,608	2,11,456	41,704	2,01,012	9,291	2,36,497
1916-17	35,38,236	2,87,043	70,529	2,47,991	24,183	2,93,466
1917-18	64,13,806	7,09,467	1,18,336	2,91,052	38,628	3,49,490
1918-19	1,16,18,396	7,48,545	2,10,582	5,07,555	56,612	6,75,343
1919-20	1,28,66,707	7,67,021	3,32,972	6,12,726	68,383	8,66,681
1920-21	2,03,33,415	7,50,090	3,17,920	6,97,185	73,846	9,19,814
1921-22	1,93,50,732	6,54,913	2,65,202	6,85,350	57,825	9,02,784
1922-23	1,62,65,658	8,57,547	2,27,105	7,29,192	1,50,076	8,61,929

	Total British India.		Native States.	Grand Total.	
	Gross duty.	Net duty.	Gross duty.	Gross duty.	Net duty.
1902-03	18,66,213	18,25,469	65,541	19,31,754	18,91,010
1903-04	20,77,449	20,36,104	59,061	21,36,510	20,95,149
1904-05	23,81,825	23,33,636	67,320	24,49,145	24,06,976
1905-06	27,06,784	26,71,061	83,455	27,90,239	27,54,516
1906-07	29,00,957	28,64,202	81,976	29,82,671	29,46,152
1907-08	33,99,717	33,55,946	97,499	34,97,216	34,53,443
1908-09	35,43,778	34,98,480	1,14,498	36,58,276	36,12,977
1909-10	40,06,193	39,61,020	1,37,699	41,43,892	40,98,719
1910-11	42,26,575	1,75,878	1,75,878	44,56,129	44,01,707
1911-12	48,79,478	48,04,492	1,82,479	50,61,957	49,86,971
1912-13	56,17,969	55,76,567	2,21,178	58,39,147	57,97,745
1913-14	54,39,043	53,95,014	2,38,393	56,77,436	56,33,407
1914-15	49,40,931	49,32,185	2,33,160	51,74,091	51,65,345
1915-16	49,25,571	48,40,107	1,90,275	51,15,846	50,30,382
1916-17	44,61,448	43,80,425	2,47,301	47,08,749	46,27,726
1917-18	76,20,779	75,45,252	3,84,780	80,05,559	79,37,032
1918-19	1,38,17,033	1,36,79,252	5,07,891	1,43,24,924	1,41,87,143
1919-20	1,55,14,490	1,52,54,671	8,90,778	1,64,05,268	1,61,45,449
1920-21	2,30,92,870	2,28,71,827	9,65,902	2,40,58,772	2,38,37,729
1921-22	2,19,16,806	2,12,28,108	10,07,539	2,29,24,345	2,22,35,647
1922-23	1,90,93,507	1,86,15,297	11,53,142	2,02,46,649	1,97,68,439

The Jute Industry.

Considering its present dimensions, the jute industry of Bengal is of very recent origin. The first jute mill in Bengal was started at Rishra in 1855, and the first power-loom was introduced in 1859. The original outturn was 8 tons per day. In 1909 it had grown to 2,500 tons per day, it is now 4,000 tons per day, and it shows every indication of growing and expanding year by year. Another interesting thing about the jute industry of Bengal is that, although it is practically a monopoly of Scotsmen from Dundee, the industry itself owes its inception to an Englishman. The founder of the industry was George Acland, an Englishman, who began life as a midshipman in the navy, and was for some years in the East India Marine Service. He quitted this service while still a young man, and engaged in commercial pursuits in Ceylon, where he was successful. Later on he turned his attention to Bengal, and arriving in Calcutta about 1853 he got into touch with the management of the paper works, then at Serampore, where experiments were being tried with country grasses and fibre plants to improve the quality or cheapen the manufacture of paper. This seems to have suggested to Acland the manufacture of rhea, and in 1854 he proceeded to England, with a view to obtaining machinery and capital in order to manufacture goods from that material. During this trip he visited Dundee, and while there Mr. John Kerr, of Douglas Foundry, suggested to him the importing of machinery into Bengal "where the jute comes from and spin it there." This suggestion bore fruit, for shortly afterwards Acland placed orders with Kerr for a few systems of preparing and spinning machinery, and returned to India the same year accompanied by his two sons and a few Dundee mechanics who were to assist him in erecting and operating the first jute mill in Bengal. This, as has been stated, was at Rishra, the site of the present Wellington mills, near Serampore, and here, in 1855, the first machine spun jute yarns were made. As not infrequently happens the pioneer got very little out of his venture. After several ups and downs the Acland interest in the Rishra mill ceased in 1867, and the company which Acland had formed in 1854 was wound up in 1868.

Power-looms.—The pioneer's example was followed by Mr. George Henderson of that silk and firm, and in 1859 the Borneo Jute Co. was launched under his auspices. To this company is due the credit of introducing the power-loom for jute cloth. Unhampered by the financial difficulties which had burdened the Aclands, the Borneo Jute Co. made rapid progress, doubling their works in 1864, and clearing their capital twice over. In 1872 the mills were turned into a limited liability company, the present "Barnagore Jute Manufacturing Co., Ld." Four other mills followed in succession—Gouripore, Serajgunge, and India Jute Mills.

"From 1866 to 1873," writes Mr. David Wallace in "The Romance of Jute," "the five mills excepting the Rishra mill simply coined money and brought the total of their looms up to 1,250." To illustrate the prosperity of the industry at this period we may take the dividends paid by the Barnagore Company. On the working of their first half year, a 15 per cent. interim dividend was declared, which seemed to justify the enormous capital at which the company was taken over from the Borneo Company, and shares touched 68 per cent. premium. The dividend for the first year, ending August 1873, was 25 per cent., for 1874, 20 per cent., and for 1875 10 per cent. Then came a change. The investing public had forgotten the effect of the Port Canning bubble, and the condition of the jute industry in 1872-73 seeming to offer a better return than coal or tea, both of which had just enjoyed a boom, it was only necessary to issue a prospectus of a jute mill to have all the shares snapped up in the course of an afternoon.

In 1872–73 three new companies were floated locally—the Fort Gloster, Budge Budge and Sibpore, and two Home companies, the Champdany and Samnugger, all of which commenced operations in 1874. In 1874–5 eight other mills were launched—the Howrah, Oriental (now Union), Asiatic (now Soorah), Clive, Bengal Pressing and Manufacturing Co. (now the Belliaghatta-Barnagore branch mill), Rustomjee (now the Central), Ganges (registered in England), and Hastings, owned by Messrs. Birkmyre Bros., of Greenock fame—in all thirteen new companies, coming on all of a heap and swelling the total looms from 1,250 up to 3,500. This was too much of a strain for the new industry, and for the next ten years all the mills had a severe struggle. The older ones all survived the ordeal, but four of the new concerns—the Oriental, the Asiatic, the Bengal Pressing and Manufacturing Co. and the Rustomjee—became moribund, to appear again later on under new names and management. Fort Gloster also suffered badly.

Between 1875 and 1882 only one new mill was put up. This was Kamarhatty, promoted by Messrs. Jardine, Skinner & Co., which came into being in 1877, as the result of Dr. Barry's visit to Calcutta in 1876, when he transferred the agency of the Gouripore Co. from Messrs. Jardine, Skinner & Co. to his own firm. This mill, together with additions made by some of the other mills, brought the total looms up to 5,150 in 1882. By the end of 1885 the total was further augmented by the Hooghly, Titaghur, Victoria and Kanknarrah mills, bringing the number of looms at work up to 6,700. From this period on to 1894 no new mills came into existence except the Calcutta Twist Mill, with 2,460 spindles, since merged into the Wellington branch of the Champdany Co. Between 1896 and 1900 the following new mills were started:—the Gordon Twist Mill with 1,800 spindles (now acquired by Anglo-India), Khardah, Gondolpara (French owned), Alliance, Arathoon, Anglo-India, Standard, National, Delta (which absorbed the Serajgunge), and the Kinnison. A lull of four years witnessed large extensions to the existing mills, after which came the following series of new

mills, besides further heavy extensions—Dalhousie, Alexandra, Naihati, Lawrence, Reliance, Belvedere, Auckland, Kelvin and Northbrook.

Progress of the Industry.

THE record of the jute industry may well be said to be one of uninterrupted progress. The following statement shews **quinquennial averages** from the earliest year for which complete information is available with actuals for 1917-18, 1918-19, 1919-20, 1920-21 and 1921-22 and the figures in brackets represent the variations for each period, taking the average of the quinquennium from 1879-80 to 1883-84 as100 :—

	Number of mills at work.	Authorised Capital (in lakhs of Rs.)	Number (in thousands) of		
			Persons employed.	Looms.	Spindles.
Average—					
1879-80 to 1883-84 ..	21 (100)	270·7 (100)	38·8 (100)	5·5 (100)	88 (100)
1884-85 to 1888-89 ..	24 (114)	341·6 (126)	52·7 (136)	7 (127)	138·4 (157)
1889-90 to 1893-94 ..	26 (124)	402·6 (149)	64·3 (166)	8·3 (151)	172·6 (196)
1894-95 to 1898-99 ..	31 (148)	522·1 (193)	86·7 (223)	11·7 (213)	244·8 (278)
1899-1900 to 1903-04 ..	36 (171)	680 (251)	114·2 (294)	16·2 (295)	334·6 (380)
1904-05 to 1908-09 ..	46 (219)	960 (355)	165 (425)	24·8 (451)	510·5 (580)
1909-10 to 1913-14 ..	60 (286)	1,209 (443)	208·4 (537)	33·5 (609)	691·8 (786)
1914-15 to 1918-19 ..	73 (348)	1,403·6 (519)	259·3 (668)	39·7 (722)	821·2 (933)
1917-18	76 (362)	1,428·5(528)	266· (686)	40·6 (738)	834 (948)
1918-19	76 (362)	1,477·2(546)	275·5 (710)	40· (727)	839·9 (954)
1919-20	76 (362)	1,563·5(579)	280·4 (723)	41·0 (745)	856·3 (973)
1920-21	77 (367)	1,923·5 (712)	288·4 (758)	41·6 (745)	869·9 (908)
1921-22	81 (386)	2,122·4 (784)	288·4 (743)	43·0 (782)	908·3 (1,032)

The production of the mills has increased to a still greater extent. The following figures show the exports of jute manufactures and the declared values for the same periods. The value of jute manufactures exported by sea in 1922-23 was over thirty-two times as great as the average value of the export in the period 1879-80 to 1883-84 :—

	Jute manufactures.		Value in lakhs of Rs.
	Gunny bags in millions of number.	Gunny cloths in millions of yards.	
1879-80 to 1883-84	54·9 (100)	4·4 (100)	124·9 (100)
1884-85 to 1888-89	77 (140)	15·4 (350)	162·9 (130)
1889-90 to 1893-94	111·5 (203)	41 (932)	289·3 (232)
1894-95 to 1898-99	171·2 (312)	182 (4,136)	518 (415)
1899-1900 to 1903-04..	206·5 (376)	427·2 (9,709)	826·5 (662)
1904-05 to 1908-09	257·8 (469)	698 (15,864)	1,442·7 (1,154)
1909-10 to 1913-14	339·1 (618)	970 (2,045)	2,024·8 (1,621)
1914-15 to 1918-19	667·6 (1,216)	1,156 (26,273)	4,019·3 (3,218)
1919-20	342·7 (624)	1,275·1 (28,980)	5,001·5 (4,004)
1920-21	533·9 (987)	1,352·7 (33,800)	5,299·4 (4,273)
1921-22	386·7 (715)	1,120·5 (28,000)	2,999·5 (2,419)
1922-23	344·2 (637)	1,254·3 (31,350)	4,049·4 (3,265)

Until the outbreak of war the exports by sea of raw jute were marked by increases from year to year, although the increase was very much less than that in the case of manufactures. During the war years exports declined very considerably. The cessation of the war stimulated the export trade and in 1919-20, the exports showed an increase, as compared with the average of the war quinquennium (1914-15 to 1918-19). In the following two years, the exports recorded a decrease and in 1922-23 they again made a recovery and amounted to 578,000 tons.

		Jute, raw, ton.	
Average	1879-80 to 1883-84..	375,000	(100)
,,	1884-85 to 1888-89..	445,000	(119)
,,	1889-90 to 1893-94..	500,000	(133)
,,	1894-95 to 1898-99..	615,000	(164)
,,	1899-1900 to 1903-04	635,000	(169)
,,	1904-05 to 1908-09..	755,000	(201)
,,	1909-10 to 1913-14..	765,000	(204)
,,	1914-15 to 1918-19..	464,000	(124)
Year	1919-20	592,000	(158)
,,	1920-21	472,000	(129)
,,	1921-22	468,000	(125)
,,	1922-23	578,000	(154)

The total quantity of jute manufactures exported by sea from Calcutta during the year 1922-23 was 663,000 tons as against 639,000 tons in the preceding year and 603,500 tons in the pre-war year 1913-14. The values of these exports amounted to Rs. 40·28 lakhs, or an increase of Rs. 10,33 lakhs over the preceding year and Rs. 12,08 lakhs over the pre-war year. The shipments of gunny bags were valued at Rs. 15,82 lakhs and of gunny cloth Rs. 24,24 lakhs as against Rs 13,86 and Rs. 15,92 lakhs respectively in the preceding year and Rs. 12,48 and Rs. 15,58 lakhs in the pre-war year.

The price of raw jute reached a very high point in 1906-07, the rate being Rs. 65 per bale; in 1907-08 it dropped to Rs. 42 per bale, and the fall was accentuated in 1908-09 and 1909-10, the price having declined to 36·4 and Rs. 31. In 1917-18 it dropped to Rs. 38-8-0 but rose again in 1919-20 up to Rs. 77-8-0. In 1920-21 it dropped to Rs. 65, but rose again to Rs. 86. It again declined to Rs. 66. In 1921-22 the price rose to Rs. 73 at the end of September, but fell back again to Rs. 50 at the end of November and recovered at Rs. 64 at the close of the year.

	Price of jute, ordinary, per bale of 400 lbs. Rs. a. p.	
1879-80 to 1883-84	23 8 0	(100)
1884-85 to 1888-89	23 3 2	(99)
1889-90 to 1893-94	32 6 5	(138)
1894-95 to 1898-99	30 12 0	(131)
1899-1900 to 1903-04 ..	32 1 7	(137)
1904-05 to 1908-09	44 13 6	(191)
1909-10 to 1913-14	51 0 10	(217)
1914-15 to 1918-19	50 6 5	(214)
1917-18	38 8 0	(164)
1918-19	60 0 0	(255)
1919-20	77 8 0	(330)
1920-21	69 8 0	(296)
1921-22	63 0 0	(268)

The average **prices of gunny cloth** have been as follows:—

	Price of Hessian cloth 10½oz. 40″ per 100 yds. Rs. a. p.	
1879-80 to 1883-84	10 7 11	(100)
1884-85 to 1888-89	8 0 7	(77)
1889-90 to 1893-94	10 6 6	(99)
1894-95 to 1898-99	9 11 8	(93)
1899-1900 to 1903-04 ..	10 2 10	(97)
1904-05 to 1908-09	11 14 1	(112)
1909-10 to 1913-14	12 12 2	(122)
1914-15 to 1918-19	23 5 7	(222)
1917-18..	33 8 0	(319)
1918-19..	33 0 0	(314)
1919-20..	28 0 0	(267)
1920-21..	20 8 0	(195)
1921-22..	14 8 0	(138)

The 1923 crop.—The final figures of outturn for the three provinces work out as follows:—

Province.	Bales. 1922.*	1923.
Bengal (including Cooch Behar)..	4,798,279	6,204,516
Bihar and Orissa (including Nepal)	421,021	468,791
Assam	266,700	322,500
Total ..	5,486,000	6,995,807

Province.	Area in acres. 1922.*	1923.
Bengal (including Cooch Behar)	1,550,000	2,014,615
Bihar and Orissa	160,000	183,770
Assam	89,900	114,300
Total ..	1,799,900	2,312,685

* Revised.

The Indian Jute Mills Association now one of the most important, if not the most important, of the bodies affiliated to the Bengal Chamber of Commerce, was started under the following circumstances:—In 1886 the existing mills, finding that, in spite of the constant opening up of new markets, working results were not favourable, came to an agreement, with the late S. E. J. Clarke, Secretary to the Chamber of Commerce, as trustee, to work short time. The only mills which stood out of this arrangement were the Hooghly and Serajgunge. The first agreement, for six months dating from 15th February 1886, was subsequently renewed at intervals without a break for five years up to February 15, 1891. The state of the market at the time of the renewals dictated the extent of the short time, which varied throughout the five years between 4 days a week, 9 days a fortnight and 5 days a week. Besides short time, 10 per cent. of the sacking looms were shut down for a short period in 1890. An important feature of this agreement was a mutual undertaking by the parties not to increase their spinning power during the currency of the agreement, only a few exceptions being made in the case of a few incomplete new mills.

The present officials of the Association are:—

Chairman.—Mr. G. F. Rose, M.L.C.

Members of Committee.—Mr. C. G. Cooper, M.L.C., Mr. R. B. Laird, Mr. J. W. A. Simpson and Mr. D. J. Leckie.

Working days.—With the introduction of the electric light into the mills in 1896, the working day was increased to 15 hours, Saturdays included, which involved an additional amount of cleaning and repairing work on Sundays. In order to minimise this Sunday work and give them a free Sunday, an agitation was got up in 1897 by the Mill European assistants to have the engines stopped at 2 or 3 p.m. on Saturdays. The local Government took the matter up, but their action went no further than applying moral suasion, backed by a somewhat half-hearted threat. The Mill Association held meetings to consider the question and the members were practically agreed as to the utility of early closing on Saturdays, but, *more suo*, could not trust themselves to carry it out without legislation. Unfortunately the Government of India refused to sanction the passing of a Resolution by the provincial Government under the Factory Act and the matter was dropped. Only a year or two ago the Jute Mills Association in despair brought out an American business expert, Mr. J. H. Parks, to advise them on the possibility of forming a jute trust with a view to exercising some control over the production and price of jute. Mr. Parks came, and wrote a report which the Association promptly pigeon-holed because the slump was over and the demand was so prodigious that there was no need to worry about the price of jute.

An Association, styled the **Calcutta Jute Dealers Association,** has lately been formed in Calcutta to promote and to guard the common interests of its members as dealers in jute for local consumption. The members are balers and brokers of jute for sale to the jute mill in and around Calcutta. The present Committee:—Mr. Geo. Morgan, M.L.A., *Chairman*, Members:—Messrs. D. King, G. C. Moon, J. Campbell Forrester, M.L.C., J. R. Miller and D. A. Wylie.

Effects of the War.—The official review of the Trade of India in 1916-17 says:—The value of the exports of raw jute increased in 1916-17 by nearly Rs. 65 lakhs to Rs. 1,629 lakhs. The quantity exported, however, was less than in the preceding year. The estimated yield of the crop was 12 per cent. above that of the previous year, *viz.*, 1,490,000 tons or 8,340,000 bales. Owing to the lack of tonnage and other abnormal circumstances brought about by the war, the quantity exported was 10 per cent. below that of the previous year. Of the consumers the United Kingdom and Italy took less, while the United States, France (mainly *via* Dunkirk), Russia (*via* Vladivostok) and Brazil took greater quantities. There were, of course, no exports to enemy countries which took more than 27 per cent. in the five years ending 1913-14, the pre-war year. The increase in the value accompanied by a decrease in the volume of exports was due to the very high range of prices during the months of September, October, November and December. Towards the close of the year under review prices steadily declined, and have since gone still lower.

Jute Manufactures.—The value of the exports now approximates to Rs. 42 crores. In spite of the war with its attendant difficulties of freight and finance, the exports of gunny cloth showed an increase of Rs. 241 lakhs of which Rs. 163 lakhs were due to higher prices and Rs. 78 lakhs to an increase in the volume of exports. There were also an increase of Rs. 118 lakhs in the value of gunny bags exported. The number of bags shipped increased while the weight decreased, sand bags for war purposes being lighter than the ordinary bags for transporting grain. Exports to Australia in 1916-17 were a record. The United Kingdom with Australia took more than half of the number of bags exported while the United States took more than half of the quantity of cloth exported.

There were 74 mills at work throughout the year with 41,292 looms and 863,339 spindles. The number of persons employed was 285,881. There were no difficulties as regards the supply of labour.

The number of gunny bags shipped from Calcutta during 1922-23 declined from 386 million bags to 342 million bags, but the value increased from Rs. 13,87 lakhs to Rs. 15,82 lakhs. Shipments of gunny cloth rose from 1,120 million yards to 1,251 million yards valued at Rs. 15,92 lakhs and Rs. 24,24 lakhs, respectively.

Hemp and Jute Substitutes.

Experiments have been made during the last few years by the Agricultural Department of the Government of India with the **Deccan hemp** plant (*Hibiscus cannabinus*), which yields a fibre very similar to jute. As a result, a new variety of the plant, known as Type 3, has been obtained, which it is now proposed to introduce into several parts of India, and, as a beginning, the variety is to be grown on a number of estates in Bihar. A sample of the fibre prepared from this variety by the usual methods of retting was 10 ft. to 12 ft. long, of an exceptionally light colour, well cleaned, and of good strength

It was valued at £18 per ton with Bimlipatam jute at £12 10s., and Bengal first mark jute at £17 per ton. Deccan hemp has been grown fairly extensively in Bombay, the Central Provinces, and Madras, where it is used for ropes and cordage and also for the manufacture of a coarse sackcloth. A valuable feature of the plant is its suitability for cultivation in such parts of India as are not suitable for jute.

Prior to the war, the United Kingdom's requirements of hemp were mainly supplied by the following countries in order of importance:—the Philippine Islands, New Zealand, India, Russia, Italy and Germany. The opinion appears to be held that the effect of the war will be to cause very considerable changes in the character of the fibre market. There will probably be labour difficulties, it is thought, in the preparation of the hemp crops of Russia and Hungary, and it is not unlikely that the world will look to countries such as India for the supply of fibres which may be used as substitutes for the European varieties of hemp. There can be no doubt that one of the early effects of the war was to firm up hemp prices. As far as Indian hemp is concerned, values were persistently depreciated during the first six months of 1914 owing to large stocks held; but the closure of the Russian hemp market on the outbreak of war resulted in a marked improvement in values, and there was a keen demand and a considerable rise in price. Exports from Calcutta during 1922-23 made a great recovery from the previous year. The quantity advanced by 37 per cent. from 197,112 cwts. to 269,487 cwts. and the value from Rs. 6 93 lakhs to Rs. 36·68 lakhs.

THE WOOL INDUSTRY.

Wool exported from India consists not only of wool grown in India itself, but of imports from foreign sources, these latter coming into India both by land and by sea. Imports by sea come chiefly from Persia, but a certain quantity from Persia also comes by land, while the main imports are from Afghanistan, Central Asia, Tibet and Nepal. Quetta, Shikarpur, Amritsar and Multan are the main collecting centres for wool received by land from Afghanistan and Persia, whence it is almost invariably railed to Karachi for subsequent export overseas.

Imports and Exports.—A considerable amount of wool is imported annually from Tibet and, in normal years, from Afghanistan. In 1913-14 imports of wool manufactures from the British Empire were valued at Rs. 223 lakhs and from foreign countries at Rs. 182 lakhs. In 1919-20 these figures fell to Rs. 138 lakhs and Rs. 22 lakhs. But in 1920-21 imports of woollen manufactures rose to Rs. 553 lakhs.

The export trade in wool showed a marked increase in 1922-23, the shipments amounting to 53 million lbs. valued at Rs. 4.41 lakhs as compared with 32 million lbs. valued at Rs. 2,54 lakhs in the previous year.

Production in India.—The production of wool in India is estimated at 60 million lbs. the estimate being arrived at from the available figures of the number of sheep in the country and their estimated yield per fleece, the average quantity of wool yielded per sheep per annum being taken at only 2 lbs.

All Indian wools are classed in the grade of **carpet wools**, and it is correct to say of perhaps fully half the breeds of sheep found on the plains of India that they yield a kind of hair rather than of wool. They are reared chiefly on account of the mutton, and the fleece has been generally regarded as of subsidiary interest. In many respects, in actual fact, the Indian plains sheep approximate more nearly to the accepted type of the goat rather than of the sheep. Short remarks in his manual on Indian cattle and sheep, particularly with respect to the Madras type, that they "resemble a greyhound with tucked up belly, having some coarseness of form, the feet light, the limbs bony, sides flat and the tail short."

Mill manufacture.—The number of woollen mills at work in British India in 1902 was three, with an authorised capital of Rs. 38,50,000, and employing 23,800 spindles and 624 looms. The number of persons employed in the industry then was 2,559, and the quantity of woollen goods produced 2,148,000 lbs. At the end of 1917 the number of mills had risen to five, with an authorised capital of Rs. 2,56,50,000 employing 39,608 spindles and 1,155 looms. The weight of goods produced then was 9,744,264 lbs. and the number of persons employed 7,824. With regard to Indian States, there was one mill in Mysore in 1903 with a capital of Rs. 6,00,000, employing 1,430 spindles and 45 looms. The quantity of goods produced was 1,130,000 lbs. and the number of persons employed 297. In 1907 there was still only the one mill working in an Indian State—the authorised capital had been increased to Rs. 15,00,000, the quantity of goods produced to 1,721,087 lbs., and the number of persons employed to 563. Three of the mills manufacture all classes of woollen and worsted goods, the remainder manufacturing blankets only. The existence of these mills in India proved of great service to Government in the meeting of war requirements, and they were all employed to their fullest capacity in supplying army demands for greatcoat cloth, serges, puttees, flannels, blankets and hosiery. Their total capacity, however, was not sufficient to meet the full requirements of the army, and consequently their supplies had to be supplemented by large imports from home. The bulk of the wool used by the Indian mills is Indian wool, although it is supplemented to some extent by the importation of merinos and cross-breds from Australia for the manufacture of the finer classes of goods. Their market for manufactured goods is almost entirely in India itself

Blanket weaving and carpet manufacture are carried on in various parts of the country, notably in the Punjab and the United Provinces. Woollen pile carpets are made in many of the jails. Amritsar had a considerable trade at one time in weaving shawls from *pashm*, the fine under fleece of the Tibetan goat, but its place has been taken to some degree by the manufacture of shawls from imported worsted yarns, but more generally by the manufacture of carpets of a fine quality which find a ready sale in the world market. This work is done entirely on hand looms and the carpets fetch a high price.

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Silk.

In the early days of the East India Company the Indian Silk trade prospered greatly, and various sub-tropical races of the Silkworm were introduced. But the trade gradually declined for the following reasons:—

In the seventeenth and eighteenth centuries India's chief competitor in the silk trade was the Levant Company. Successful efforts, however, were made to acclimatise in Europe one or two races of a temperate worm, procured from China and Japan. When sericulture became part of the agriculture of France and Italy, a quality of silk was produced entirely different from that of India and Turkey, and its appearance created a new demand and organized new markets.

All subsequent experience seems to have established the belief that the plains of India, or at all events of Bengal, are never likely to produce silk that could compete with this new industry. On the lower hills of Northern India, on the other hand, a fair amount of success has been attained with this (to India) new worm, as, for example, in Dehra Dun and Kashmir. In Manipur, it would appear probable that *Bombyx mori*, possibly obtained from China, has been reared for centuries. The caprice of fashion has, from time to time, powerfully modified the Indian silk trade. The special properties of the *korah* silk were formerly much appreciated but the demand for them has now declined. This circumstance, together with defective systems of rearing and of hand-reeling and weaving, accounts largely for the present depression in the mulberry silk trade of India.

Mulberry-feeding worms.—Sir George Watt states that in no other country does the necessity exist so pressingly as in India to treat the subject of silk and the silk industries under two sections, *viz.*, Bombycidae, the domesticated or mulberry-feeding silk worms; and Saturnlidae, the wild or non-mulberry-feeding worms. In India the mulberry worm (Bombyx Mori) has been systematically reared for many centuries, there being six chief forms of it. In the temperate tracts of India various forms of *Morus alba*, (the mulberry of the European silk-producing countries), are grown specially as food for the silkworm. This is the case in many parts of the plains of Northern India, Baluchistan, Afghanistan, Kashmir, and along the Himalaya at altitudes up to 11,000 feet. The other species even more largely grown for the Indian silkworm is *M. Indica* of which there are many distinctive varieties or races. This is the most common mulberry of Bengal and Assam, as also of the Nilgiri hills.

India has three well-known purely indigenous silkworms; the *tasar*, the *muga* and the *eri*. The first is widely distributed on the lower hills, more especially those of the great central tableland, and feeds on several jungle trees. The second is confined to Assam and Eastern Bengal, and feeds on a laurel. The third exists in a state of semi-domestication, being reared on the castor-oil plant. From an art point of view the *muga* silk is the most interesting and attractive, and the cocoon can be reeled readily. The *eri* silk, on the other hand, is so extremely difficult to reel that it is nearly always carded and spun—an art which was practised in the Khasi Hills of Assam long before it was thought of in Europe.

Experiments and results.—Numerous experiments have been made with a view to improving sericulture in India. French and other experts are agreed that one of the causes of the decline of the silk industry in India has been the prevalence of diseases and parasites among the worms, the most prevalent disease being pebrine. M. Lafont, who has conducted experiments in cross breeding, believes that improvement in the crops will be obtained as soon as the fight against pebrine and other diseases of the worms is taken up vigorously by the producers of seed and the rearers of worms, while improvement in the quality of the cocoons will be obtained by rearing various races, pure and cross breds.

In Kashmir and Mysore satisfactory results have been obtained. In the former State sericulture has been fostered on approved European principles with Italian reeling machinery, seed being imported annually on a large scale. In 1897 in Mysore Mr. Tata, after selecting a plantation and site for rearing houses, sent to Japan for a Superintendent and trained operatives. The Mysore authorities have made a grant of Rs. 3,000 a year to the Tata farm in return for instruction given to the people of Mysore in Japanese methods of growing the mulberry and rearing the insects. The products of the Mysore State are exported to foreign countries from Madras. The work of the Salvation Army is also noteworthy in various parts of India. They have furnished experts, encouraged the planting of mulberry trees, and subsidised several silk schools. The draft prospectus has been issued of a silk farm and institute to be started at Simla under the auspices of the Salvation Army. The Lieut.-Governor of the Punjab has permitted the school to be called after his name, and the Punjab Government made a grant of Rs. 2,000 towards the expenses. Sir Dorabji Tata has also made a donation of Rs. 1,000. The Bengal Silk Committee under the guidance of some French experts have conducted cross-breeding experiments with a view to establish a multi-voltine hybrid of European quality. There is a Government sericultural farm at Berhampore, where, it is said, a pure white multi-voltine of silk worm is reared. The results of the Bengal Committee's labours may be summed up as follows: the only really effective method of dealing with the problem is to work up gradually to a point at which the whole of the seed cocoon necessary for the province will be supplied to rearers under Government supervision, and to establish gradually a sufficient number of large nurseries throughout the silk districts of the province.

In 1915 there was issued by the Agricultural Research Institute, Pusa, a *Bulletin* (No. 48 of 1915) entitled "First Report on the Experiments carried out at Pusa to improve the Mulberry Silk Industry." In a short Prefatory note Mr. Bainbrigge Fletcher (Imperial Entomo-

logist) explains that the object of the Bulletin is to place on record some of the more important experiments which were commenced at Pusa in the year 1910 and have since been carried on in the endeavour to fix a superior multivoltine race of the Mulberry Silkworm which would not degenerate and which would yield silk better both in quality and outturn than that supplied by the multivoltine races which are reared at present.

Central Nurseries.—The report of the Agricultural Department, Bengal, for the year ending June 30, 1913, gives an account of a scheme which has been devised with the object of reclaiming the silk industry. The aim of the scheme is gradually to establish throughout the silk districts a sufficient number of central nurseries with rearing houses and thus enable the whole of the seed cocoons required in the province to be supplied under Government supervision. It is believed that this is the only really effective method of dealing with the problem. A number of the existing smaller nurseries were closed during 1913 and others are being converted into enlarged and improved central nurseries with rearing houses complete. The ultimate success of the scheme depends largely on the willingness of the rearers to pay an adequate price for pure seed.

A pamphlet was published in 1915, by Mr. M. N. De, Sericultural Assistant at Pusa, which contains practical hints on improved methods which are recommended to be used for reeling mulberry silk in Bengal and other silk producing districts. It has been found that, by the provision of two small pulleys to the ordinary Bengal type of reeling machine, superior thread can be obtained, the cost of the extra apparatus is merely nominal (five or six annas per machine) whilst the suitability of the machine for cottage workers is maintained. By attention to such simple points as the stifling and storage of cocoons and the temperature and quality of the water used in the reeling pans, great improvements can be effected in most silk centres in Bengal and other districts.

Exports of Silk.—As a result of the war the trade has showed in some degree signs of revival from its decadent condition, both as regards its volume and value. The value of exports during 1915-16 improved by Rs. 12 lakhs to Rs. 27½ lakhs, of which raw silk accounted for Rs. 24 lakhs. In 1916-17 the total exports rose to Rs. 54½ lakhs. In 1922-23 exports of raw silk amounted to Rs. 38 lakhs and of silk manufactures to approximately Rs. 2½ lakhs.

Imperial Silk Specialist.—At the end of 1915 it was decided that the first step to be taken to revive the silk industry should be the employment of a qualified expert who, after a careful study of the conditions not only in India but in other silk-producing countries, will formulate recommendations for the consideration of Government. With the approval of the Secretary of State, Mr. H. Maxwell Lefroy, formerly Imperial Entomologist and now Professor at the Imperial College of Science and Technology, South Kensington, was appointed to the temporary post of Imperial Silk Specialist.

Indigo.

Indigo dyes are obtained from the Indigofera, a genus of Leguminosæ which comprises some 300 species, distributed throughout the tropical and warm temperate regions of the globe, India having about 40. Western India may be described as the headquarters of the species, so far as India is concerned, 25 being peculiar to that Presidency. On the eastern side of India, in Bihar, Bengal, Assam and Burma, there is a marked decrease in the number of species but a visible increase in the prevalence of those that are met with.

There is evidence that when Europeans first began to export the dye from India, it was procured from the Western Presidency and shipped from Surat. It was carried by the Portuguese to Lisbon and sold by them to the dyers of Holland, and it was the desire to obtain a more ample supply of dye stuff that led to the formation of the Dutch East India Company and so to the overthrow of the Portuguese supremacy in the East. Opposition to indigo in 17th century Europe was keen owing to its interference with the wood industry, but it was competition to obtain indigo from other sources than India that led to the first decline of the Indian indigo industry. In the middle of the eighteenth century, when the cultivation of indigo in the West Indies had been given up—partly on account of the high duties imposed upon it and partly because sugar and coffee were found to be more profitable—the industry was revived in India, and, as one of the many surprises of the industry, the province of Bengal was selected for this revival. It had no sooner been organised, however, than troubles next arose in Bengal itself through misunderstandings between the planters, their cultivators and the Government, which may be said to have culminated in Lord Macaulay's famous *Memorandum* of 1837. This led to another migration of the industry from Lower and Eastern Bengal to Tirhut and the United Provinces. Here the troubles of the industry did not end, for the researches of the chemical laboratories of Germany threatened the very existence of any natural vegetable dye. They first killed the maddar dye of Europe, then the safflower, the lac and the *al* dyes of India, and are now advancing rapidly with synthetic indigo, intent on the complete annihilation of the natural dye. Opinions differ on many aspects of the present vicissitude; meantime the exports from India have seriously declined, and salvation admittedly lies in the path of

cheaper production both in cultivation and manufacture. These issues are being vigorously faced and some progress has been accomplished, but the future of the industry can scarcely help being described as of great uncertainty. The issue is not the advantage of new regulations of land tenure, but one exclusively of natural *versus* synthetic indigo. (See Watt's "Commercial Products of India.") In this connection it may be noted that increases in the price of coal in England, due to labour difficulties, have greatly strengthened the position of natural indigo. In February 1915 a conference was held at Delhi when the possibility of assisting the **natural indigo industry** was considered from three points of view—agricultural, research and commercial. The agricultural or botanical side of the question is fully discussed by Mr. and Mrs. Howard of Pusa in Bulletins Nos. 51 and 54 of the Agricultural Research Institute. Other aspects of the question were fully examined last year in the Agricultural Journal of India by Mr. W. A. Davis, Indigo Research Chemist to the Government of India. An **Indigo Cess Bill** was passed in the Imperial Legislative Council in 1918. It provides for a cess on indigo exported from India for the scientific investigation of the methods of cultivation and manufacture of indigo, the proceeds of the cess being received and expended by Government.

Decline of the Industry.—Since synthetic indigo was put upon the market, in 1897, the natural indigo industry of India has declined very rapidly; apart from slight recoveries in 1906-07 and 1911-12, the decline continued without a break until the revival due to the impossibility of obtaining artificial dyes in sufficient quantities during the war.

The total area under indigo in 1922 is estimated at 296,800 acres, which is 7 per cent. below the finally revised area of last year. The total yield of dye is estimated at 54,600 cwts. (81,500 factory maunds *) as against 61,600 cwts. (92,000 factory maunds), the finally revised estimate of last year, or a decrease of 11 per cent. Details for the province are given below:—

Province.	Area (acres).		Yield (cwts.)	
	1922-23.	1921-22.	1922-23.	1921-22.
Madras	119,600	182,600	34,000	42,900
United Provinces	38,400	44,600	4,000	5,000
Bihar and Orissa	37,400	39,900	4,100	5,400
Punjab	55,000	33,000	10,400	6,300
Bengal	7,300	10,600	200	500
Bombay and Sind (including Indian States)	11,100	9,400	1,900	1,500
Total ..	296,800	320,100	54,600	61,600

Exports.—The exports by sea to foreign countries were in each of the last five years (in cwts.) as follows:—

From—	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.
	cwts.	cwts.	cwts.	cwts.	cwts.
Calcutta	18,040	15,739	3,961	6,340	2,180
Madras ports	10,246	12,138	4,871	5,062	1,735
Bombay	4,281	4,179	1,301	837	555
Karachi	140	631	114	123	65
Total ..	32,707	32,387	10,250	12,362	4,535

* One factory maund 75 lbs.

The Forests.

Even in the earliest days of the British occupation the destruction of the forests in many parts of India indicated the necessity for a strong forest policy, but whether or not our earlier administrators realized the importance of the forests to the physical and economic welfare of the country, the fact remains that little or nothing was done. The year 1855 marked the commencement of a new era in the history of forestry in India, for it was then that Lord Dalhousie laid down a definite and far-sighted forest policy. Further progress was delayed for a time by the Mutiny, but from 1860 onwards forest organization was rapidly extended to the other provinces. The earlier years of forest administration were beset with difficulties, which is not surprising considering that the Department was charged with the unpopular duty of protecting the heritage of Nature from the capacity of mankind, a duty which naturally roused the antagonism of the agricultural population of India. Exploration, demarcation and settlement, followed by efforts to introduce protection and some form of regular management, were the first duties of the Forest Department. Work on these lines, which is not yet completed in the more backward parts of the country, has been pursued steadily from the commencement, and in consequence large tracts of forest have been saved from ruin and are gradually being brought under efficient management. Whatever may have been the opinions held in some quarters half a century ago as to the need for a policy such as that expressed in Lord Dalhousie's memorable enunciation of 1855, there is no longer any doubt that results have amply justified the steps taken, and that in her forests India now possesses a property of constantly increasing value, the future importance of which it is hardly possible to overestimate.

Types of Forest.—More than one-fifth of the total area of British India (including the Shan States) is under the control of the Forest Department. These areas are classified as reserved, protected or unclassed State forests. In the reserved forests rights of user in favour of individuals and the public are carefully recorded and limited at settlement while the boundaries are defined and demarcated; in the protected forests the record of rights is not so complete, the accrual of rights after settlement not being prohibited, and the boundaries are not always demarcated; while in the unclassed forests no systematic management is attempted, and as a rule the control amounts to nothing more than the collection of revenue until the areas are taken up for cultivation or are converted into reserved or protected forests. The total forest area of British India (including the Shan States) in 1920-21 was 250,473 square miles, or 23·1 of the total area. This was classed as follows: Reserved 103,491, Protected 7,516, Unclassed State 139,466.

Throughout this vast forest area, scattered over the length and breadth of India from the Himalayan snows to Cape Comorin and from the arid juniper tracts of Baluchistan to the eastern limits of the Shan States, there is, as may be imagined, an infinite variety in the types of forest vegetation, depending on variations of climate and soil and on other local factors. Broadly speaking, the following main types of forest may be distinguished:—

(1) Arid-country forests, extending over Sind, a considerable portion of Rajputana, part of Baluchistan and the south of the Punjab, in dry tracts where the rainfall is less than 20 inches. The number of species is few, the most important tree being the babul or kikar (*Acacia arabica*), which however in the driest regions exists only by the aid of river inundations.

(2) Deciduous forests, in which most of the trees are leafless for a portion of the year. These forests, which extend over large areas in the sub-Himalayan tract, the Peninsula of India and Burma, are among the most important, comprising as they do the greater part of the teak and sal forests.

(3) Evergreen forests.—These occur in regions of very heavy rainfall, such as the west coast of the Peninsula, the eastern sub-Himalayan tract, and the moister parts of Burma and are characterized by the great variety and luxuriance of their vegetation.

(4) Hill forests.—In these the vegetation varies considerably according to elevation and rainfall. In the Eastern Himalaya, Assam and Burma, the hill forests are characterized by various oaks, magnolias and laurels, while in Assam and Burma the Khasia pine (*Pinus khasya*) grows gregariously at elevations of 3,000 to 7,000 feet. In the North-Western Himalaya the chief timber tree is the deodar (*Cedrus deodara*), which occurs most commonly at elevations of 6,000 to 8,000 feet, and in association with oaks or blue pine(*Pinus excelsa*); towards its upper limit the deodar merges into very large areas of spruce and silver fir, while below it are found extensive forests of the long-needled pine (*Pinus longifolia*) which is tapped for resin.

(5) Littoral forests.—These occur on the sea coast and along tidal creeks. The most characteristic trees belong to the mangrove family (*Rhizophoreae*). Behind the mangrove belt is an important type of forest occasionally inundated by high tides, in which the most valuable species is the "sundri" (*Heritiera fomes*).

Forest Policy.—The general policy of the Government of India in relation to forests was definitely laid down in 1904 by the classification of the areas under the control of the Department into four broad classes, namely:—

(*a*) Forests the preservation of which is essential on climatic or physical grounds. These are usually situated in hilly country, where the retention of forest growth is of vital importance on account of its influence on the storage of

the rainfall and on the prevention of erosion and sudden floods.

(*b*) Forests which afford a supply of valuable timbers for commercial purposes, such, for example, as the teak forests of Burma, the sal forests of Northern, Central, and North-Eastern India, and the deodar and pine forests of the North-Western Himalaya.

(*c*) Minor forests, containing somewhat inferior kinds of timber, and managed for the production of wood, fodder, grazing and other produce for local consumption; these forests are of great importance in agricultural districts.

(*d*) Pasture lands.—These are not "forests" in the generally understood sense of the term, but grazing grounds managed by the Forest Department merely as a matter of convenience.

These four classes of forest are not always sharply divided from each other, and one and the same tract may to a certain extent be managed with more than one object.

Administration.—The forest business of the Government of India is carried out in the Department of Revenue and Agriculture. The Inspector-General of Forests is the head of the Forest Department and is the technical adviser to the Government of India in forest matters.

Territorial charges.—The various provinces are divided into one or more Forest Circles; each in charge of a Conservator of Forests; provinces containing three or more circles also have a Chief Conservator who is the head of the Department for his province. Circles are divided into a number of Forest Divisions, in charge of members of the Imperial or Provincial Forest Service; these Divisions in most cases correspond to civil districts. Each Division contains a number of Ranges in charge of junior members of the Provincial Service or of Forest Rangers or Deputy Rangers; heavy Divisions are also sometimes divided into Subdivisions. The Ranges are further subdivided into a number of beats or protective charges held by Forest Guards or in some cases by Foresters.

Non-territorial charges.—Apart from territorial charges there are various important posts of a non-territorial nature connected with Forest Research and Education, the preparation of Forest Working Plans, and other special duties. Among special posts may be mentioned that of Assistant Inspector-General of Forests, who in addition to Secretariat work, helps the Inspector-General of Forests in the scrutiny of working plans referred to in section 6.

The Forest Service.—The Forest Service comprises three branches:—

(1) The Imperial Service with a total personnel of 257 officers, consisting of the Inspector-General of Forests, Chief Conservators, Conservators, Deputy and Assistant Conservators. The Officers of this service are recruited in the United Kingdom, the present system of recruitment being by selection subject to the possession of an honours degree in some branch of Natural Science of an English, Welsh or Irish University, or of the B.Sc. degree in Pure Science of a Scottish University. Probationers are at present trained at a University possessing a forest school approved by the Secretary of State (Oxford, Cambridge and Edinburgh at present), this training being supplemented by a practical course, partly on the continent of Europe. A Forest Engineering branch has lately been added to the service.

(2) The Provincial Service with a total personnel of 260 officers, consisting of Extra Deputy and Extra Assistant Conservators, Officers for this service are recruited in India and trained at the Forest Research Institute, Dehra Dun, though a certain number of posts in this service are filled by the promotion of specially promising Rangers.

(3) The Subordinate Service, consisting of Forest Rangers (about 840), Deputy Rangers (about 900), Foresters (about 2,000) and Forest Guards (about 11,500). The Rangers are at present trained at three different centres—the Forest College at Dehra Dun (for provinces other than Burma, the Central Provinces and Madras), the Burma Forest School at Pyinmana (for Burma), and the Madras Forest College at Coimbatore (for Madras and the Central Provinces). These three institutions were established in 1878, 1898 and 1912 respectively. A scheme is now under consideration for the further decentralization of the training of Rangers, and it is probable that before long the number of training centres will be increased. The training of subordinates below the rank of Ranger is carried out in various local forest schools and training classes.

Research.—For the first fifty years of the existence of the Forest Department in India no attempt was made to organize the conduct of forest research, and thus to co-ordinate and elaborate the scientific knowledge so necessary to successful economic working. A commencement in organized forest research was at last made in 1906 by the establishment, at the instance of Sir Sainthill Eardley-Wilmot, then Inspector-General of Forests, of a Forest Research Institute at Dehra Dun. From that time onwards research work has been prosecuted energetically in spite of deficient accommodation. The Forest Research Institute, which is under the administrative control of the Inspector-General of Forests, is in the charge of a President. There are five main branches of research, namely Sylviculture, Forest Botany, Forest Economic Products, Zoology and Chemistry, each branch being in charge of a research officer. In addition specialists are appointed temporarily when necessary and are attached to the Institute to carry out investigations in subjects of particular economic importance. Thus a cellulose expert has been employed for some time to investigate possible new sources of paper-making materials, of which the forest of India contain abundant supplies, while more recently a tanning expert has been engaged to study the question of tanning materials.

Forest Products.—Forest produce is divided into two main heads—(1) Major produce, that is timber and firewood, and (2) Minor produce, comprising all other products such as bamboos, leaves, fruits, fibres, grass, gums, resins, barks, animal and mineral products, etc.,

The average annual volume of timber and fuel and the value of minor produce removed from State forests during the year 1921-22, is given in the following statement: —

Forest produce removed from State forests during the year 1921-22.

Agency of exploitation.	Major produce (volume).		Minor produce (value).			
	Timber.	Fuel.	Bamboos.	Grazing and fodder grass.	Other minor produce.	Total.
	c. ft.	c. ft.	Rs.	Rs.	Rs.	Rs.
By Government ..	16,809,862	21,780,923	76,393	29,859	23,37,078	24,43,330
By purchasers ..	96,612,588	136,780,927	13,32,686	27,81,431	26,83,135	67,97,252
By free grantees ..	2,434,884	14,205,170	28,292	3,75,444	3,21,970	7,25,706
By right-holders ..	4,041,720	68,730,000	68,563	33,63,375	4,12,088	38,44,026
Total ..	119,899,054	241,497,820	15,05,934	65,50,109	57,54,271	1,38,10,314

Forest Industries.—The important role which the forests of a country play in its general commercial welfare and in providing employment for its population is not always fully recognized. Fifteen years ago it was estimated that in Germany work in the forests provided employment for 1,000,000 persons while 3,000,000 persons, earning £30,000,000 a year, were employed in working up the raw material yielded by the forests. If accurate estimates were available for India, they would no doubt show that apart from the jungle population which is directly dependent on the forests and the large numbers of wood-cutters, sawyers, carters, carriers, raftsmen and others working in and near them, employment on an excessive scale is provided to persons engaged in working up the raw products. Among these latter may be mentioned carpenters, wheelwrights, coopers, boat-builders, tanners, rope-makers, lac-manufacturers, basket-makers, and many other classes of skilled labourers. The Indian census of 1911 gave 1,191,367 people and their dependents so employed in British India, and a further 394,097 in Native States, but these are probably below the actuals, as much forest labour is not whole-time labour, devoting seven or eight months in the year to forest work and the rest to agriculture. With the opening up of the forests, the extension of systematic working, the wider use of known products, and the possible discovery of new products, a steady and extensive development of industries dependent on the forests of India may be confidently anticipated in the future.

Financial Results.—The steady growth of forest revenue, expenditure and surplus during the past 50 years is shown in the following statement, which gives annual averages for quinquennial periods:—

Financial Results of Forest Administration in British India from, 1864-65 *to* 1918-19 (*in lakhs of rupees*).

Quinquennial period.	Gross revenue (average per annum).	(Expenditure average per annum).	Surplus (average per annum).	Percentage of surplus to gross revenue.
	Lakhs.	Lakhs.	Lakhs.	Lakhs.
1864–65 to 1868–69	27·4	23·8	13·6	36·4
1869–70 to 1873–74	56·3	39·3	17·0	30·2
1874–75 to 1878–79	66·6	45·8	20·8	31·2
1879–80 to 1883–84	88·2	56·1	32·1	36·4
1884–85 to 1888–89	116·7	74·3	42·4	36·2
1889–90 to 1893–94	159·5	86·0	73·5	46·1
1894–95 to 1898–99	177·2	98·0	79·2	44·7
1899–1900 to 1903–04	196·6	112·7	83·9	42·7
1904–05 to 1908–09	257·0	141·0	116·0	45·1
1909–10 to 1913–14	296·0	163·7	132·3	44·7
1914–15 to 1918–19	371·3	211·1	160·2	43·1

The financial year 1921-22 showed a total revenue of Rs. 5,83,16,071, an expenditure of Rs. 4,08,51,878, and a surplus of Rs. 1,74,64,193. The proportion of surplus to gross revenue was about 30.

Prospects.—The past work of the Forest Department has already borne fruit, not only in a steady rise of revenue but also in the improved condition of the forests resulting from careful protection and tending. Much has been done in the way of opening up the forests to regular exploitation; but there is still room for enormous development in this respect, for there are extensive areas of valuable forest as yet almost untouched, and these represent a vast capital locked up and not only lying idle but even deteriorating. Perhaps the two most pressing needs at present are the introduction of improved sylvicultural systems and the extension of roads and other export works to facilitate and cheapen extraction. These two must proceed simultaneously, since they are inter-dependent, for it is obvious that timber and other produce can be extracted far more economically if it is available in large quantities within a limited radius than if it is scattered in small quantities over large tracts of country; indeed this question must often decide whether extraction is possible or not. Sylviculture teaches us how to effect this concentration and is therefore the bed-rock on which future results, financial and otherwise, must rest; it is of little avail to seek and develop new markets for timbers and other products if these cannot be produced in regular and sufficient quantities and extracted at a reasonable cost.

Bibliography.—Quinquennial Review of Forest Administration in British India for the period 1911-15 to 1918-19. (Simla: Government Press). A large number of bulletins and other publications has been issued by the Forest Research Institute, and of these a list can be obtained from the Superintendent, Government Printing, India, Calcutta.

AREA of FOREST LANDS, OUTTURN of PRODUCE, and REVENUE and EXPENDITURE of FOREST DEPARTMENT

Province.	Area of Province	Forest Area.				Proportion of Forests to whole Area of Province	Outturn of Produce.		Revenue.	Expenditure.	Surplus.
		Reserved Forests.	Protected Forests.	Unclassed State Forests, &c.†	Total.		Timber and Fuel.	Minor Produce.			
	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.	Sq. miles.	Per cent.	Cub. ft.	Rs.	Rs.	Rs.	Rs.
Madras	142,387	18,825	..	500	19,325	13·6	23,511,000	22,93,388	53,81,246	45,30,486	8,50,760
Bombay	123,220	12,076	496	..	12,572	10·2	39,911,000	11,29,496	68,98,585	53,05,022	15,93,563
Bengal	78,668	4,859	1,708	4,030	10,627	13·5	17,317,000	4,16,080	21,84,763	13,36,750	8,48,013
United Provinces	106,720	7,373	4	65	7,442	7·0	34,913,000	18,86,622	87,79,781	70,43,578	17,36,203
Punjab	97,281	2,060	4,036	530	6,626	6·8	34,261,000	25,57,943	38,05,058	35,75,749	2,29,309
Burma (including Shan States)	226,911	29,934	..	115,822	145,816	64·3	82,441,000	9,81,383	1,89,75,060	73,07,014	1,16,68,046
Bihar and Orissa	82,984	1,751	1,272	10	3,033	3·7	18,509,000	2,50,428	8,10,602	5,89,118	2,21,484
Central Provinces & Berar	99,948	19,640	..	..	19,640	19·7	30,125,000	27,30,488	43,94,526	27,33,601	16,60,925
Assam	49,243	5,647	..	15,855	21,502	43·7	12,773,000	11,93,495	15,31,914	9,66,601	5,65,343
North-West Frontier Province	13,184	236	..	..	236	1·8	2,678,000	33,814	2,19,779	4,54,197	—2,34,418
Baluchistan	54,228	313	..	472	785	1·4	125,293	43,339	22,544	28,761	—6,217
Ajmer-Merwara	2,767	142	..	..	142	5·1	177,447	60,890	48,112	37,417	10,695
Coorg	1,582	520	..	..	520	32·9	311,249	18,342	4,27,551	4,60,758	—32,407
Andamans and Nicobars ..	3,143	85	..	2,122	2,207	70·2	1,601,000	4,919	6,24,374	13,27,930	—7,03,556
Total 1920-21 ..	1,082,266*	103,491	7,516	139,466	250,473	23·1	298,653,989	1,36,00,627	5,41,43,495†	3,64,19,907§	1,77,23,588§§
1919-20 ..	1,080,814*	103,003	7,941	14,005	250,949	23·2	339,515,833	1,28,77,188	5,36,75,739	3,17,63,199	2,19,12,540
1918-19 ..	1,080,794*	101,633	8,557	141,272	251,468	23·3	343,850,918	1,42,04,588	4,68,18,231	2,88,75,505	1,79,42,726
1917-18 ..	1,080,650*	101,233	8,752	141,527	251,512	23·3	328,666,279	1,36,75,668	4,09,69,257	2,11,57,063	1,98,12,194
1916-17 ..	1,078,585*	100,308	9,140	137,131	246,579	22·9	306,869,398	1,24,56,596	3,70,61,930	1,87,43,883	1,83,18,047
Totals. 1915-16 ..	1,079,481*	99,205	9,712	140,083	249,000	23·10	286,216,111	1,16,80,737	3,11,16,367	1,85,92,807	1,25,23,760
1914-15 ..	1,079,149	97,580	10,405	141,882	249,867	23·15	270,455,459	1,07,63,283	2,97,09,784	1,82,06,450	1,15,03,334
1913-14 ..	1,079,638	96,297	8,390	140,925	245,612	22·7	294,643,323	1,07,98,905	3,33,61,545	1,75,43,455	1,57,58,090
1912-13 ..	1,079,163	96,867	8,492	133,564	238,923	22·1	290,718,866	1,10,84,674	3,22,09,809	1,72,07,810	1,50,01,999
1911-12 ..	1,071,051	96,148	8,496	138,316	242,960	22·7	257,194,423	1,06,34,726	2,90,57,359	1,09,46,566	1,21,10,793

* Excludes Delhi Province and the British Pargana of Manpur (Central India).

† Unclassed state forests or 'public forest lands,' as they are often called, include in many provinces all unoccupied waste, often entirely devoid of trees. So the statistics do not necessarily represent the wooded area.

‡ Including receipts under the following heads of the sums stated against them—Imperial (Rs. 27,122), Imperial Forest College (Rs. 12,648).

§ Including expenditure under the following heads of the sums stated against them—Imperial (Rs. 1,68,993). Imperial Forest College (Rs. 4,57,484), Forest Survey (Rs. 90,448).

§§ Including deficits under the following heads of the sums stated against them—Imperial (Rs. 1,41,871), Forest College (Rs. 4,44,836), Forest Surveys (Rs. 90,448).

RUBBER CULTIVATION.

The most important rubber-yielding tree found growing naturally in the Forests of India is *Ficus elastica*, a very large tree of the outer Himalayas from Nepal eastwards, in Assam, the Khasia Hills and Upper Burma. It has also been cultivated in Assam in the Charduar plantation in the Tezpur Sub-Division, as also in the Kulsi plantation of the Gauhati Sub-Division in the Kamrup Division. There are also a number of other rubber-yielding trees found in the Indian and Burman forests from which rubber can be collected on terms quoted by Government. Attempts have been made to cultivate Para, Ceara and Castilloa in various parts of India and Burma. In India proper the chief attempts were made on the west coast, about 180 acres being planted from 1908 onward at Gersoppa. Similar attempts have been made in Madras: but at present Para rubber is being grown as a commercial product rather in Burma than the rest of India.

The **production of rubber in India** is confined to Assam, Burma, and the Madras Presidency:—

	Acres.	No. of trees
Assam	4,681	137,430
Madras	12,022	1,636,476
Burma	29,544	4,911,399
Total ..	46,247	6,685,305

The yield of Assam plantations is relatively small and the number of trees to the acre is much less than in Madras and Burma. The outturn of Madras in 1913 was more than double that of Burma, where most of the trees being less than six years old are not yet productive. All planting is stump planting about 9 to 12 months old. The trees can be tapped in four years from the date of planting. The average yield in Burma from 4 to 6 years old trees is 1½ to 3 lbs. per tree per year. The capital invested is from £22 to £25 per acre. The average cost of production is about 1*s.* 6*d.* to 1*s.* 10½*d.* per lb. The Government of India has now decided to collect annual statistics relating to the production of rubber.

There has been a steady development in the **exports of rubber** from India. There was in 1920-21 a record export of 14 million lbs. of rubber which was 11 per cent. above the previous year's although the demand created by the war had fallen off. This was chiefly due to the increased area tapped, namely, 69,000 acres which was estimated to yield nearly 14 million lbs. In 1921-22 the exports fell to 11 million lbs. the area tapped to 61,000 acres, and the yield to 9 million lbs. In 1922-23 Exports were 12 million lbs. Madras accounted for nearly 56 *per cent.* and Burma 44 *per cent.* of the total trade. The total production during the year is reported to be 11,820,286 lbs., as against 9,056,430, lbs. a year ago. There was a general increase in the year 1922-23 especially in Madras, Coorg and Cochin.

Bibliography.—For fuller details see "Dictionary of the Economic Products of India" and the abridged edition of the same published in 1908 under the title "The Commercial products of India" by Sir George Watts; and the "Commercial Guide to the Forest Economic Products of India" by R. S. Pearson, published by the Government Press, Calcutta, 1912.

MATCH FACTORIES.

Imports of matches in 1920-21 fell off from 15 to less than 12½ million gross in quantity and from Rs. 2,05 to Rs. 1,67 lakhs in value. In 1921-22 there was a rise in the value of the imports to Rs. 204 lakhs. This figure fell in 1922-23 to Rs. 1,62 lakhs. In the opinion of the Forest experts at Dehra Dun there is an abundance of raw material in this country for match manufacture.

Indian timbers for matches.—In an article on the Indian match industry which appeared in the *Indian Agriculturist* the woods of the following species are said to be employed in Burma for match splints: *Bombax insigne*, *B. malabaricum* (simul), *Anthocephalus Cadamba* (kadam), *Sarcocephalus cordatus*, *Spondias mangifera* (amra), and *Engelhardtia spicata* (palash). These woods are not the best for the purpose, but are those most easily procurable. There are other kinds of white wood, such as poplar, pine, willow, and alder, in abundant quantities, but they are difficult to extract and transport, and are therefore costly.

The attempts to manufacture matches in India have not hitherto been attended with great success, but recently two well-equipped factories have been started in Burma which give promise of good results. One of these is in Rangoon and is owned by Chinese; the other is at Mandalay, and is under European management. Further investigations are said to be necessary in order to settle the question as to the most suitable woods to employ, and when these have been brought to a satisfactory conclusion it is thought that Burma will be able to produce matches of first-class quality. It may be added that in 1912, the latest year for which complete statistics are available, there were six match factories in India.

The **Law in India** prohibiting the importation of the old sulphur matches as from July 1st 1913, has not seriously affected the position of the Swedish manufacturers, as they were able to supply another "strike-anywhere" match to take the place of the kind then prohibited, but as the new kind is dearer to manufacture the prices have gone up, and are likely to rise still further.

PAPER MAKING.

There are five large paper mills in the country working on up-to-date Western lines, viz., at Titagarh, Kankinara and Raniganj in Bengal, the Upper India Couper Mills at Lucknow and the Reay Mill at Poona. There are also two smaller mills at Bombay and Surat which make only country paper, and there are one or two other mills which recently were not working. The five large mills have a large Government connection, as the greater part of Government orders for paper is placed in India.

During the past year an interesting experimental paper-making plant has been installed at the Government of India Forest Research Institute at Dehra Dun. Specially designed to incorporate a new system patented by Mr. Raitt, Cellulose Expert to the Government of India, the object of this plant is to test the various paper-making fibres which are available over vast forest and hill areas in India and Burma, and thus encourage the establishment of pulp and paper mills on a commercial scale.

After many delays the Carnatic Paper Mills Company commenced operations at Rajahmundry, on the Godavari river, during the year, and it is estimated that the daily output will be ten tons of pulp and five tons of paper made from bamboos and paddy straw. In Southern India the Sri Minakshi Paper Mills, established many years ago as a small concern in Travancore State, appears to have taken a new lease of life and has ordered a new plant capable of turning out fifteen tons of paper per day, whilst in Assam a new company has been formed and is said to be waiting for the arrival of its plant. At Chittagong a new plant for manufacturing paper pulp from bamboos has commenced operations whilst another company has obtained a comprehensive concession for Bhabbar grass in the Punjab and is erecting a factory near the headworks of the Western Jumna Canal, about 200 miles from Lahore.

The possibility of utilising the dense growths of bamboo in the hinterland of Cuttack has again been under consideration during the year, and the project has been investigated afresh by Mr. Raitt on behalf of the Government of Bihar and Orissa. Mr. Raitt estimates that in this area alone there is sufficient raw material for an output of 10,000 tons of paper pulp per annum.

Raw Materials.—The existence of the local industry depends chiefly on the supply of Sabai grass which on account of unfavourable seasons sometimes yields short crops. It is of great importance, therefore, to look for materials according a constant outturn,and various reports have been published on the available paper-making materials. Considerable attention has been devoted to **Bamboo**, since1875 when it was found that this plant—of which there are four chief varieties in India—yielded a fibrous paper stock which made a quality of paper superior to esparto grass and at a considerably less cost. It was at that time estimated that one acre of bamboo would yield 10 tons of dried stems equivalent to 6 tons of merchantable cellulose. In 1905 Mr. R. W. Sindall was invited by Government to visit Burma with a view of enquiring into the possibility of manufacturing paper pulp. His report on the subject appeared in March 1906. He made numerous experiments with bamboo and woods of Burma and laid down lines along which further enquiry should be made. Subsequently Mr. W. Raitt, a pulp expert, was engaged at the Forest Research Institute in conducting tests on the treatment of bamboos by the soda and sulphate processes, the treatment of bamboo before boiling, with remarks on the utilisation of nodes and internodes. His results were embodied in the "Report on the investigation of Bamboo or Production of Paper-pulp," published in 1911. Mr. R. S. Pearson of the Forest Service, Dehra Dun, as the outcome of enquiries made throughout India published in 1912 a note on the Utilization of Bamboo for the manufacture of Paper-pulp. The yield per acre from bamboo is larger than that of grasses usually used for paper. The cost of working into pulp has been estimated to yield a product cheaper than imported unbleached spruce sulphite and unbleached sabai grass pulp. In 1915 Mr. Dhruva Sumanas published a pamphlet, Dendrocalamus Strictus Bamboo of the Dangs, as the result of investigations carried on in Bansda State.

In a paper read before the Royal Society of Arts in 1921 Mr. Raitt gave an answer to the question: "**What India can do** to fill the gap in the world's shortage of paper?" He said that he thought it was "a modest estimate to say that from bamboo, taking only that which is available under 'possible' manufacturing conditions, Burma, Bengal and South West India could produce ten million tons of pulp per annum, and Assam from Savannah grasses three million. India could therefore produce pulp for the whole world."

The leading Indian **paper grass** for the last thirty years has been the bhaib, bhabar, or sabai grass of Northern India. It is a perennial grass plentiful in drier tracts from Chota Nagpur and Rajmahal to Nepal and Garhwal. The Calcutta mills draw their supplies from Sahibganj, Chota Nagpur and the Nepal Terai. The quantity annually exported from Sahibganj is between three to four lakhs of maunds. The cutting in these districts is said to commence in October when the plants are six or seven feet high. Sabai grass yields from 36·6 to 45·5 per cent. of bleached cellulose. A report by Mr. R. S. Pearson, Forest Economist, Dehra Dun, on the use of **elephant grasses** in Assam was issued in 1919. The most important species of grass found in the areas in which investigation has been made are Khagra (*Saccharum spontaneum*) and Batta (*Saccharum narenga*), with patches of Nal (*Phragmites karka*) on the more swampy ground. Hand samples of the above grasses were sent to England to be tested on a laboratory scale, while several tons were sent to an Indian paper mill to be made into paper. The results were satisfactory and proved that a very fair quality of paper can be produced from these grasses at a relatively low price. Small samples of such paper can be obtained by persons interested in these grasses from the Forest Economist, Forest Research Institute, Dehra Dun, who can also supply further details.

Mines and Minerals.

Total value of Minerals for which returns of Production are available for the years 1920 and 1921.

——	1920. (Rupee=2s).	1921. (Rupee=1s. 4d.)	Increase.	Decrease.	Variation per cent.
	£	£	£	£	
Coal	9,297,853	8,673,377	....	624,476	—7·2
Petroleum	7,954,632	5,603,975	....	2,350,657	—29·6
Gold	2,733,115	2,050,576	....	682,539	—25·0
Manganese-ore (*a*) ..	3,586,072	1,537,068	....	2,049,004	—57·1
Lead and lead-ore ..	975,927	784,586	....	191,341	—19·6
Salt	1,446,409	742,147	....	704,262	—48·7
Silver	343,109	593,008	....	250,101	—29·7
Mica (*a*)	1,065,438	426,274	....	639,164	—60·0
Building Materials ..	454,750	422,219	....	32,531	—7·1
Saltpetre	500,854	357,032	....	233,822	—39·6
Tin and tin-ore	325,626	162,770	....	162,856	—59·4
Iron-ore	118,163	140,555	22,392	....	+18·9
Jadeite	180,728	126,535	....	54,193	—29·9
Ruby, Sapphire and Spinel	61,982	50,165	....	11,817	—19·1
Clays	40,812	37,378	....	3,434	—8·4
Chromite	79,970	36,492	....	43,478	—54·3
Copper-ore	42,250	32,560	....	9,690	—22·9
Monazite	40,231	30,959	....	18,272	—37·1
Tungsten Ore	139,707	29,292	....	110,415	—79·0
Magnesite	17,216	15,632	....	1,584	—9·2
Steatite	10,585	5,880	....	4,705	—44·4
Diamonds	4,125	4,865	740	....	+17·9
Alum	7,320	4,293	....	3,027	—41·3
Barytes	1,553	3,485	1,932	....	+124·4
Bauxite	5,331	3,280	....	2,051	—38·5
Gypsum	3,693	2,267	....	1,426	—38·6
Ochre	5,356	2,174	....	3,182	—59·4
Aquamarine and Beryl .	1,225	1,274	49	....	+4·0
Amber	1,666	1,123	....	543	—32·6
Fuller's earth	....	966	966	....	....
Asbestos	7,272	884	....	6,388	—87·8
Apatite	....	231	231	....	....
Antimony-ore	40	70	30	....	+75·0
Corundum	575	55	....	520	—81·7
Graphite	560	52	....	508	—90·7
Soda	....	24	24	....	....
Molybdenite	19	13	....	6	—31·6
Potash	25	....	....	25	....
Samarskite	12	....	....	12	....
Total ..	30,053,201	21,883,536	26,364	8,196,029	27·3
				—8,169,665	

(*a*) Export values.

The feature which stands out most prominently in a survey of the mineral industries of India is the fact that until recent years little has been done to develop those minerals which are essential to modern metallurgical and chemical industries, while most striking progress has been made in opening out deposits from which products are obtained suitable for export, or for consumption in the country by what may conveniently be called direct processes. In this respect India of to-day stands in contrast to the India of a century ago. The European chemist armed with cheap supplies of sulphuric acid and alkali, and aided by low sea freights and increased facilities for internal distribution by the spreading network of railways has been enabled to stamp out, in all but remote localities, the once flourishing native manufactures of alum, the various alkaline compounds, blue vitriol, copperas, copper, lead, steel and iron, and seriously to curtail the export trade in nitre and borax. The reaction against that invasion is of recent date. The high quality of the native-made iron, the early anticipation of the processes now employed in Europe for the manufacture of high-class steels, and the artistic products in copper and brass gave the country a prominent position in the ancient metallurgical world, while as a chief source of nitre India held a position of peculiar political importance until, less than forty years ago, the chemical manufacturer of Europe found among his by-products, cheaper and more effective compounds for the manufacture of explosives.

With the spread of railways, the development of manufactures connected with jute, cotton and paper, and the gradually extended use of electricity the demand for metallurgical and chemical products in India has steadily grown. Before long the stage must be reached at which the variety and quantity of products required, but now imported, will satisfy the conditions necessary for the local production of those which can be economically manufactured only for the supply of groups of industries.

Coal.

Most of the coal raised in India comes from the Bengal and Bihar and Orissa—Gondwana coal-fields. Outside Bengal and Bihar and Orissa the most important mines are those at Singareni in Hyderabad, and in Central Provinces but there are a number of smaller mines which have been worked at one time or another

Provincial production of coal during the years 1921 and 1922.

	1921 Tons.	1922 Tons.
Assam	312,465	348,103
Baluchistan	54,627	60,135
Bengal	4,259,642	4,328,986
Bihar and Orissa ..	12,990,481	12,711,328
Burma	300	172
Central Provinces ..	712,914	675,916
Punjab	67,242	67,180
Total	18,397,671	18,191,820

There is no doubt that India is not producing sufficient coal for her industries owing to a variety of reasons, the principal of which are (1) the reduction of output as a direct result of increased wages and (2) shortage of wagons, lack of siding accommodation and general transport difficulties. The first cause will be an extremely difficult one to remedy, as it has been found that increased earnings were not used by the workers to improve their conditions of life but were merely an incentive to increasing idleness. The railway difficulties will probably be removed during the next few years now that the railways are committed to a large capital expenditure programme, much of which will be utilised for the rehabilitation of rolling-stock and the supply of sidings and extra marshalling facilities.

	Tons.
(1) Production of coal in British India in 1922	19,010,986
(2) Imports by sea into British India of foreign coal (including coke and patent fuel) during 1922. (Private merchandise only.)	1,220,639
(3) Imports by sea into British India of foreign coal (including coke and patent fuel) for Government Stores during 1922	491,828
(4) Re-exports of foreign coal (including coke and patent fuel) during 1922. (Private merchandise only.)	72,944
(5) Exports of Indian coal (including coke and patent fuel) to foreign ports during 1922. (Private merchandise only.)	77,111
(6) Exports of coal (including coke and patent fuel) for Government Stores during 1922	7
(7) Exports of bunker coal during 1922	799,403

			Rs. as. p.
(8) Average rates of freight during 1922, per ton of coal by sea from	Calcutta to	Bombay	10 0 0
		Madras	7 5 0
		Rangoon	6 4 0
		Kurrachee	10 8 0

	Calcutta. Deshar-ghur.	Bombay Deshar-ghur.	Bombay Cardiff.	Kurrachee Indian Coal.
	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p
(9) Average prices (per ton) of Indian and Welsh coal at chief ports during 1922.]	14 8 0	33 8 0	39 5 10	35 6

IRON ORE.

Bengal and Bihar and Orissa are the only provinces in India in which iron ore is mined for smelting by European methods. Iron smelting, however, was at one time a widespread industry in India and there is hardly a district away from the great alluvial tracts of the Indus, Ganges and Brahmaputra in which slag heaps are not found. The primitive iron smelter finds no difficulty in obtaining sufficient supplies of ore from deposits that no European ironmaster would regard as worth his serious consideration. Early attempts to introduce European processes for the manufacture of pig-iron and steel were recorded in 1830 in the South Arcot District. Since that date various other attempts have been made but none proved a success before that now in operation near Barakar in Bengal. The site of the **Barakar Iron-Works** was originally chosen on account of the proximity of both coal and ore supplies. The outcrop of iron stone shales between the coal-bearing Barakar and Raniganj stages stretches east and west from the works, and for many years the clay ironstone nodules obtainable from this formation formed the only supply of ore used in the blast furnaces. Recently magnetite and hematite have been obtained from the Manbhum and Singhbhum districts, and the production from the last named district has largely replaced the supplies of ore hitherto obtained near the Iron-works. The Bengal Iron and Steel Company, Limited, have now given up the use of ores obtained from the neighbourhood of Barakar and Raniganj and are now obtaining most of their ores from the Kolhan Estate, Singhbhum. Some years ago the Bengal Iron Steel Co., Ltd., secured two deposits of iron-ore in Saranda (Singhbhum) forming parts of two large hill masses known as Notu Buru and Buda Buru respectively. Recent prospecting in this part of Singhbhum has led to the discovery of numerous additional deposits of iron-ore, the extension of which has been traced into Keonjhar and Bonai States in Orissa, a total distance of some 40 miles in a S. S. W. direction. At Pansira Buru, a portion of Notu Buru, the deposit has been opened up, and now feeds the Barakar ironwork. Pansira Buru rises to over 2,500 feet above sea level, the low ground on the west side being at about 1,100 feet above sea-level. The uppermost 400 to 450 feet of this hill has now been opened up, and the workings indicate the existence of a deposit about a quarter of a mile long, perhaps 400 feet thick and proved on the dip for about 500 feet. The ore body appears to be interbedded with the Dharwar slates, from which it is separated by banded hematite-jaspers. The ore itself is high-grade micaceous hematite, often lateritised at the outcrop. Cross-cuts into the interior of the deposit show that the hematite becomes very friable not far below the outcrop. In fact the characteristics of this ore, including the surface lateritisation, are almost exactly reproduced in the iron-ore deposits of Goa and Ratnagiri. **The Tata Iron and Steel Company** at Sakchi possesses slightly richer and purer ore-bodies in the Raipur district, supplies of ore are at present drawn from the deposits in Mayurbhanj. The ore-deposits have all been found to take the form of roughly lenticular leads or bodies of hematite, with small proportions of magnetite, in close association with granite on the one hand and granulitic rocks on the other. These latter have been noted in the field as charnockites, the term being employed, rather loosely no doubt, but probably in the main correctly, to cover types of pretty widely varying acidity. In still more intimate association with the ores than either of the foregoing were found masses of dense quartz rocks, frequently banded, and banded quartz-iron-ore rocks. These last are of the types so commonly associated with Indian iron-ores, but are here not so prominent as is usually the case.

Output.—There was an increase in the output of iron-ore of about 70 per cent. viz. from 558,005 tons valued at Rs.11,81,628 (£118,163) to 942,084 tons, valued at Rs. 21,08,320 (£140,555). This increased production was due largely to the increased activity of the Tata Iron and Steel Company, Limited, who blew in their third blast furnace (the Batelle furnace) in August 1919, the full effect of which was not felt until 1921 when the company produced 281,541 tons of pig iron, 125,336 tons of steel including rails, and 3,076 tons of ferro-manganese. The Bengal Iron Company record a slightly smaller output than in the preceding year, viz., 86,445 tons of pig iron and 27,219 tons of cast iron castings, with no production of ferro-manganese.

MANGANESE ORE.

This industry commenced some thirty years ago by quarrying the deposits of the Vizagapatam district, and from an output of 674 tons in 1892, the production rose rapidly to 92,008 tons in 1900 when the richer deposits in the Central Provinces were also attacked, and are now yielding a larger quantity of ore than the Vizagapatam mines. India now alternates with Russia as the first manganese-producing country in the world. The most important deposits occur in the Central Provinces, Madras, Central India, and Mysore—the largest supply coming from the Central Provinces. The uses to which the ore is put are somewhat varied. The peroxide is used by glass manufacturers to destroy the green colour in glass making, and it is also used in porcelain painting and glazing for the brown colour which it yields. The ore is now used in the manufacture of ferromanganese for use in steel manufacture. Since 1904, when the total output was 150,190 tons, the progress of the industry has been remarkable owing to the high prices prevailing. In 1905 production reached 247,427 tons; the following year it was more than doubled (571,495 tons), and in 1907 the figures again rose to 902,291 tons. In 1909, on account of the fall in prices the output contracted to 642,675 tons, but it almost regained its former position in 1910 when the production rose to 800,907 tons. In 1911 it fell to 670,290 tons. In 1916 the output was

645,204 tons valued f. o. b. at Indian Ports at £1,487,026. The ore raised in the Central Provinces is of a very high grade, ranging from 50 to 54 per cent. of the metal, and in consequence of its high quality is able to pay the heavy tax of freight over 500 miles of railway, besides the shipment charges to Europe and America, for the whole of the ore is exported to be used principally in steel manufacture in the United Kingdom, Germany, and the United States.

Manganese was one of the minerals which were largely affected by the war, the exports being restricted almost entirely to consignments to the United Kingdom, with a comparatively small quantity to the United States; the quantity produced in 1920 amounted to 736,439 tons, as compared with 537,995 tons in the previous year. In 1921 the output was 679,286 tons valued at £1,537,068 f. o. b. at Indian ports.

GOLD.

The greater part of the total output of gold in India is derived from the Kolar gold field in Mysore. During the last decade the production of this mine reached its highest point in 1905 when 616,758 ounces were raised. In 1906 the quantity won was 565,208 ounces and this figure fell to 535,085 ounces in 1907. The figures for the latter years reveal a small improvement. The Nizam's mine at Hutti in Hyderabad comes next, but at a respectable distance, to the Kolar gold field. This mine was opened in 1903. The only other mines from which gold was raised were those in the Dharwar district of Bombay and the Anantapur district of Madras. The Dharwar mines gave an output of 2,993 ounces in 1911 but work there ceased in 1912. The Anantapur mines gave their first output of gold during the year 1910, the amount being 2,532 ounces, valued at Rs. 1,51,800. Gold mining was carried on in the North Arcot district of Madras from 1893 till 1900, the highest yield (2,854 ounces) being obtained in the year 1898. The Kyaukpazat mine in Upper Burma was worked until 1903, when the pay chute was lost and the mine closed down. In 1902 dredging operations were started on the Irrawaddy river near Myitkyina, and 216 ounces of gold were obtained in 1904; the amount steadily increased from year to year and reached 8,445 ounces in 1909, but fell in subsequent years until, in 1922, it was no more than 24 oz. The small quantity of gold produced in the Punjab, the Central Provinces, and the United Provinces is obtained by washing. Gold washing is carried on in a great many districts in India, but there is no complete record of the amount obtained in this way. The average earnings of the workers are very small, and the gold thus won is used locally for making jewellery.

The continuous decrease in the output of gold in India from the maximum production of 616,728 ozs. reached in 1915, continued during the year 1921, when the total output of gold was 432,723 ozs., valued at £2,050,576, as compared with an output of 499,068 ozs., valued at £2,733,115 in the previous year. This decrease was due partly to the cessation of operations of the Hatti (Nizam's) Gold Mines, Limited, and to a decrease of some 50,000 ozs. from the gold mines of Kolar.

Quantity and value of Gold produced in India during 1920 and 1921.

	1920		1921		Labour.
	Quantity.	Value.	Quantity.	Value.	
Burma—	Oz.	Rs.	Oz.	Rs.	
Katha	3·04	202	15·66	927	112
Upper Chindwin ..	7·69	717	26·503	3,115	
Hyderabad	12,390	5,88,695	....	....	....
Madras—					
Anantapur	13,645	8,03,535	(*a*) 10,108	721,359	535
Mysore	4,72,958	2,59,33,544	(*b*) 422,533	3,00,30,373	23,344
Punjab	61·18	4,274	39·43	2,853	45
United Provinces ..	2·7	199	*Nil.*	*Nil.*	*Nil.*
Total ..	499,067·61	2,73,31,158	432,722,593	3,07,58,627	27·045

(*a*) Fine gold. (*b*) Contains 380,780·49 ozs. fine gold.

PETROLEUM.

Petroleum is found in India in two distinct areas—one on the east, which includes Assam, Burma, and the islands off the Arakan coast. This belt extends to the productive oil fields of Sumatra, Java, and Borneo. The other area is on the west, and includes the Punjab and Baluchistan, the same belt of oil-bearing rocks being continued beyond the borders of British India to Persia. Of these two the eastern area is by far the most important, and the most successful oil fields are found in the Irrawaddy valley. Yennangyaung is the oldest and most developed of these fields. Native wells have been at work here for over 100 years, and in 1886, prior to the annexation of Upper Burma, the output is estimated to have averaged over 2 million gallons a year. Drilling was begun in 1887. The Yenangyat field yielded a very

small supply of petroleum before 1891, in which year drilling was started by the Burma Oil Company. Singu now holds the second place among the oil fields of India. Petroleum was struck at the end of 1901, and in 1903, 5 million gallons were obtained. In 1907 and 1908 the production of this field was 43 million gallons, and after a fall to 31¼ million gallons in 1910 it rose to 56½ million gallons in 1912. Several of the islands off the Arakan coasts are known to contain oil deposits but their value is uncertain. About 20,000 gallons were obtained from the eastern Barongo Island near Akyab, and about 37,000 gallons from Ramri Island in the Kyaukpyu district during 1911. Oil was struck at Minbu in 1913, the production for that year being 18,320 gallons which increased to nearly 4 million gallons in 1912. The existence of oil in Assam has been known for many years and an oil spring was struck near Makum in 1867. Nothing more, however, was done until 1883, and from that year up till 1902 progress was slow. Since that year the annual production has been between 2½ and 4 million gallons.

On the west, oil springs have been known for many years to exist in the Rawalpindi and other districts in the Punjab. In Baluchistan geological conditions are adverse, and though some small oil springs have been discovered, attempts to develop them have not hitherto been successful.

Quantity and value of Petroleum produced in India during 1920 and 1921.

	1920		1921	
	Quantity.	Value.	Quantity.	Value.
Assam—	Gals.	Rs.	Gals.	Rs.
Digboi	5,206,850	2,57,630	5,069,461	2,50,833
Badarpur	8,151,322	6,11,349	4,461,473	3,34,611
Burma —				
Akyab	9,770	2,747	9,780	2,821
Kyaukpyu	30,075	8,459	27,869	19,124
Minbu	3,835,198	10,78,649	3,706,831	11,58,385
Singi	95-256,753	2,67,90,962	104,167,749	2,92,97,179
Thayetmyo	91,329	25,686	66,372	33,186
Upper Chindwin	1,022,766	2,87,653	1,182,782	2,95,695
Yenangyat	3,176,231	8,93,315	2,510,533	7,84,541
Yenangyaung	176,285,048	4,95,80,170	184,420,141	5,18,68,165
Punjab—				
Attock	50,640	9,495	59,306	14,826
Mianwali	852	213	930	261
Total ..	293,116,834	7,95,46,328	305,683,227	8,40,59,627

Imports of **Kerosine Oil** amounted in 1913-14 to 68,850,000 gallons. This figure fluctuates considerably from year to year, having risen in 1919-20 as high as 94,135,000 gallons, and having fallen in 1920-21 to 57,192,000 gallons.

Amber, Graphite and Mica.—Amber is found in very small quantities in Burma, the output for 1922 being 26 cwts. valued at Rs. 16,840. Graphite is found in small quantities in various places but little progress has been made in mining except in Travancore. The total output in 1921 was 25 tons. India has for many years been the leading producer of mica, turning out more than half of the world's supply. In 1914, owing to the war, the output was only 38,189 cwts. compared with 43,650 cwts. in 1913. Owing to necessary restrictions with regard to the export of mica, the output fell off considerably in the year 1915, but subsequent demand in the United Kingdom for the best grade of ruby mica led to a considerable increase in production during the following years. The declared output of mica in 1921 shows a decrease of nearly 14,000 cwts., over that of the previous year, having dropped from about 76,517 cwts. valued at Rs. 1,06,54,380 in 1920 to 30,944 cwts. valued at Rs. 63,94,113 in 1921.

Tin, Copper, Silver and Lead.—The only persistent attempt to mine tin is in Burma. The output was for some time insignificant but rose in 1913 to 116 tons valued at £46,000 which fell to £38,000 in 1914. In 1922 Burma yielded 217·87 tons. Copper is found in Southern India, in Rajputana, and at various places along the outer Himalayas, but the ore is smelted for the metal alone, no attempt being made to utilize the by-products. After a set-back the industry recovered in 1920 and the outturn in 1921 was 23,089 tons valued at £32,560. The only **Lead** mine of any importance being worked in the Indian Empire is that of Bawdwin, where a very large body of high-grade lead-zinc-silver ore has now been blocked out. For many years the smelting operations of the Company were directed to recovering lead and silver from the slags left by the old Chinese miners. Those slags, however, are now practically exhausted, and the mine has reached a stage of development at which a steady output of ore is assured. In 1922 the output was 39,214 tons valued at Rs. 1,41,71,392.

Silver is obtained as a by-product in the smelting of the lead-zinc ores of Bawdwin. The total output in 1922 was 4,205,584 oz. valued at Rs. 1,00,39,362.

Zinc.—A monograph on zinc ores issued by the Imperial Institute in 1917 says that during the past fifty years zinc ores have received but little attention in India, and no production was recorded until 1913. In 1914 the production was 8,553 tons, and although the

output fell to 196 tons in 1915, there is a prospect of India becoming an important producer of zinc ore in the future. Important silver-lead-zinc deposits occur at Bawdwin, in Tawngpeng State, one of the Northern Shan States in Upper Burma. The mines are connected with the Mandalay-Lashio Branch of the Burma railways by a narrow-gauge line 51 miles long, the lines meeting at Manhpwe, which is about 544 miles from Rangoon. They were worked for many centuries by the Chinese for silver, and have long been known to contain zinc ore; until recently, however, no serious attempt appears to have been made to market the ore for its zinc values. In 1907 the present undertaking was started by the Burma Mines, Ltd., with the idea of recovering the lead from the old slag heaps left by the Chinese, estimated at 125,000 to 160,000 tons, and later to work the deposit. Smelting operations on these slags were first carried out at Mandalay, but later the works were transferred to Namtu, about 13 miles below the mines on the narrow-gauge railway. The deposits, which comprise an area of about 2,500 acres, have now been taken over by the Burma Corporation, Ltd., and one is being worked.

Gem Stones.—The only precious and semi-precious stones at present mined in India are the diamond, ruby, sapphire, spinel, tourmaline, garnet, rock-crystal, agate, cornelian, jadeite and amber. Amber has already been referred to; of the rest only the ruby, sapphire and jadeite attain any considerable value in production and the export of the latter has declined owing to the disturbances in China, which is the chief purchaser of Burmese jadeite. The output of diamonds is comparatively unimportant. The output of the ruby mines in 1922 was 231,160 carats valued at Rs. 7,27,312. In 1922 an exceptionally valuable ruby of nearly 23 carats was found which is of such rare size and quality that it is anticipated it will fetch several thousand pounds sterling.

Wolfram.—Owing to the continued depression in the wolfram market, Tungsten ore is now nowhere extracted except in the Tavoy District, where it occurs chiefly as a constituent of mixed concentrates. The total for that district, includes 312 tons of mixed tin and wolfram ore and shows for 1922 an increase of about 45 tons over the output in 1921. This increase is ascribed to the fact that a scheme was in force in the district throughout the year, whereby the Local Government suspended the levy of dead rent and royalty and guaranteed bank advances to mine-owners in respect of mixed tin and wolfram concentrates.

Radio-active Minerals.—The General Report of the Director of the Geological Survey of India for 1913 includes a brief report by R. C. Burton on an occurrence of pitchblende at mica mines near Singar, Gaya district, Bengal. The pitchblende occurs as rounded nodules in a pegmatite that is intrusive in mica schists. Other minerals occurring in the pegmatite are mica, triplite, ilmenite, tourmaline, and uranium ochre; whitish columbite, zircon, and torbernite have also been recorded. Of these minerals triplite is stated to be the commonest.

The importance of the find of uranium oxide impregnating the triplite led to the discovery of weathered pitchblende, and as the pits were deepened the weathering became less and less until pure pitchblende was obtained. In the six months from July 1913 to February 1914, eight hundredweight of pitchblende was obtained from Abrakhi Hill together with six tons of uranium earth debris, five to six hundred tons of triplite and two tons of tantalite. These ores were raised under a prospecting license in respect of Abrakhi Hill alone and in March 1914, a mining lease for thirty years was obtained in respect of sixty square miles of the Singar estate. The first intention was to work only the five square miles round Abrakhi and a syndicate was formed for this purpose, which on the outbreak of war, was refused a Trading License on account of the German element in it.

Labour in Mines.

The question of the labour supply presents difficulties which are not encountered in countries where mining is a special calling. The majority of the persons working at the Indian coal mines are agriculturists, and the supply of labour, as experience has recently shown, depends to a material extent on the condition of the agricultural industry. "The major portion of those employed," says a report by the Department of Statistics, "are the aboriginal Dravidians from the mountainous country of Chota Nagpur and the Central Provinces, but a large number of other castes is also employed, particularly in the outlying fields. The majority of the workmen follow the vocation of agriculture as well as mining and return to their homes during the period of sowing and reaping, the result being that at such times the output of many of the mines is greatly restricted. At the Makum collieries of the Assam Railway and Trading Company, where the labour question continues to be a very difficult one, nearly a third of the total labour force are Mekranis, Chinese, and Nepalese. The Chinese have, however, proved unsatisfactory, and it is unlikely that they will in future be recruited." With the increase in the depth of working the need for a skilled mining class will become accentuated, and if the price of coal remains at a sufficiently high level, further development in the introduction of coal-cutting plants may take place. During the period of high prices some nine years ago cutting plants were introduced in order to augment the output. These worked successfully, but the cost proved to be high and as labour conditions improved the machines were discarded.

Inspection of Mines.

During the year 1922 the daily average number of persons working in and about the mines regulated by the Indian Mines Act was 228,511, as compared with 249,663 in the previous year. This is a decrease of 21,152 persons or 8·47 per cent. Of these persons 137,017 worked underground and 91,494 on the surface.

142,103 were adult males, 78,806 were adult females and 7,602 were children under 12 years of age.

Accidents.—During the year 1922, at mines regulated by the Indian Mines Act, 1901, there were 205 fatal accidents, being a decrease of 27 on the number which occurred in 1921, and a decrease of 4 on the average number in the preceding five years.

These accidents involved the loss of 243 lives or 50 less than in 1921. Of these persons 218 were males and 25 females. In three separate accidents the number of lives lost was 13, 8 and 4 respectively. In four cases three lives, and in seven cases 2 lives were lost. There were in addition 202 serious accidents involving injuries to 300 persons. The subsequent remarks under this heading refer only to fatal accidents.

The causes of these accidents have been classified as follows:—

Cause.	Number of accidents.	Percentage of total number of accidents.
Misadventure	120	58·54
Fault of deceased	61	29·76
Fault of fellow-workmen	9	4·39
Fault of subordinate officials	7	3·41
Fault of management	6	2·93
Faulty material	2	0·97
Total ..	205	100·00

There was an improvement in respect of accidents from falls of roof and sides. There were 109 such accidents, as compared with 136 in 1921. Many of them were due to persons working in prohibited places, and frequently the victims had deliberately broken down or passed through a fence. The exercise of more vigilance by the supervising staff would have prevented many of these accidents. In some cases the supervising staff was insufficient in number. Twenty-one fatal accidents causing the loss of twenty-six lives occurred in quarries and surface cuttings.

There were more accidents in shafts. The number was 26, as compared with 17, in the previous year. Two of these accidents were due to overwinding and one involved the loss of eight lives. Another accident was due to the fall of a guide rope which was being fitted in a shaft and in this accident three persons were killed.

Accidents on haulage roads were fewer. There were 20 such accidents, as compared with 30 in 1921.

There were five fatal explosions of firedamp causing twenty-one deaths. One of these occurred in a thin seam in a long-wall face and caused the death of thirteen persons. Another, which occurred in narrow gallery workings, caused the death of four persons.

The number of accidents from explosives decreased from 14 in the previous year to 9 in 1922. Nine lives were lost. Most of these accidents were due to carelessness in the handling and use of gunpowder.

There were three accidents caused by electricity.

The Indian Electricity Rules which include a comprehensive code of rules regulating the use of electricity in mines were brought into operation on 31st July 1922. The Electric Inspector of Mines, after a close inspection of most of the electric plant in the provinces of Bengal and Bihar and Orissa, reported that many of the installations were on modern lines and required little or no alteration to bring them into compliance with the rules. In some of the older installations considerable improvements have been effected, mine owners generally being ready to comply with the new requirements.

The **death rate** per thousand persons employed above and below ground was 1·06 while that of the preceding five years was 1·08. At coal mines only these figures were 1·13 and 1·18 and at mines other than coal 0·77 and 0·76. At all mines in the United Kingdom during the ten years ending with and including 1920 the average death-rate per thousand persons employed underground was 1·36 as compared with 1·46 for all Indian mines.

The death-rate per million tons raised at coal mines was 11·50 while that of the preceding five years was 11·12. At coal mines in the United Kingdom, during the ten years ending with and including 1919 the death-rate per million tons raised was 5·13.

Deaths occurring in each class of mines were as follows: 209 in coal mines, 7 in salt mines, 2 in wolfram mines, 3 in mica mines, 5 in tin mines, 8 in silver-lead mines, 5 in manganese mines, 1 in a gold mine and 3 in an iron mine.

Twenty-one persons lost their lives by explosions of gas, 57 by falls of roof, 65 by falls of side, 35 in shafts, 9 by explosives, 20 by haulage, 11 by other accidents underground, and 25 on the surface.

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CHEMICAL SERVICES COMMITTEE.

The Chemical Services Committee, which was appointed by the Government of India in October 1919, under the Presidentship of Professor J. F. Thorpe, issued its report and made its recommendations in 1920.

The terms of reference to the Committee were:—

(1) To consider whether an All-India Chemical Service is the best and most suitable method of overcoming the difficulties and deficiencies pointed out by the Indian Industrial Commission. (2) In the event of the Committee approving the principle of an All-India Service, to devise terms of recruitment, employment and organisation; to indicate the extent to which chemists already in Government employ should be included in that service; and to suggest what should be the relations of the proposed organisation with the public and with Departments of the Government of India and of Local Governments. (3) In particular to frame proposals for the location, scope and organisation of institutions for chemical research.

The following is a summary of the chief recommendations:—

(1) That a chemical service should be constituted.

(2) That the service should be called the ndian Chemical Service.

(3) That the service should be controlled by a Director-General.

(4) That a Central Imperial Chemical Research Institute should be erected at Dehra Dun under the Director-General of the Chemical Services as Director, assisted by a number of Deputy Directors.

(5) That each Deputy Director should be in charge of a separate Department and that, in the first instance, there should be four Departments, (*a*) Inorganic and Physical Chemistry, (*b*) Organic Chemistry, (*c*) Metallurgical Chemistry, (*d*) Analytical Chemistry.

(6) That a Provincial Research Institute under the control of the Local Government should be erected in each Province near the chief seats of industry in that Province, and that each Provincial Research Institute should be under a Director of Research.

(7) That the **functions of the Central Imperial Institute** should be as follows:—

To create new industries and to carry out the development of new processes up to the "semi-large" scale, or further if necessary: to investigate those problems of a fundamental character, arising from the work of the Provincial Institutes, which have been transferred to the Central Institute by the Local Director of Research in consultation with the Director General. Such problems will be those which have no apparent immediate practical importance, but which in the opinion of the Director-General and the Director of Researches are likely o lead to discovery of fundamental industrial importance affecting the industries of the countrty generally assist in the co-ordination of the work in progress in the Provinces, both by means of personal discussion between the officers of the Central and Provincial Institutes during the course of the tours made by the Director-General and the Deputy Directors, and by means of periodical conferences of Provincial and Imperial officers to carry out such analytical work as may be required and to correlate the methods of analysis in general use throughout the country; to maintain a Bureau of information and Record Office; and to issue such publications as are considered necessary.

(8) That the **functions of the Provincial Research Institutes** should be as follows:—

To maintain close touch with the works chemists and with the works generally and to work out any problems which may be submitted to them; to develop and place on an industrial scale new industries which have been previously worked out on the laboratory and "semi-large" scale by the Central Imperial Institute; to carry out such other work as may be necessary to establish and foster new industries peculiar to the Province; to carry out such analytical work of a chemical character as may be required in the Province, and to erect and control substations in such parts of the Province as the development of industry may require.

(9) That, under 8 above, arrangements should be made by which a firm supplying a problem should have the use of the solution for an agreed period of time prior to its publication.

(10) That members of the service should be lent to private firms as occasion demanded and should during the period of their service be paid an agreed sum by the firms.

(11) That the Research Institutes should not undertake manufacture in **competition with private enterprise**, but that chemical industries developed in accordance with 8 above should be handed over to private firms as soon as practicable.

(12) That whenever necessary experts, should be employed to establish chemical industries based on known processes.

(13) That the work of the Central Imperial Institute should be controlled by a **Board** of which the Director-General will be Chairman and which will comprise the Deputy Directors and such other persons as the Government of India may determine.

(14) That the Central Imperial Institute should have no administrative control over the Provincial Research Institute, but that no appointment as Director of Research should be made without consulting the Director-General.

(15) That the Director-General and Deputy Directors should visit Provincial Research Institutes periodically and co-ordinate the work done in each.

(16) That chemists employed at Provincial Research Institutes should be appointed in the first instance by the Local Government in consultation with the Director of Research and the Director-General.

(17) That chemists so appointed should be members of the Chemical Service and should be seconded for service under the Provincial Governments and be paid by them.

(18) That agricultural chemists should not at present be included in the service.

(19) That a Ministry of Science should be created as soon as practicable.

(20) That the Deputy Director in charge of Analytical Chemistry should co-ordinate the methods of analysis in use throughout India and should act in an advisory capacity to the various Provincial Government Analysts who should be attached to each Provincial Research Institute.

(21) That Provincial Government Analysts should be under the control of the Directors of Research and should take over the chemical work now carried out by the Chemical Examiner and the Government Test House.

(22) That the question of the connection of the Indian Institute of Science, Bangalore, with the Chemical Service should await proposals from the Council of the Institute.

(23) That a Bureau of Information and Record Office, a Library, and a Museum should be attached to the Central Imperial Institute and to each Provincial Research Institute.

(24) That a **Chemical Survey of India** should be carried out at the earliest possible moment.

(25) That the Government of India should give maintenance and equipment grants to students to enable them to undergo the training in chemical research required for recruitment.

(26) That liberal grants, free from the customary accounts, restrictions, should be given for the initiation of the scheme and for the development of industries through the medium of chemical research.

Action on this report has been suspended.

CREMATION.

Cremation as a means of disposing of the dead is commonly adopted throughout India by the Hindus, but has been little adopted among the Europeans in India. A crematorium was started some years ago in Calcutta close to the Lower Circular Road Cemetery, at a cost of Rs. 40,000. But the return for this expenditure is disappointing. Only five or six cremations take place in Calcutta each year, in spite of the fact that the fee for cremation has been fixed by the Cremation Society of Bengal at the very low figure of Rs. 30, subject to reductions in the case of poor families. The reason for this is thought to be that, when possible, Europeans go home to die, and the Native Christians and Eurasians are very largely Roman Catholics among whom a prejudice exists against this form of the disposal of the dead. In Bombay arrangements have recently been made for a small area in the Sewri Cemetery to be walled in, and for cremations to be carried on within it in the primitive style of the country, but in such a way as to preserve the ashes.

The Opium Trade.

Two descriptions of opium must be distinguished. *Bengal* opium which is manufactured from poppy grown in the United Provinces; and *Malwa* opium which is almost entirely produced in certain Native States in Central India and Rajputana.

Bengal Opium.—Cultivation of poppy is only permitted under license. The cultivator to whom advances are made by Government free of interest is required to sell the whole of his production to the Opium Factory at Ghazipur at a rate fixed by Government, now Rs. 7/8 per seer of 70° consistency. The area licensed for cultivation has in recent years been much reduced as a consequence of the agreement between the Government of India and the Chinese Government, and is now restricted to the United Provinces. The following are the figures of the area under cultivation and of production in 1917-18: Bighas cultivated, 331,216: Gross produce in Maunds, 32,321: number of chests manufactured, 25,146. At the Factory two classes of opium are manufactured:

(1) "Provision" opium intended for export to foreign countries. This opium is made up in balls or cakes, each weighing 3·5 lbs., 70 cakes weighing 140½ lbs. being packed in a chest.

(2) "Excise" opium intended for consumption in British India. This is made up in cubic packets, each weighing one seer, 60 packets being packed in one chest. It is of higher consistency than "provision" opium.

"Provision" opium is sold by public auction in Calcutta, the quantity to be sold being fixed by Government. This quantity has been reduced in recent years in accordance with the agreement with China, the figures being 15,440 chests in 1911 and 6,700 chests in 1912. Exports to China have been stopped altogether since 1913.

Malwa Opium.—The poppy from which Malwa opium is manufactured is grown chiefly in the Native States of Indore, Gwalior, Bhopal, Jaora, Dhar, Rutlam, Mewar and Kotah. The British Government has no concern with the cultivation of the poppy, or the manufacture of the opium: but it used to regulate, before exports to China were stopped, the import of Malwa opium into, and the transport through, its territories. As the chief market for Malwa opium was China, and as the States in which the drug is produced had no access to the sea, except through British territory, the British Government were able to impose a duty on the importation of the drug on its way to Bombay for exportation by sea.

No statistics of cultivation or production are available. The poppy is sown in November, the plants flower in February, and by the end of March the whole of the opium has been collected by the cultivators who sell the raw opium to the village bankers. It is then bought up by the large dealers who make it up into balls of about twelve ounces and store it until it is ready for export, usually in September or October. The opium is of 90° to 95° consistency and is packed in half chests: considerable dryage took place in the case of new opium while transported to Bombay.

Sales of Malwa opium for export to China have ceased since January 1913 and the trade has become extinct since 17th December of that year when the last shipment was made. Practically the whole of the Malwa opium exported from Bombay went to China. There is no market for it in the Straits Settlements. A few chests annually are shipped to Zanzibar.

Revenue.—The revenue derived by the Government of India from opium in recent years is as follows:—

	£
1915-16	1,913,514
1916-17	3,160,005
1917-18	3,078,903
1918-19	3,229,000
1919-20	2,088,000
	Rs.
1920-21	3,72,85,000
1921-22	3,03,24,000
1922-23	3,98,68,000
1923-24 (Budget estimate)	3,93,12,000

Agreement with China.—The fluctuations in the revenue derived from opium are directly attributable to the trade conditions arising out of the limitation of opium exports. In 1907 being satisfied of the genuineness of the efforts of the Chinese Government to suppress the habit of consuming opium in China, the Government of India agreed to co-operate by gradually restricting the amount of opium exported from India to China. In 1908 an arrangement was concluded by which the total quantity of opium exported from India was to be reduced annually by 5,100 chests from an assumed standard of 67,000 chests. Under a further agreement, signed in May 1911, the cessation of the trade was to be accelerated on evidence being shown of the suppression of the native production of opium in China, and in accordance with this agreement a further limitation was placed on exports to Chinese ports. The reduction of exports led to an increase in the price of the drug in China and a corresponding rise in the price obtained in India at the auction sales. For some considerable time, however, in 1912 the trade in China was paralysed by the imposition by Provincial Governors in defiance of instructions from the Central Government of restrictions on the importation and sale of Indian opium. Stocks accumulated rapidly at Shanghai and Hongkong and the position in December 1912 had become so acute that a strong and influential demand was made on the Government of India to relieve the situation by the suspension of sales. Sales were accordingly postponed both of Bengal and Malwa opium and in order to afford the Malwa trade the most complete relief, the Government of India undertook to purchase for its own use 11,253 chests of Malwa opium which remained to be exported in 1913. The present position is that the export trade to China has ceased since 1913.

GLASS AND GLASSWARE.

The total value of the glass and glassware imported into India in 1922-23 amounted to Rs. 260 lakhs compared with Rs. 222 lakhs in the previous year. The imports of glassware in India are showing an upward tendency, they being in 1913-14 over Rs. 190 lakhs in value, *i.e.*, over the quinquennial average of Rs. 161 lakhs. Austria Hungary and Germany before the outbreak of the war exported bangles, beads, bottles, funnels, chimneys and globes, etc., to the value of Rs. 116 lakhs in 1913-14. The value of average imports from the enemy countries during the five pre-war years was Rs. 93 lakhs or about 57% of the trade. With their disappearance from the Indian market, imports from Japan increased to 71% from 8%, the pre-war average. United Kingdom increased her shipments of sheet and plate glass, which before 1914 came largely from Belgium. Japan, however, could not meet the Indian demand, and hence renewed and pioneer efforts were made in India to satisfy the needs of the Indian consumer. After the war imports from what was the Dual Monarchy quickly revived.

Manufacture of Glass in India.—Glass was manufactured in India in centuries before Christ and Pliny makes mention of "Indian Glass" as being of superior quality. As a result of recent archæological explorations, a number of small crude glass vessels have been discovered indicative of the very primitive stage of the Industry. But no further traces of ancient Indian Glass Industry as such survive; yet, it is certain that by the sixteenth century it was an established Industry producing mainly bangles and small bottles. The quality of the material was inferior and the articles turned out were rough. Beyond this stage, the industry had not progressed until the nineties of the last century. Manufacture of glass in India on modern European lines dates from the nineties of the last century, when some pioneer efforts were made in this line. Since then a number of concerns have been started, a number of them have failed, while some are still clinging to life owing to war conditions. They mainly devote themselves to the manufacture of bangles and lampware side by side with bottle-making on a small scale. This, therefore, is the criterion which determines the two well-defined classes of the Industry in its present stage, (i) indigenous Cottage Industry and (ii) the modern Factory Industry.

(i) The indigenous Cottage Industry which is represented in all parts of the country, but has its chief centres in Firozabad District of U. P., and Belgaum District, in the South, is mainly concerned with the manufacture of cheap bangles made from "glass cakes or blocks" made in larger Factories. The industry is at present in a flourishing state and supplies nearly one-third of the Indian demand for bangles. The quality has been improved by the discovery of new glazing processes and for the present the turnover in this line has gone up to 20 lakhs of rupees a year. But these bangles have now to face a very hard competition from Japan whose "silky" bangles are ousting the old type Indian ones.

(ii) The modern Factory type of organization of this Industry is just in its infancy at present. The existing Factories either stop at producing glass cakes for bangle as in Firozabad or simple kind of lampwares and bottles. With the existing state of knowledge and machinery in India they can neither produce sheet and plate glass, nor do they pretend to manufacture laboratory or table glass. Artistic glassware is out of the question and the private capitalists who have to run their concerns mostly with commercial ends do not think it worth their while to spend money and labour on it. War caused a great decrease in volume—though not so much in value which was much increased—of the imports of the lampware, etc., and in order to meet the Indian demand for them, new Factories were started and old revived, which produced only cheap and simple kind of lampware and bottles on small scale. The total production of these Indian Glass Works has not been exactly estimated, but it is generally supposed that they were able to meet in these war years nearly half the Indian demand for this kind of glassware. There are at present 14 Factories engaged in the production of lampware, of which two or three only produce bottles and carboys also. The chief centres for the former kind are Bombay, Jubbulpore, Allahabad, and Bijhoi and Ambala; while bottles are only manufactured at Naini and Lahore, and recently at Calcutta.

During the latter years of the war period, a number of Glass Works were opened in the Bombay Presidency and adjoining districts, local manufacture having been stimulated by the cessation of imports of German, Austrian and Belgian glass.

Causes of failure.—Records of the earlier ventures have shown that the failures in some cases were due in part at least to preventible causes, prominent among which were (1) Lack of enlightened management. (2) Lack of proper commercial basis, as in some cases the proprietors had a number of other more larger concerns to look to. (3) Bad selection of site. An ideal site for a Glass Factory would be determined by the (*a*) nearness of quartz and fire-clay, (*b*) nearness of fuel, and (*c*) by the nearness of market. At least two must be present. In some concerns, two were absent. (4) Specialisation was lacking, some factories in their initial stages trying to manufacture three or four different kinds of glassware simultaneously like lampware, bottles, and bangles, etc. (5) Paucity of sufficient fluid capital for initial expenses for machinery or other improvements or even in some cases for running the concern in the beginning.

But beyond these there are certain real and special causes that contributed to the failure of

some of these and hinder the progress of the rest. Chief among them are (1) The Industry is in its infant stage and hence such failures are but incidental. (2) No expert guidance in this line, there is a lack of men and good literature. (3) Paucity of skilled labour of higher type. The present Indian workmen in this line and blowers are few in number and illiterate. They, therefore, master the situation and are unamendable to management. (4) Heavy cost of good fuel, the works usually being situated where good sand and quartz can be obtained, and consequently, in most cases, at a great distance from the coal-fields. (5) To a certain extent, competition from Japan and other European countries.

Alkali used is almost entirely of English manufacture being Carbonate of Soda 98-99% in a powdered form. This Alkali has almost completely taken place of the various Alkaline Earths formerly employed by the Glass Bangle manufactures as the latter cannot be used in the manufacture of glass which is to compete with the imported article. These points must be carefully noted for future guidance.

The Industry developed considerably under war conditions; but in peace times, in this transition stage, immediate efforts must be made in the direction of what the Indian Industrial Commission say in their Report (Appendix E)., *viz.*: "The Glass Industry, even in its simplest form is highly technical and can be efficiently carried on only by scientifically trained managers and expert workmen. The present stage has been reached by importing men, only partially equipped with the necessary qualifications, from Europe and Japan, and by sending Indian students abroad to pick up what knowledge they can. The glass industry is a closed trade and its secrets are carefully guarded, so that the latter method has not proved conspicuously successful."

Bibliography—Indian Industries Commission Report (Appendix); Indian Munitions Board, Industrial Handbook, etc. "Notes on Glass Manufacture." By C. S Fox. (Bulletin No. 29 of Indian Industries and Labour, 1922.)

WILD BIRDS' PLUMAGE.

The Bill for prohibiting the importation into England of wild birds' plumage, which was introduced into Parliament in 1913, was the occasion of a fierce controversy on the nature of the plumage traffic. Organised opposition to the Bill, although successful in preventing it from becoming law, failed to convince the public that the plumage trade was not one of great cruelty. The controversy continued with unabated vigour until May 1921, when an agreement was arrived at between the two parties. The most important clause in the agreement stipulates that within four months of the Bill becoming law an Advisory Committee shall be appointed by the Board of Trade This Committee will consist of an independent chairman, two expert ornithologists, three representatives of the feather trade, and four other independent members. The function of this Committee will be to advise the Board of Trade as to additions to and removals from the existing schedule (ostrich and cider duck) of birds whose plumage may be imported. The passing of the Plumage Bill will thus place England abreast of the United States and of her own daughter Dominions in the suppression of a barbarous industry, as all legitimate methods of breeding birds for their plumage will be safeguarded as definite exceptions under the Plumage Bill.

Plumage birds.—The birds most killed on account of their plumage in India are paddy birds, egrets, kingfishers, bustards, junglefowl, pheasants, paroquets, peafowl, hoopoes and rollers. Egrets and rollers (popularly known as Blue Jays) are perhaps the birds which have been most extensively killed in the past, and of these, egrets have attracted the greatest attention. There are three species met with in India: the Large, Smaller and Little Egrets. All three are pure white slim birds which develop during the breeding season a dorsal train of feathers, which elongates and becomes "decomposed" as it is expressed, that is to say, the barbs are separate and distinct from each other, thus forming the ornamental plume or aigrette for which these birds are much sought after and ruthlessly destroyed. Thirty years ago the exports were valued at over six lakhs in one year, but since 1895 the export trade has steadily diminished. But, though legitimate exports have been stopped, the trade is so lucrative as to lead to many attempts at smuggling. Within a recent period of 12 months the Bombay Preventive Department, for example, seized egret plumes worth Rs. 2,19,047 in India and £44,000 in London. The rupee value represents the sum which the exporters paid to those who took the feathers from the birds, so the loss to the trade was considerable. In addition, penalties varying from Rs. 5,000 to Rs. 10,000 each and amounting altogether to Rs. 59,175 were inflicted on the ten merchants concerned in attempting to export the feathers. A case was reported from Rangoon in 1916 of a man being found in possession of 22 lbs. of egret feathers valued at Rs. 66,000. Although frequently denied, there seems very little reason to doubt, that within the last decade egrets have been successfully bred in captivity by the fisherfolk in the province of Sind. But whether such birds can be bred without cruelty, and if so whether the export of their plumage could be legalised without encouraging barbaries in other areas of the peninsula, is a question which can only be decided as a result of a searching and exhaustive inquiry.

Legislation.—Indian legislation on the subject will be studied with interest by those who have followed the course of legislation on this subject in other countries. Until 1887 no legislation was considered necessary in India. An Act of that year enabled local governments and municipal and cantonment authorities to make rules prohibiting under penalties the sale or possession of wild birds recently killed or taken during their breeding seasons, and the importation into any municipal or cantonment area of the plumage of any wild birds during

those seasons; and local governments were empowered to apply these provisions to animals other than birds.

Afterwards, in 1902, action was taken under the Sea Customs Act to prohibit the exportation of the skins and feathers of birds, except feathers of ostriches and skins and feathers exported *bona fide* as specimens illustrative of natural history. Act VIII of 1912 goes much further than the previous law. It schedules a list of wild birds and animals to which the Act is to apply in the first instance, enables local governments to extend this list, empowers local governments to establish "close times," presumably during the breeding seasons, in the whole of their territories or in specified areas, for wild birds and animals to which the Act applies, and imposes penalties for the capture, sale, and purchase of birds and animals in contravention of the "close time" regulations, and for the sale, purchase and possession of plumage taken from birds during the close time. There is power to grant exemptions in the interests of scientific research, and there are savings for the capture or killing by any person of a wild animal in defence of himself or of any other person, and for the capture or killing of any wild bird or animal in *bona fide* defence of property.

One defect in the law may be noticed When an exporter is discovered, the Customs Department can on a magistrate's warrant have his house searched and seize the feathers found there to produce as evidence that he is engaged in the trade. But they have to return the feathers and can only take possession of them if they are discovered presently in course of export.

BREWERIES.

Statistics compiled from official returns show that there were, in 1912, 22 **breweries** in British India, of which one did not work during the year. Fifteen of these are private property and seven are owned by six joint-stock companies with a nominal capital of Rs. 26,71,000, of which Rs. 22,26,260 was paid up at the end of 1912-13. Eight of the breweries are located at stations in the Himalayas from Murree to Darjeeling. The largest brewery is the one at Murree, the Bangalore, Solon, Rawalpindi, Kasauli, Poona, and Mandalay breweries standing next in the order shown. In the pre-war year **production** was 3,651,000 gallons. This figure rose in 1918 to 8,214,000 gallons, but sank after the war, being in 1920 only 3,536,000 gallons.

A substantial quantity of beer produced locally is consumed by the British troops in India. In 1907 the Army Commissariat purchased some 38 per cent. of the total production and the average purchases in the five years 1903-1907 amounted to 2,633,616 gallons yearly. From the 1st January, 1908, the contracts with Indian breweries for the supply of malt liquor to British troops have been discontinued, each British regiment being left free to make its own arrangements to obtain the necessary supply; as a result, the figures of Army consumption are no longer readily available.

GRAIN ELEVATORS.

The question of adopting elevators for the handling of Indian grain has engaged attention for some time and has assumed increased importance in the light of the railway congestion experienced in recent years and more particularly in the grain season. In the last three years great strides have been made by other countries in the adoption or perfecting of the elevator system, and a large mass of contemporary data on the subject has been brought together by the Commercial Intelligence Department. Since the subject is one that cannot receive adequate consideration in India till the facts are before the public, these have been embodied in a pamphlet entitled *Indian Wheat and Grain Elevators*, by the late Mr. F. Noel-Paton, Director General of Commercial Intelligence to the Government of India. The work gives full particulars regarding India's production of wheat, and shows that less than one-eighth of the crop is exported. It describes the conditions under which the grain is held and the risks that it runs. It is pointed out that the cultivator has no adequate means of preserving his wheat and that he is constrained to sell at harvest time: also that the prices then obtained by him are considerably lower than those usually current in later months. The constant nature of the European demand is explained and an attempt is made to gauge the probability that the enormously increased quantities of wheat to be expected when new irrigation tracts come into bearing would be accepted by Europe at one time and at a good price, or could be economically transported under a system in which a few months of congestion alternated with a longer period of stagnation. Figures are given which suggest that in practice the effect of equipping railways to do this is to intensify the evil and so to engage in a vicious circle. The author explains the structural nature of elevators and their functions as constituted in other countries. Particulars are given as to the laws that govern their operations in such countries

TRADE MARKS.

The **Indian Merchandise Marks Act** (IV of 1889) was passed in 1889, but its operation in the earlier years was restricted, especially in Calcutta, in consequence of the lack of adequate Customs machinery for the examination of goods. In 1894, with the introduction of the present tariff, the Customs staff was strengthened for the examination of goods for assessment to duty, and this increase enabled examination to be made at the same time for the purposes of the Merchandise Marks Act. The Act was intended originally to prevent the fraudulent sale of goods bearing false trade marks or false trade descriptions (as of origin, quality, weight, or quantity). While the Act was before the Legislature a provision was added to require that piece-goods should be stamped with their length in yards. In this respect these goods are an exception, for the Act does not require that other descriptions of goods should be stamped or marked, though it requires that when goods are marked the marks must be a correct description. **The number of detentions** under the Act during the twenty years ending 1912-13 has been :—

Average of the five years ending	.. .. ..	1897-98 1,386
" " " " "	..	1902-03 1,411
" " " " "	..	1907-08 1,198
" " " " "	..	1912-13 1,960

Detention is but rarely followed by confiscation, and there have been only 100 such cases during the stated twenty years. Usually, detained goods are released with a fine, and this procedure was followed in 19,232 cases out of the 29,774 detentions ordered in the same period. In 10,364 cases the detained goods were released without the infliction of a fine. In this period of twenty years 42 per cent. of the detentions were on account of the application of false trade marks or false trade descriptions. In 36 per cent. of the cases detention was ordered because the country of origin was either not stated or was falsely stated, and in 21 per cent. because the provisions of the Act for the stamping of piece-goods had been infringed.

HIDES, SKINS AND LEATHER.

India's local manufactures of skins and leather have steadily increased in recent years. Previous to the outbreak of war, the trade in raw hides in this country was good; there was a large demand for hides, and prices ruled high. While in the continental markets stocks were high owing to overtrading in the previous year, the United States had a shortage which was estimated at approximately two million pieces. On the declaration of war, the trade which had up till then been brisk was seriously dislocated. Exports to enemy countries, especially to the great emporium of Indian hides, Hamburg, were stopped, and exporters had to find new markets for the raw material. The raw hide business of India, it is well known, has hitherto been largely, if not quite entirely, in the hands of German firms or firms of German origin. Germany has had the largest share of India's raw hides. In the four months before the outbreak of war she took 39 per cent. of the total exports. In 1912-13 she took 32 per cent. and in 1913-14, 35 per cent. Raw hides were exported to Trieste in considerable quantities whence they were taken to Germany or Austria. In the four months before the outbreak of war 15 per cent. of India's exports passed through Trieste; in 1913-14 the percentage was 21.

Exports.—The exports in raw hides and skins in 1922-23 amounted to 45,700 tons valued at Rs. 571 lakhs as compared with 48,500 tons and Rs. 598 lakhs in the previous year. In raw hides Germany maintained the lead as before though the quantity shipped to that country decreased.

Conditions of the Trade.—The trade in hides and skins and the craft in leather manufacture are in the hands either of Mahomedans or of low caste Hindus and are on that account participated in by a comparatively small community. The traffic is subject to considerable fluctuations concomitant with the vicissitudes of the seasons. In famine years for instance the exports of untanned hides rise to an abnormal figure. The traffic is also peculiarly affected by the difficulty of obtaining capital and by the religious objection which assigns it to a position of degradation and neglect: it has thus become a monopoly within a restricted community and suffers from the loss of competition and popular interest and favour.

No large industry has changed more rapidly and completely than that of leather. By the **chrome process**, for example, superior leather may be produced from the strongest buffalo hides in seven days, from cowhide in twenty-four hours, and from sheep and goat skins in six to eight hours; and these operations formerly took thirty days or as much as eighteen months. Of these changes the native tanners of India were slow to take advantage, but in spite of general backwardness the leather produced by some of the tanneries, especially those under European management, is in certain respects equal to the best imported articles. But since the outbreak of war progress has been more rapid and considerable quantities of special forms of chrome leather, for which Indian hides are particularly suitable, have found a ready market in London.

Protecting the industry.—The report of the Industrial Commission pointed out that the principal difficulty at present in the hides and leather industry was the lack of organisation and expert skill. Government action to foster the industry was first taken in September 1919, when a Bill was introduced in the Imperial Legislative Council further to amend the Indian

Tariff Act, 1894. The effect of this Bill was officially described as follows: "It is to impose an export duty of 15 per cent. on hides and skins with a rebate of 10 per cent. on hides and skins exported to other parts of the Empire, and there tanned. Its object is to ensure that our hides and skins shall be converted into fully tanned leather or articles of leather so far as possible in India and failing this in other parts of the Empire, instead of being exported in a raw state for manufacture in foreign countries." Sir George Barnes who was in charge of the Bill and described the tanning industry as one of the most promising Indian industries explained that "the present position is that we have in India at the present time some hundreds of tanneries for the tanning of hides, a large number of which have come into existence in order to satisfy military requirements during the war. We have in fact the foundations of a flourishing tanning industry, but there is reason to fear that it may tend to dwindle and disappear with the diminution of military requirements, if some other support is not given. We want to keep this industry alive, and we believe that in this case protection in the shape of a 15 per cent. export duty is justifiable and ought to be effective. It is clearly just also that the same measure of protection should be extended to the tanners of skins whose business, as I have already stated, was injured by the necessities of the war. Though Indian tanneries have enormously increased in number during the past three years, they can only deal with a comparatively small proportion of the raw hides and skins which India produces, and it is to the advantage of India and the security of the Empire generally that this large surplus should, so far as possible, be tanned within the Empire, and with this end in view the Bill proposes a 10 per cent. rebate in respect of hides and skins exported to any place within the Empire. I should add that it is proposed to limit by notification the benefit of this rebate to hides and skins actually tanned within the Empire; and Indian hides and skins re-exported from an Empire port for the purpose of being tanned abroad will not be entitled to any rebate."

Indigenous methods.—India possesses a large selection of excellent tanning materials such as Acacia pods and bark, Indian sumach, the Tanner's cassia, Mangroves, and Myrabolans. By these and such like materials and by various methods and contrivances, hides and skins are extensively cured and tanned and the leather worked up in response to an immense, though purely local, demand.

INVENTIONS AND DESIGNS.

A handbook to the **Patent Office** in India, which is published by the Government Press, Calcutta, gives the various Acts, rules, and instructions bearing on the subject together with hints for the preparation of specifications and drawings, hints for searchers and other valuable information that has not hitherto been readily accessible to the general public in so convenient a form. In the preface Mr H. G. Graves, Controller of Patents and Designs, explains the scope of the Patent laws in India and indicates wherein they differ from English law and procedure.

The foundation of patent legislation throughout the world lies in the English "Statute of Monopolies" which was enacted in 1623, the 21st year of King James the First. In part this Act has been repealed, but the extant portion of the more important section 6 is as follows:—"Provided also that any declaration before mentioned shall not extend to any letters patent and grants of privilege for the term of fourteen years or under, hereafter to be made of the sole working or making of any manner of new manufactures within this realm to the true and first inventor and inventors of such manufactures, which others at the time of making of such letters patent and grants shall not use, so as also they be not contrary to the law nor mischievous to the State by raising prices of commodities at home, or hurt of trade, or generally inconvenient; the said fourteen years to be accomplished from the date of the first letters patent or grants of such privilege hereafter to be made, but that the same shall be of such force as they should be if this Act had never been made, and of none other."

The **existing Indian patent law** is contained in the Indian Patents and Designs Act, 1911, supplemented by the Indian Patents and Designs (Temporary Rules) Act, 1915, and by the Rules made under those Acts. The Patent Office does not deal with trade marks or with copyright generally in books, pictures, music and other matters which fall under the Indian Copyright Act III of 1914. There is, in fact, no provision of law in British India for the registration of Trade Marks which are protected under the Merchandise Marks Act (IV of 1889) which forms Chapter XVIII of the Indian Penal Code.

On the whole, Indian law and procedure closely follow that in the United Kingdom for the protection of inventions and the registration of designs, as they always have done in matters of major interest. One main difference exists, however, as owing to the absence of provision of law for the **registration of trade marks**, India cannot become a party to the International Convention under which certain rights of priority are obtainable in other countries.

The first Indian Act for granting exclusive privileges to inventors was passed in 1856, after an agitation that had been carried on fitfully for some twenty years. Difficulties arising from an uncertainty as to the effect of the Royal Prerogative prevented earlier action, and, owing to some informalities the Act itself was repealed in the following year. In 1859 it was re-enacted with modifications, and in 1872 the Patterns and Designs Protection Act was passed. The protection of Inventions Act of 1883, dealing with exhibitions, followed, and then the Inventions and Designs Act of 1888. All these are now replaced by the present Act of 1911.

The existing Acts extend to the whole of British India, including British Baluchistan and the Santhal Parganas. This of course includes Burma, but it does not embrace the Native States. Of the latter three, *viz.*, (1) Hyderabad (Deccan), (2) Mysore, (3) Gwalior have ordinances of their own, for which particulars must

be obtained from the Government of the States in question as they are not administered by the Indian Patent Office in Calcutta. The object of the Act of 1911 was to provide a simpler, more direct, and more effective procedure in regard both to the grant of patent rights and to their subsequent existence and operation. The changes made in the law need not here be referred to in detail. They gave further protection both to the inventor, by providing that his application should be kept secret until acceptance, and to the public, by increasing the facilities for opposition at an effective period. At the same time a Controller of Patents and Designs was established, with power to dispose of many matters previously referred to the Governor-General in Council, and provision was made for the grant of a sealed "patent" instead of for the mere recognition of an "exclusive privilege." The provisions of the Act follow with the necessary modifications those of the British Inventions and Designs Act of 1907.

Printed Specification of applications for patents, which have been accepted (8 annas per copy), may be seen free of charge, together with other publications of the Patent Office at the following places:—

AHMEDABAD..R. C. Technical Institute.
ALLAHABAD..Public Library.
BANGALORE .Indian Institute of Science.
BARODA. ..Department of Commerce and Industry.
BOMBAY ..Record Office.
" ..Victoria Jubilee Technical Institute, Byculla.
..The Bombay Textile and Engineering Association, No. 1A, Sussex Road, Parel.
CALCUTTA ..Patent Office, No. 1, Council House Street.
" ..Bengal Engineering College, Sibpur.
CAWNPORE ..Office of the Director of Industries, United Provinces.
CHINSURAH ..Office of the Commissioner, Burdwan Division.
CHITTAGONG .Office of the Commissioner, Chittagong Division.
DACCA ..Office of the District Board, Dacca.
DELHI ..Office of the Deputy Commissioner.
HYDERABAD .Industries and Commerce Department of His Highness the Nizam's Government.
KARACHI ..Office of the City Deputy Collector.
LAHORE ..Punjab Public Library.
LONDON ..The Patent Office, 25, Southampton Buildings, W. C.
MADRAS ..Record Office, Egmore.
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OILS AND OIL CAKES.

The production of oil-seeds—rape, mustard, linseed, sesamum, and ground-nut—was estimated in 1920-21 at 2,762,000 tons of which 4,89,000 tons, or 18 per cent. were exported. Exports in 1922-23 amounted to 1,177,000 tons valued at Rs. 27,35 lakhs, showing an increase of 60 per cent. in quantity and 57 per cent. in value compared with the previous year.

A pamphlet on the subject recently published by the Commercial Intelligence Department points out that it is both economically and industrially unsound for India to export her oil seeds instead of manufacturing the oils and oil cakes in India. It allows other countries to reap the manufacturers' profits and at the same time deprives Indian agriculture of the great potential wealth, as cattle-food and manure, contained in the oil cakes. An immense quantity of oil is, as a matter of fact, already manufactured in this country by more or less crude processes. Village oil mills worked by bullocks and presses worked by hand exist in all parts of the country and supply most of the local demand for oil. There has also been a great increase in recent years in the number of oil mills worked by steam or other mechanical power. These crush all the commoner oil seeds and development has been especially marked in the case of mustard oil, castor oil and groundnut oil. In spite of all this there has been a perceptible diminution in the export of oil from India, particularly of cocoanut oil and linseed oil, and an increase in the export of oil seeds, which is particularly marked in the case of copra and groundnuts. The situation created by the War has naturally led to too much discussion of the possibility of developing on a large scale the existing oil-milling industry in India.

There are three difficulties with which any proposal to develop in India an **oil-milling industry on a great scale is faced. In the first** place, there exist high protective tariffs in European countries which encourage the export from India of the raw material rather than the manufactured product. Secondly, there is a better market for the oil cake in Europe than in India and the freight on oil seeds is less than the freight on cake. Thirdly, it is much easier and less expensive to transport oil seeds by sea than it is to transport oil. While this has been the position in the European markets, Indian made oils, other than cocoanut oil, have made enough headway in Eastern markets to suggest the possibility of a development of those markets.

The problem of finding a market for **oil cakes** is equally important. The value of oil cakes is much better appreciated in Europe than in India. The Indian cultivator is prejudiced against the use of machine-made cake as a cattle food or as manure because he considers that it contains less oil and therefore less nourishment than the village-made cake. He is therefore unwilling to buy it except at a reduced price. His prejudices on this point have no justification in fact since experts are agreed that mill cake is a better food for cattle than village-made cake. Even when the mill cake contains less oil than the village cake, there is still more oil in the cake than cattle can digest. The excess of oil in the village cake, where it exists, is a drawback and not an advantage to the use of the cake as food. A considerable amount of demonstration work has been done by the Agricultural Departments of Government in order to remove the cultivator's prejudices and there is said now to be an increasing demand for most classes of mill cake.

Life Insurance.

There are no publications from which a complete statistical survey of the various branches of insurance work in India can be obtained, but the official "Report on the working of Life Assurance Companies doing business in British India," published by the Government of India, (ninth issue, 1921-22) gives much information in regard to the 75 Life Assurance Companies subject to the provisions of the Indian Life Assurance Companies Act, 1912.

The oldest of the Indian Companies were established in Madras about 90 years ago: Bombay has none older than the Bombay Mutual, the Oriental and the Bombay Widows' Pension Fund which were established about 40 years ago. Life Assurance seems not to have been started in Bengal until much later, and it was not until 1906 that many Companies were established either in that Presidency or elsewhere in India. The year 1919 was marked by the formation of several new companies, more particularly in Bombay.

In his introductory note to the official publication already mentioned, Mr. H. G. W. Meikle, Actuary to the Government of India, dealing with the year 1921-22, says:—

The summaries of the Indian companies show that the life assurance funds now amount to 8¾ crores and the total income exceeds 2 crores. The sum assured paid in claims by death or maturity exceeds 93 lakhs. The net interest income is nearly 49 lakhs, and exceeds the total expenses of management, including commission, by only 6 lakhs. The outstanding feature of these tables is the large amount of depreciation of assets which the Indian Life Assurance Companies have had to meet; the total exceeds 2 crores, a sum which is equal to the interest income during the past five years. Dividends to shareholders paid out of the life assurance funds amount to 1 per cent. of the sums paid as claims to policy-holders. Before the Life Act came into force almost all of the proprietary Indian companies used to pay dividends to their shareholders, irrespective of whether or not their life assurance funds permitted of such dividends being declared. Now no dividend is paid by any company out of its life funds except out of profits ascertained by an actuarial valuation of its assets and liabilities.

The average **amount of sum assured** under the policies now being issued by Indian companies is larger than in previous years and now exceeds Rs. 1,900. The average sum assured under policies issued in India by the British companies is more than twice as large. Under most of the policies issued by Indian companies the premiums are payable by monthly instalments, while with the policies of the other companies a much larger number of the premiums are renewable yearly and half-yearly than monthly. Although these factors are partly responsible for the Indian companies having the higher expense ratios, it is unfortunately the case that some of the Indian companies conduct their business on very extravagant lines.

The **total assets** of the Indian companies is nearly 10 crores. They consist of Indian Government securities to the extent of 80 per cent. of their total holdings in stock exchange investments.

The total amount of the paid up capital of the Indian companies exceeds 51 lakhs.

The new sums assured under ordinary life assurance policies issued by Indian companies during the year under review was nearly 5½ crores. There has been a steady increase each year since 1916 when the amount was only 1¾ crores. Endowment Assurance policies, under which the sum is payable at some stipulated age or at previous death, constitute 83 per cent. of the total business.

The average rate of annual premium payable under the policies issued by Indian companies is nearly 5·4 per cent. of the sum assured. The corresponding rate deduced from the returns to the British Board of Trade is lower, the difference being partly due to the fact that endowment assurances constitute a larger proportion of the policies issued by Indian than by British companies.

Rates of Premium and Surrender value.—If it becomes necessary for any company to adopt a higher rate of interest for the purpose of the valuation, it is quite likely that the reserve values of many policies will be found to be less than the guaranteed surrender values. In such circumstances the rates of surrender values hitherto guaranteed will be unsuitable for new policies as well as a source of weakness under the existing ones. There is yet another consideration which must now also influence the grant of correct surrender values. The expense ratio shows signs of advancement on account of the general rise in rents, printing, stationery, etc., as well as the advance in salaries consequent on the general rise in prices. The rate at which surrender values are now allowed ought, therefore, to be largely reduced. At the same time it will probably be found that the rates of premium should be revised so as to give effect to the increased cost of procuration and management of business as well as to the higher rate of interest now obtainable. The higher interest would bring about a reduction in the rates of premium unless this benefit be counterbalanced by the increased loading now found to be necessary to meet expenditure. There are many other factors which must be taken into account in fixing on suitable surrender values and in the calculation of premium rates. The questions should not be decided without sound actuarial advice.

Rates of Mortality in India.—Actuaries in this country are frequently asked for a table which will show the expectation of life in India. Sometimes this is asked for without any information being given as to the use to which the table is desired to be put. The rates might, for instance, be those applicable to selected Indian male lives assured, to the wives and daughters of Europeans in Government service, to the wild Hazaras from across the frontier or to the widows of P. & O. lascars. In every civilised country there are many different standard tables of mortality. The rates vary not only with occupation, sex, etc., and are different for annuitants and lives assured, but vary with almost each different class of policy under which

The report by the Actuary to the Government of India for 1922-23 has not been received up to the time of going to press in March, 1924.

the lives are insured. In India the problem is further complicated owing to her heterogenous population which differ from one another in their traditional occupation, mode of living, social and religious customs, etc., in a more marked manner than in any European country. It is thus not possible to get tables of mortality which can rightly be claimed as applicable to each and all of the almost innumerable different classes of lives in this country, but it will probably be of help in this direction if the main characteristics of some of the more recent important mortality investigations which have come to notice relating to lives of residents in India be contrasted with well-known British standard mortality tables. For instance, it has been found that for members of the Indian Civil Service the expectation of life at ages over 30 is equal to that shown in the OM table for lives between 2 and 3 years younger. In the first few years of service in India the death rate in the I. C. S. is much heavier than the rate experienced after the first period of furlough and almost as heavy as for other members of the service 20 years older. For British officers in the Indian Army the death rate during the greater portion of service was, before the war, much heavier than the OM table. After retirement it was less than the rate in that table for lives of the same age, being about equal to the rate for those 2 years younger. The wives and daughters of members of hese two services experience a lighter mortality than the select rates in the British Offices table for female annuitants. In the uncovenanted services of Government the rate of mortality applicable to members is approximately equal to those for lives 4 years older in the HM table. For wives and daughters of those in the uncovenanted services the expectation of life is about equal to the ultimate rate for lives two years older in the British Offices table for female annuitants.

It is impossible to differentiate correctly between the rates applicable to each of the many different races in India, but it has been found that the expectation of life of Mahomedan lives assured is less than that of Hindus, which again is less than that of Parsees. The rates of mortality and expectation of life deduced from the Indian census are not claimed to be more than an approximate indication of the actual rates prevailing. This unsatisfactory state of affairs must continue so long as the data relating to births and deaths, as well as to the ages at the date of the census remain as defective as has hitherto been the case.

Actuarial Valuations.—Of the 51 existing Indian companies 39 have submitted the results of actuarial valuation of their assets and liabilities. The majority have undergone valuation more than once, and altogether 72 valuation reports have been submitted by the companies now existing. In the case of 24 companies the result of the latest valuations disclosed a surplus. In 8 of the remaining 15 companies the deficit was covered by the paid up capital, thus proving solvency but precluding the payment of either bonus or dividend. In the remaining 7 cases it became necessary either to call up more capital or alter the policy contracts. Thus only 12 companies out of a total of 51 have not undergone any actuarial valuation. Four of these transact business which is not readily susceptible of actuarial valuation and the remaining 8 are newly started companies which have not yet reached the stage of having a valuation.

Mutual Companies.—With one exception, all the Indian companies shown as established within the last 20 years are proprietary companies with a share capital; but of the older companies, the great majority are mutual companies. These mutual companies generally have very small funds and it is found that payment of the full deposit prescribed in section 4 of the Life Act sometimes presses unduly on their resources, and as payment of the full deposit also interferes with the formation of new mutual companies, Government will be prepared to consider any application from an Indian mutual company for permission to pay a smaller deposit. One or two of the existing Life Offices are called "Mutual" companies even although they have share capital; such nomenclature should be avoided in the case of companies established hereafter, as there is generally a recognised technical meaning attached to the use of the word "Mutual" in connection with life assurance, in consequence of which its use by a company having a share capital is likely to be misleading.

Since the passing of the Life Act twenty-four Indian life assurance companies have gone into liquidation.

Provident Insurance Societies.—Although several of the Indian Life Assurance companies formerly in existence may deservedly have had very undesirable reputations, it must be remembered that a great deal of discredit has been brought on the better class of such companies owing to the existence of a large number of Provident Societies. The essential difference between a Life Assurance Company and a Provident Insurance Society is that the company is subject to the Life Act and not to the Provident Insurance Societies Act if, under insurances payable at the death or survivance of any one life, it undertakes either to pay sums which in the aggregate exceed Rs. 500 or to receive premiums which in the aggregate exceed Rs. 25 in any one year where the period for which the premiums are payable is unlimited, or Rs. 250 altogether where such period is limited. If, as may happen in the case of a dividing society, the sum assured payable at death is not fixed but may in certain contingencies exceed Rs. 500, the society is subject to the Life Act. The fact of either the sum assured or the premiums exceeding those limits under any other form of insurance than life assurance does not make the society subject to the Life Act.

Sixteen years ago there were about 1,200 societies in existence in India of the Provident Insurance Society type. Now 29 only remain, 5 of which are proprietary and the rest mutual. Ten of these societies do ordinary life assurance business, one is a widows' fund and another transacts sickness insurance business. These 12 societies could with advantage undergo actuarial valuation. The remaining 17 societies either work on the dividing plan without any minimum guarantee, or on the death call system, and are consequently not susceptible of actuarial valuation. They, however, are mostly in a moribund state. Eight of the Provident Insurance Societies transact other classes of business, mostly marriage insurance, in addition to life business.

Business other than Life Assurance.—The following is a list of Indian companies which transact other classes of insurance business in addition to life assurance :—

NAME OF COMPANY.	CLASS OF BUSINESS OTHER THAN LIFE ASSURANCE.
All India United	Fire and Marine.
New India	Fire, Marine, and Accident.
Himalaya	Fire, Marine, Motor Car, etc.
Bharat Empire National National Indian	Fidelity Guarantee.
Rechabites	Sickness.
Sind Hindu Provident	Marriage.
Christian Mutual	Capital Redemption.
Bengal Insurance and Real Property	Bond Investment.

Indian Life Assurance Companies.—The following list shows the Indian companies in existence in the several provinces of India arranged according to the year when they were founded:—

The names of Mutual Companies have been printed in Capitals.

Year when established.	Madras Presidency.	Bombay Presidency.	Bengal Presidency	Punjab.	United Provinces, Assam, Ajmer-Merwara, Central Provinces and Bangalore.
1829 ..	MADRAS EQUITABLE	....	....	....	....
1833 ..	MADRAS WIDOWS.	....	....	....	....
1847 ..	....	....	....	CHRISTIAN MUTUAL.	....
1849 ..	TINNEVELLY.	....	....	....	....
1871 ..	....	BOMBAY MUTUAL.	....	....	....
1874 ..	....	Oriental. ..	....	....	....
1876 ..	....	BOMBAY WIDOWS.	....	....	....
1884 ..	INDIAN CHRISTIAN.	....	....	....	....
1885 ..	....	GOAN MUTUAL.	....	....	....
1888 ..	MANGALORE R.C.	B. B. AND C. I. ZORON.	....	....	....
1889 ..	....	BOMBAY ZORON ..	....	....	....
1891 ..	....	GUJARAT ZOROASTRIAN.	HINDU MUTUAL.	....	....
1892 ..	....	Indian Life ..	....	....	....
1893 ..	....	....	....	PUNJAB MUTUAL.	RECHABITES (U. P.)
1894 ..	....	SIND HINDU ..	....	....	....

Year when established	Madras Presidency.	Bombay Presidency.	Bengal Presidency.	Punjab.	United Provinces, Assam, Ajmer-Merwara and Central Provinces and Bangalore.
1896	....	Empire of India ..	....	Bharat ..	....
1901	....	....	....	SIMLA MUTUAL.	....
1906	United India	All India United ..	National Indian; National.	Co-operative.	....
1907	....	....	Hindusthan Co-operative.	....	....
1908	....	Bombay Life ..	India Equitable .	Hindusthan Death Benefit	General (Ajmer).
1910	....	....	Bengal Mercantile	....	ALL INDIA & BURMA (Bangalore).
1911	....	Asian Commercial ..	....	....	Aryya (Assam).
1912	....	....	Unique ..	....	....
1913	....	Industrial and Prudential; Western India; East and West.	Light of Asia; Provincial.	....	....
1914	....	....	....	British India.	....
1916	....	Zenith	....	....	....
1918	....	....	....	....	India Allied (U.P.)
1919	....	New India New Era, Crescent.	Himalaya ..	....	....
1920	....	....	Bengal Insurance and Real Property.	....	....
1921	....	Indian-Lion ..	....	....	Nagpore Pioneer (C. P.).

Postal Insurance Fund.—This Fund was instituted by the Government of India for the benefit of the postal employees in 1883 but gradually admission to this Fund has been thrown open to almost all classes of Government servants who are employed on civil duties. On the 31st March 1921 there were 33,258 policies in force assuring a total sum of Rs. 5,16,86,399 including bonus additions. The life assurance fund on that date amounted to Rs. 1,69,19,788. The last actuarial valuation disclosed a surplus which permitted a bonus being paid by way of addition to the sum assured at the rate of 1½ per cent. under whole life policies and 1 per cent. under endowment assurance for each year's premium paid in the valuation period. The limit of assurance permissible under the rules of the fund, which was previously Rs. 4,000, has now been raised to Rs. 10,000.

British, Colonial and Foreign Companies —There are at present 21 British, Colonial and Foreign Life Offices which have a place of business in India. Of these, 17 are constituted in Britain, 2 in Canada, 1 in Australia, 1 in the Straits Settlements, 2 in Shanghai and 1 in the United States of America. Nearly all are partially exempt from the operation of the Indian Life Assurance Companies Act of 1912 on the ground that, when it came into force, they were carrying on business in the United Kingdom in conformity with the provisions of the British Assurance Companies Act of 1909. The principal effects of the exemptions allowed to these British, Colonial and Foreign companies are that they are freed from the necessity either of making a deposit with the Controller of Currency or of making separate statements respecting their Indian business. Those granted exemptions are allowed to submit their accounts in the form prescribed by the British Assurance Companies Act of 1909. The Indian Life Act has to a great extent been enacted on the lines of the British Act. All of these 24 companies grant annuities and in addition carry on the other classes of business shown in the following statement. This statement also indicates the proportion of each company's business which is transacted in the United Kingdom. Unfortunately no similar information can be given regarding their Indian business as none of the companies, except the Great Eastern, the China and the Shanghai, are required to give any particulars of this nature. These three companies transact about ten per cent. of their business in India.

	Name of Company.	Year when established.	Head Office.	Insurance business done. F = Fire; M = Marine. C = Capital redemption. S = Sickness and Accident. G = Fidelity Guarantee and Burglary, etc.					Percentage of Life Assurance premium income in the United Kingdom to total life assurance premium income.
Constituted in the United Kingdom.	1. Alliance ..	1824	London ..	F	M	C	S	G	98·0
	2. Atlas ..	1808	London ..	F	..	C	S	G	99·3
	3. Commercial Union ..	1861	London ..	F	M	C	S	G	95·4
	4. Gresham ..	1848	London ..	..	..	C	..	..	25·1
	5. Law Union and Rock ..	1806	London ..	F	..	C	S	G	..
	6. Liverpool and London and Globe ..	1836	Liverpool ..	F	M	C	S	G	96·9
	7. London Assurance Corporation ..	1720	London ..	F	M	C	S	G	..
	8. North British and Mercantile	1823	Edinburgh ..	F	..	C	..	..	90·7
	9. Northern ..	1836	Aberdeen ..	F	..	C	S	G	94·6
	10. Norwich Union ..	1797	Norwich ..	..	..	C	..	..	70·9
	11. Phœnix ..	1782	London ..	F	M	C	S	G	89·6
	12. Royal ..	1845	Liverpool ..	F	M	C	S	G	83·2
	13. Royal Exchange ..	1720	London ..	F	M	C	S	G	94·5
	14. Royal London Auxiliary* ..	1910	London ..	F	..	C	S	G	..
	15. Scottish Union and National ..	1824	Edinburgh ..	F	M	C	S	G	81·2
	16. Standard ..	1825	Edinburgh ..	..	..	C	..	..	46·2
	17. Yorkshire ..	1824	York	F	M	C	S	G	94·3
Not constituted in the U. K.	18. Manufacturers	1887	Canada ..	..	..	..	..	..	·7
	19. Sun of Canada	1865	Canada ..	..	..	C	S	..	..
	20. National Mutual of Australasia. ..	1869	Australia ..	..	..	..	..	..	..
	21. Great Eastern	1909	Singapore ..	..	..	..	..	..	*Nil*
	22. China ..	1898	Shanghai ..	..	..	..	..	..	*Nil*
	23. Shanghai ..	1905	Shanghai ..	..	..	..	..	..	*Nil*
	24. New York ..	1845	United States of America.	..	..	..	..	..	·6

* This Company has, with effect from June 1922, merged in the Royal London Mutual Insurance Society.

The following table shows some of the voluminous information relating to the Indian business of some of the non-Indian Companies which is stated in the returns submitted periodically to the Government of India :—

Name of Company.	Year at close of which returns relate.	Indian Business in force at date of return.			
		Number of Policies.	Sum Assured and Bonuses.	Office Annual Premium.	Net Actuarial Liability.
			£	£	£
Commercial Union	1912	612	354,539	15,671	158,810
	1917	550	311,894	12,627	156,474
Gresham	1914	5,461	888,052	45,886	188,975
	1919	5,981	1,017,497	51,647	282,084
North British and Mercantile ..	1915	6,100	2,056,807	96,952	653,454
	1920	7,662	2,741,108	125,384	945,410
Norwich Union	1916	3,739	830,701	46,535	144,988
	1920	6,114	1,457,735	82,167	305,301
Phœnix	1915	2,954	755,545	36,210	161,207
	1920	3,892	1,020,486	49,862	286,045
Royal	1914	2,250	820,558	37,956	216,241
	1919	2,623	1,303,131	58,351	410,640
Royal Exchange	1915	731	143,316	6,318	37,008
	1920	867	170,916	7,672	47,788
Scottish Union and National (including City of Glasgow)	1914	4,995	1,621,810	77,550	563,031
	1919	4,804	1,574,311	76,683	812,613
Yorkshire	1914	79	22,686	1,037	3,740
	1919	182	91,765	4,377	18,228

The broad characteristics of the trade of India are familiar to readers of the Indian Year Book. India is chiefly an agricultural country, for 72 per cent. of its people are directly dependent upon agriculture for their means of livelihood. Consequently, the prosperity of the land is largely determined by the character of the south-west monsoon rains. An area which every year grows larger is protected by irrigation and the extension of these works, together with the increased resisting power of the people and the growth of the manufacturing industry, is expected to make the population immune to the shock of such famines as those of 1896-97, 1899-1900 and 1918-19. But many of the irrigation works, such as tanks and wells, depend on the rains for their replenishment. Consequently, the rains mainly determine the export trade and the consequent purchasing power of the people. Another feature that arises from these conditions is that the imports are chiefly manufactured goods and the exports produce.

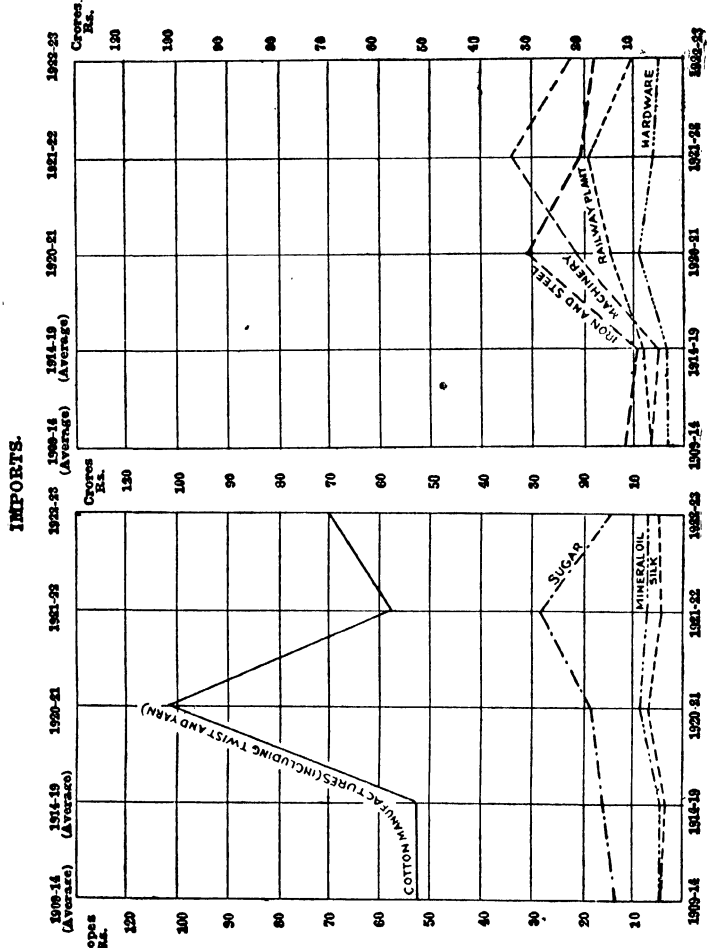
The main conclusions to be drawn from the trade statistics of the last official year are indicated in the annual Review of the Trade of India by Mr. C. G. Freke, Director-General of Commercial Intelligence, from which the following details are mainly drawn.

Indian trade in 1922-23 had many of the characteristics of the previous year, but the general position at the end of the year was distinctly healthier than at its beginning. The period of readjustment after the postwar boom began about the beginning of 1921, when the period of liquidation set in. And the worst of this liquidation was borne by 1921-22. During 1922-23 stagnation was the key note of the import trade, but on the export side conditions in India favoured a strong revival to which, however, her overseas customers were only in a position to provide a moderate response. The rains were ample and well distributed and good harvests were reaped in practically all parts of the country. As a result of two good years the exportable surpluses of grains and seeds were considerable and prices of the staple food-grains fell appreciably. The unsold stocks of imported goods carried over from the previous year were gradually cleared and the general increase in purchasing power was evidenced by the large importations of gold and silver which were a normal feature of Indian trade before the war but have been absent during the two previous years. It was pointed out, however, in last year's review that the prospects of real improvement in Indian trade are bound up with the improvement of purchasing power in Europe —in 1913-14 fifty eight per cent. of her exports went to European countries. During the year 1922 there were distinct signs of improvement. Most European countries showed notable improvement in practically all branches of industrial and commercial activity and there were by December 1922 signs of steady improvement visible nearly everywhere. In the first quarter of 1923, the occupation of the Ruhr introduced a factor of uncertainty and difficulty, which, although it gave a temporary stimulus to international trade in certain commodities, particularly coal and iron and steel, very soon led to marked stagnation and arrested the general improvement in trade which had been noticeable up till then. This change was felt in India in the increased prices of certain imports, particularly iron and steel and dyes, and in the slackening of the demand for certain of her exports, particularly hides. India's three best individual customers are the United Kingdom, Japan, and the United States of America and consequently from an exchange point of view, she is particularly interested in the movements of the levels of wholesale prices in those countries. Those levels remained remarkably constant in both the United Kingdom and India, and in Japan also the level was well maintained except for a fall in the period November to January. The level in the United States rose from 11·7 (Bradstreet's index number) in April 1922 to 13·9 in March 1923, practically the whole of the rise taking place after the end of August, *i.e.*, after the considerable increases in import duties, enacted under the Fodney Tariff, were brought into effect. Apart from the variations in Continental exchanges, the sterling exchange rate was comparatively steady. After rising slowly from 1*s.* $3\frac{1}{32}$*d.* in April to 1*s.* 4$\frac{1}{4}$*d.* in December, it spurted to 1*s.* $5\frac{5}{16}$*d.* in January but this rise was short-lived and it fell as rapidly again to the neighbourhood of 1*s.* 4*d.*, where it remained until the close of the year. The economic state of some of the principle European countries became steadily worse and this was naturally reflected in the foreign exchanges. The German mark reached unprecedentedly low levels and has since almost passed out of commerce. The Austrian rate rose to over 400,000 by August but was thereafter steady. The currencies of Greece, Turkey, Poland, Roumania and Portugal also depreciated considerably but that of Czecho Slovakia made a good recovery.

The decrease in the recorded values of imports was primarily due to lower prices, while the improvement in the value of exports was a genuine increase, as the general level of export prices was fairly steady. The following figures have been compiled to show the values of imports and exports, *of merchandise only*, on the basis of declared values in 1913-14. These statistics are necessarily approximate, but they are sufficiently accurate to afford a reliable measure of the course of trade, and they illustrate the extent to which Indian trade is returning to pre-war dimensions, more on the export side than on the import side. It has also to be borne in mind that in 1913-14 trade was distinctly better than the pre-war normal.

(In crores of Rupees)

	1913-14.	1919-20.	1920-21..	1921-22.	1922-23.
Imports	183	101	142	124	138
Exports	244	198	172	182	214
Total trade in merchandise excluding re-exports ..	427	299	314	306	352


IMPORTS.
Crores Rs.
1909-14 (Average)
1914-19 (Average)
1920-21
1921-22
1922-23
COTTON MANUFACTURES (INCLUDING TWIST AND YARN)
SUGAR
MINERAL OIL
SILK
IRON AND STEEL
MACHINERY
RAILWAY MAT.
HARDWARE

Imports of Merchandise.

Cotton Manufactures.—During 1921-22 the combination of excessive stocks on hand and the reduced purchasing power of consumers rendered importations small. Most of the old stocks were cleared and the improvement in purchasing power combined with the collapse of the movement against the use of imported goods led to a marked increase in importations. Future prospects did not become sufficiently clear to lead wholesale distributors to place large orders and the high price of the raw material lessened the expansion which might otherwise have been anticipated from the improvement of purchasing power due to good harvests—the average price of Middling American in Liverpool was 12¼ pence in 1922 as compared with 10 pence in 1921. Trade throughout the year was fitful and uncertain but there were clear signs of its reaching a steady basis of normal trading.

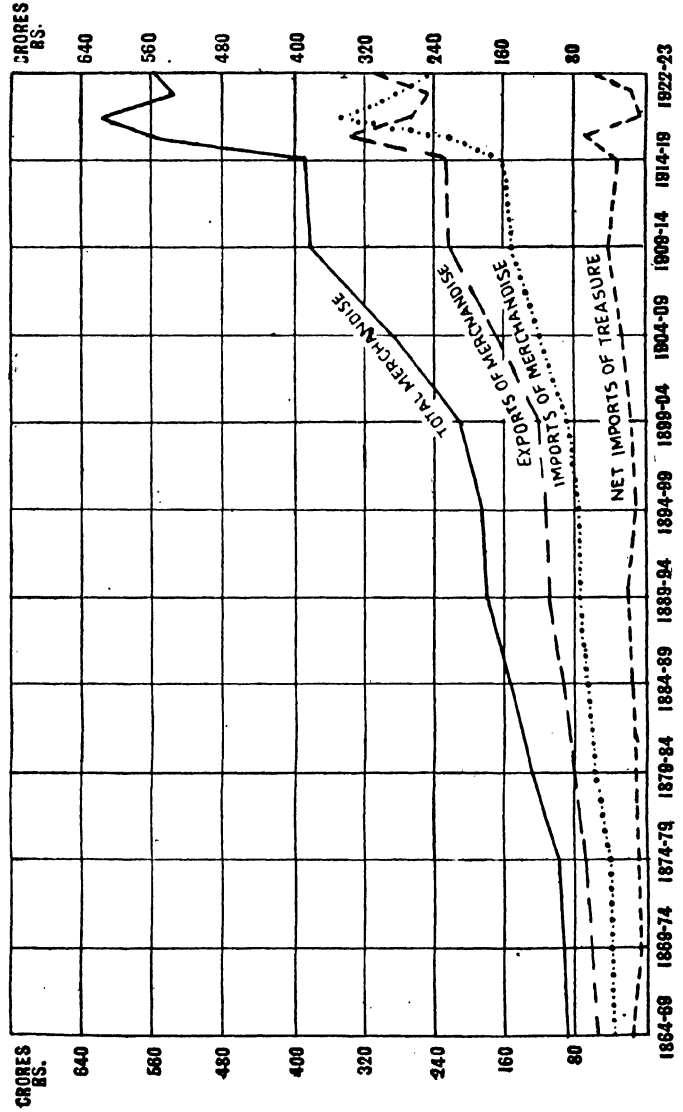
The total imports of cotton manufactures increased in value to Rs. 70 crores in 1922-23 as compared with Rs. 57 crores in 1921-22 and Rs. 66 crores in 1913-14. These values represent respectively 30, 21, and 36 per cent. of India's total imports during each of the years specified. The increase in the imports of cotton twist and yarn was maintained and the quantity rose from 57 to 59 million lbs. but the value fell by Rs. 2,25 lakhs to Rs. 9,26 lakhs on account of lower prices. The increase in quantity was only 4 per cent. over 1921-22, while the decrease in value was 20 per cent. The average value per lb. decreased from Rs. 2-0-3 in 1921-22 to Rs. 1-9-0 in 1922-23. There was a noticeable increase in the imports of counts Nos. 1 to 20, which nearly doubled from 7 million lbs. in 1921-22 to 13 million lbs. in 1922-23, of which 12 million lbs. were received from Japan as against 5 million lbs. in the preceding year. The imports of counts 31 and over decreased from 36 to 33 million lbs. of which the United Kingdom supplied 21 millions and Japan 10 millions as against 27 and 7 millions respectively in 1921-22. The United Kingdom maintained her position in the higher counts but Japan practically dominated the market in the lower counts, in which she is a strong competitor with Indian mill-made yarns. Of the total imports, 52 per cent. came from the United Kingdom and 45 per cent. from Japan. The corresponding percentages were for 1921-22, 70 and 26, for 1920-21, 49 and 43 and for 1913-14, 86 and 2. The sum total of imports and production was 765 million lbs. as against 751 million lbs. in 1921-22 and 727 million lbs. in 1913-14. The total quantity of cotton piece-goods imported increased by 500 million yards or 46 per cent. to 1,600 million yards, the largest increase being in grey goods. Grey goods increased by nearly 300 million yards or 46 per cent., while white and coloured varieties each showed an increase of about 100 million yards or 31 and 76 per cent. respectively. In spite of these improvements the quantities still fell short of the pre-war level by 39,49, and 71 per cent. respectively.

Sugar.—Sugar ranked third in India's import trade in 1921-22. It fell back to fourth place in 1922-23 with a total value of Rs. 15½ crores, the first three being cotton manufactures (Rs. 70 crores), machinery and mill work (Rs. 24 crores) and iron and steel (Rs. 18 crores). The excessive stocks at the end of 1921-22 together with heavy losses by merchants in that year as a result of the continuous fall in prices of Java sugar depressed the trade. The total quantity of imported sugar, refined and unrefined, decreased by 38 per cent. to 442,400 tons. Over 84 per cent. of the imports came from Java and 7 per cent. from Mauritius. Imports from Java (including imports from the Straits Settlements which are forwarding agents for Java sugar) fell to 373,700 tons from 628-400 tons in 1921-22. In 1922 Java exported 1,379,420 tons of sugar, of which British India and the Straits took about 28 per cent. Bengal took 151,600 tons or 41 per cent. of the Java imports, Bombay 104,500 tons or 28 per cent, Karachi 86,200 tons or 23 per cent, Burma 22,700 tons or 6 per cent. and Madras 8,700 tons or 2 per cent. The most marked decrease in the import of Java sugar was in Bengal which took less than half the quantity imported in 1921-22, while Bombay increased her takings. The imports of Mauritius sugar decreased from 61,600 tons in 1921-22 to 31,400 tons, of which 72 per cent. was taken by Bombay and 27 per cent. by Bengal. Mauritius sugar, being sugar manufactured within the British Empire, pays a lower rate of duty on entry into the United Kingdom than outside sugar and hence the tendency in future will be for this sugar to be attracted more and more to the United Kingdom. The principal sources of India's foreign sugar supplies are shown in the following table:—

Higher prices ruling in the preceding years gave an impetus to the sugar industry of India. The area under cultivation increased from 2,395,000 acres in 1921-22 to 2,721,000 acres in 1922-23 and the production of sugar from 2,599,000 tons to 2,989,000 tons. In some districts, notably in North Bihar, several centrals have been established for the manufacture of sugar direct from cane and for refining raw sugar, and Indian farmers in the white sugar tract have realised that it is more to their advantage to sell their canes to these centrals for ready money than to crush them themselves. In view of the reduced imports of foreign sugar it is of interest to note that in 1922-23 the net production of gur in India was 342,800 tons greater than in 1921-22 Exports of Indian sugar fell from 6,200 tons in 1921-22 valued at Rs. 25 lakhs to 3,500 tons, valued at Rs. 10½ lakhs, and of this quantity 2,479 tons, valued at nearly Rs. 6 lakhs consisted of molasses.

Metals and Manufactures thereof.—The total value in 1922-23 amounted to Rs. 25 crores. Iron and steel represented Rs. 18 crores of this total and occupied the third place in order of importance among imports, ousting sugar which occupied that place in the preceding year If there were included under the heading of metals and manufactures also machinery and mill-work (Rs. 23½ crores), railway plant and rolling stock (Rs. 11 crores), cutlery, hardware and instruments (excluding electrical instruments) (Rs. 6¾ crores) and vehicles other than carriages and carts (Rs. 3 crores), the total value would reach Rs. 69 crores and so would be short of the value of textiles by Rs. 7 crores only.

Iron and Steel.—The imports of manufactured iron and steel (excluding pig and old iron) increased from 580,000 tons in 1921-22



Note.—Imports and Exports include both private and Government transaction.

to 732,000 tons in 1922-23, the highest figure recorded since 1913-14, but lower prices accounted for a drop of Rs. 2,56 lakhs in value to Rs. 18,23 lakhs as compared with the preceding year. The chief increases were in sheets and plates, nails, rivets and washers, bolts and nuts, hoops and strips, steel bars and channel, wire other than fencing wire, wire nails and wire rope, all of which increased both in quantity and to a lesser proportion in value. Iron bars and channels, beams, pillars and girders, cast pipes and fittings, and steel angles and springs showed increases in quantity but decreases in value. The only important items in which decreases were noticeable were wrought tubes, pipes and fittings and cast steel which decreased respectively by 10,000 tons and 300 tons in quantity and by Rs. 1,56 lakhs and Rs. 3 lakhs in value. The increase under steel bars was chiefly contributed by Belgium and Germany which quoted lower prices than the United Kingdom. There were larger arrivals of galvanised sheets and plates from the United Kingdom and the United States of America. The United Kingdom, Norway and Sweden mostly contributed to an increase under nails, rivets and washers. Cast pipes and fittings were received mostly from the United Kingdom. There were larger supplies of tubes, pipes and fittings wrought from the United Kingdom and Germany, with lower prices, while the United States of America lost ground in this line. Wire nails were chiefly supplied by Germany, Belgium and the United States of America, while wire rope was obtained mostly from the United Kingdom.

Machinery and Millwork.—As in the previous year the head "Machinery and millwork" ranked next in importance to that of cotton manufactures in India's import trade during 1922-23. The total value of the imports of machinery of all kinds including belting for machinery decreased to Rs. 24 crores from Rs. 35 crores in 1921-22, a decrease largely due to lower manufacturing costs. Almost all descriptions showed a decrease in value with the exception of cotton textile machinery and sewing and knitting machines. The heaviest decreases were shown by jute mill machinery(—Rs. 2,53 lakhs or 59 per cent.) and boilers (—Rs. 1,31 lakhs or 51 per cent.). The value of cotton machinery imported increased from Rs. 7,64 lakhs to Rs. 8,49 lakhs due to a large increase in cotton spinning machinery, from Rs. 4,58 lakhs to Rs. 6,52 lakhs. Cotton weaving, bleaching and other sorts of cotton machinery, however, decreased by Rs. 1,09 lakhs to Rs. 1,97 lakhs. Jute machinery decreased by 59 per cent. in value to Rs. 1,79 lakhs, and total textile machinery fell from Rs. 12,82 to Rs. 10,68 lakhs, of which the United Kingdom supplied 98 per cent.

Railway Plant and Rolling Stock.—Railway expenditure in India was greatly restricted during the war and confined only to works that were absolutely necessary. The value of the imports of railway plant and rolling stock, on private and Government accounts combined, averaged Rs. 4,73 lakhs during the war quinquennium (1914-15 to 1918-19) as compared with the pre-war average of Rs. 8,91 lakhs. After the termination of the war the value of railway plant and rolling stock imported both on private and Government account steadily increased from Rs. 9.05 lakhs in 1919-20 to Rs. 16,60 lakhs in 1920-21 and to Rs. 21,86 lakhs in the following year. In 1922-23 the value of total imports fell, partly owing to marked price-reductions, and amounted to Rs. 13,76 lakhs, of which Rs. 2,70 lakhs were on Government account as compared with Rs. 2,95 lakhs in 1921-22.

The imports from the United Kingdom and the United States of America during the last four years were in the following proportions :—

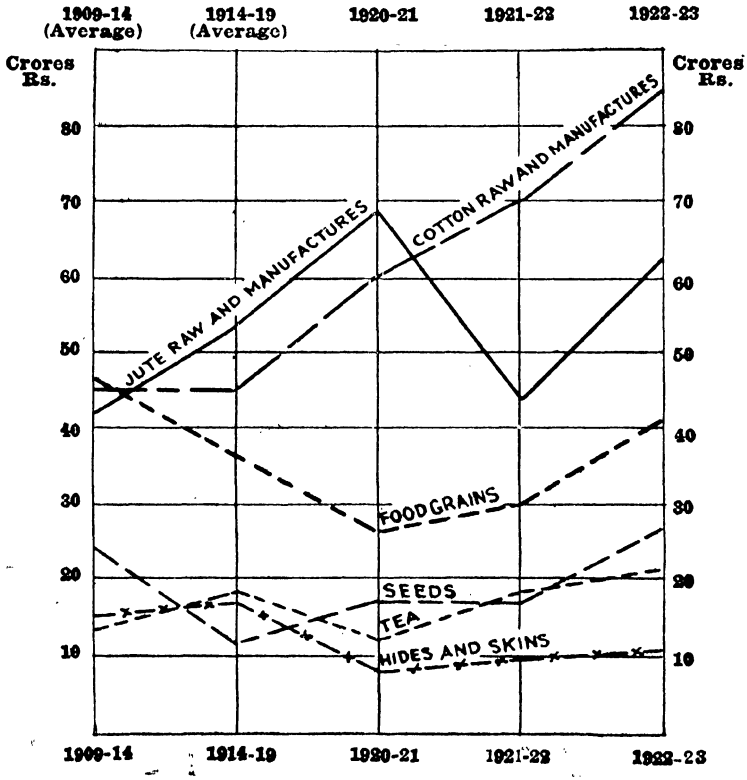
	1919-20.	1920-21.	1921-22.	1922-23.
United Kingdom.	69	96	97	94
United States of America.	30	1	1	1

Motor Vehicles.—The year 1922-23 opened with considerable stocks of motor car son hand, but there are indications that the bulk of these had been absorbed by the end of the year. Importations rose from 2,895 in 1921-22 to 4,323 in 1922-23, an increase of 50 per cent. The increase of the import duty from 20 to 30 per cent. in March 1922 was speedily neutralised by price-reductions and prices were on the downward trend throughout 1922-23. The value of the imports decreased by 20 per cent. to Rs. 1,38 lakhs as the result of large importations of the cheaper American and Canadian cars. Of the total imports 1,846 cars came from Canada, 1,386 from the United States, 449 from the United Kingdom, 131 from Italy, 119 from Belgium, 61 from France, and 55 from Germany.

In connection with the dominance of American and Canadian cars in the Indian market, it is worthy of note that of the total number of cars registered in the world, approximately 14½ million at the beginning of 1923, it is estimated that 88 per cent. consist of cars registered in the United States and Canada, and the production of motor vehicles in the United States during 1922 was 2,400,000. This very large home demand gives North American manufacturers a distinct advantage in this market over their European competitors. Travelling conditions in the United States are also more closely similar to long distance touring and estate-work in India than is the travelling on good roads for which European cars are mostly designed. The price-factor is, however, the chief consideration and it is their big advantage in this respect that enables American and Canadian cars to dominate the Indian market.

Hardware.—This omnibus head includes a number of items, such as enamelled ironware, implements and tools (other than machine tools) buckets of tinned or galvanised iron, metal and glass lamps, safes, stoves, builders' hardware, domestic hardware, etc. The total value of the imports showed a small decrease from Rs. 5,92 lakhs in 1921-22 to Rs. 5,15 lakhs in 1922-23. The noticeable feature of the trade was a large increase at the expense of British and American products, in the imports from Germany which were valued at Rs. 1,12½ lakhs or 22 per cent. of the total, as compared with Rs. 61 lakhs or 10 per cent. in 1921-22 and Rs. 29 lakhs or 3 per cent. in 1920-21.

EXPORTS.


1909-14 (Average)
1914-19 (Average)
1920-21
1921-22
1922-23
Crores Rs.
80
70
60
50
40
30
20
10
JUTE RAW AND MANUFACTURES
COTTON RAW AND MANUFACTURES
FOODGRAINS
SEEDS
TEA
HIDES AND SKINS

Mineral Oils.—The year 1922 was not so favourable for the oil industry as its immediate predecessors. Prices fell considerably owing to production having outstripped consumption. There was an increased output of crude oil in the United States of America and Mexico in the earlier months of the year, but in the closing months Mexican output fell off considerably which tended to firm up prices in other producing countries. The smaller Mexican output was, however, more than counterbalanced by the increase in other directions. So that the world output was not much affected. Fifty million gallons of kerosene (bulk oil 45,670,000 and case oil 4,642,000) were imported in 1922-23 as compared with 46½ million gallons (bulk 41½ millions and case 5 millions) in 1921-22. The quantity, however, was 16½ million gallons less than the average annual imports during the five pre-war years ending 1913-14. The average declared value per gallon fell from 11 annas 11 pies to 10 annas 9 pies and imports showed a decrease in value from Rs. 3,46 lakhs in 1921-22 to Rs. 3,38 lakhs in 1922-23. Thirty-nine million gallons or 78 per cent. came from the United States as comapred with 40 million gallons or 86 per cent. in 1921-22. Borneo sent 8 million gallons or 15 per cent., and 2 million gallons of Persian kerosene oil were imported from Egypt. Coastwise imports from Burma to India proper amounted to 119 million gallons as compared with 116 million gallons in 1921-22, 100 million gallons in 1920-21, and a pre-war average of 93 million gallons. There was again an increase in the imports of fuel oils from 58 to 62½ million gallons, due to the increased demand for liquid fuel by railways, ships and industrial concerns. Persia supplied 51 million gallons or 81 per cent. of the total imports.

Exports of Merchandise.

Cotton.—The American crop was estimated at 12,202 thousand bales (400 lbs.) as compared with 9,942 thousand bales in 1921 and 16,800 thousand bales in 1920, and the Egyptian crop at 1,213 thousand bales as compared with 817 thousand bales in 1921 and 1,491 thousand bales in 1920. The Indian crop also increased, by 16 per cent., from 4,485 thousand bales (400 lbs.) in 1921-22 to 5,181 thousand bales in 1922-23. The production in 1920-21 was 3,600 thousand bales.

Exports from India increased to 3,362 thousand bales as compared with 2,989 thousand bales in 1921-22, 2,074 thousand bales in 1920-21, and a pre-war average of 2,407 thousand bales. Japan took 1,621 thousand bales or 48 per cent. of the total quantity exported as compared with 1,760 thousand bales or 59 per cent. in 1921-22 and a pre-war average of 1,012 thousand bales, which amounted to nearly two-thirds of her total importation of cotton. Although Japan has been steadily increasing her consumption of cotton during recent years she has been making great efforts to increase production both in Japan and in Korea and her importations of American cotton are much greater than formerly. This latter increase is due to finer spinning as is shown by her returns of counts spun. The reduction of about 20 per cent. in spindleage resulting from the disaster in the autumn of 1923 may temporarily reduce her cotton consumption, but that will be quite temporary and it may well be much less than was at first anticipated, as most of her spinning mills were not working full-time and those which remain effective can absorb a fair quantity of the anticipated decrease merely by an extension of working hours. It is anticipated that a certain number of the mills destroyed may be re-established in the neighbourhood of Shanghai in order to benefit by the Chinese tariff. So that the future may show a still larger increase in Chinese cotton imports accompanied possibly by a decrease, or at any rate a cessation of the increases noticed in recent years, of cotton imports into Japan.

Cotton Piece-goods.—There was a slight decrease in production of 6 million yards as compared with 1921-22, but an increase of 9 per cent. over 1920-21. The decline which was observed under coloured goods during 1921-22 was more than made up in 1922-23; dhutis and shirtings and longcloth under grey and bleached piece-goods, which showed great increases in 1921-22, experienced slight declines in the year under review. Exports of grey and bleached goods increased by 7 million yards to 32·2 million yards, while coloured goods fell by 11 million yards to 124·8 million yards. Exports of total piece-goods to Turkey, Mesopotamia, and Persia decreased to 61 million yards from 66 million yards and those to Singapore, Colombo and Aden were 45 million yards as compared with 47 million yards. Exports to East African ports increased to 25 million yards, from 22 million yards. Bombay, as usual, had the bulk of the trade with 77 per cent. of the total quantity exported, while Madras had 22 per cent.

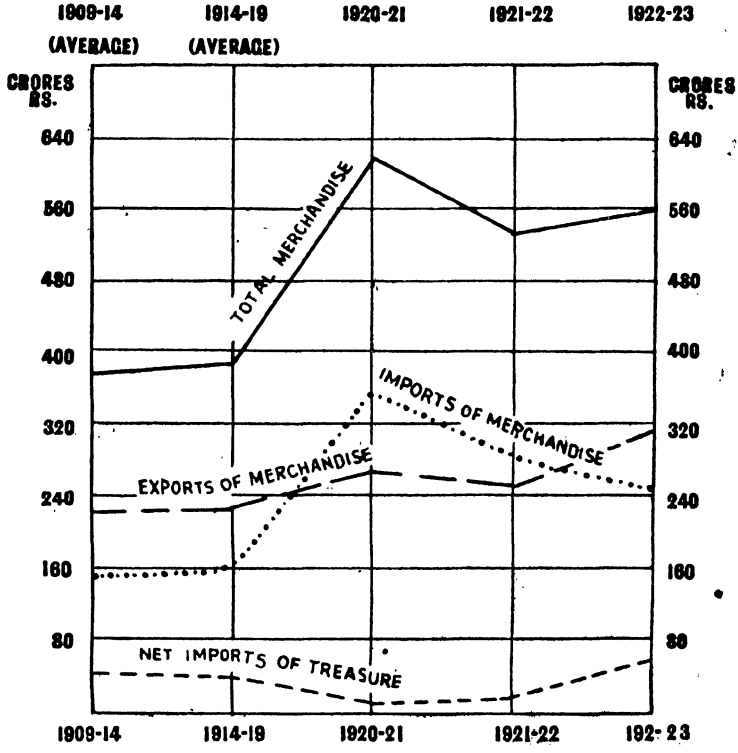
The value of goods woven in Indian mills during the year, as far as reported, was Rs. 58¾ crores against Rs. 60¾ crores in 1921-22, while the value of cotton goods imported was Rs. 61 crores as compared with Rs. 45½ crores in the previous year. It should be noted that there is no record of piece-goods manufactured on hand looms.

Jute and Jute Manufactures.—The figures of 1922-23 showed a marked improvement upon those of 1921-22. The total weight of raw and manufactured jute shipped in 1922-23 increased by 13 per cent. from 1,108 to 1,250 thousand tons, but, owing to improved prices, the value of these exports increased by 43 per cent. from Rs. 44 to Rs. 63 crores. The following figures show the exports of raw and manufactured jute separately in 1913-14, 1921-22 and 1922-23:—

——	1913-14.	1921-22.	1922-23
Jute (in thousand tons)	768	468	578
Bags (in millions) .	369	387	344
Cloth (in million yards)	1,061	1,121	1,254

Foodgrains and Flour.—The exports of grain, pulse and flour during 1922-23 amounted to 2,598,200 tons, valued at Rs. 42,48 lakhs, showing an increase of 57 per cent. in quantity

Foreign Sea-borne Trade of British India.



and 42 per cent. in value over 1921-22, due to the removal of the embargo on the export of rice. The important crops are rice and wheat, 92 per cent. of the total quantity of foodgrains and flour exported consisting of rice (2,125,300 tons), wheat (220,200 tons), and wheat flour (50,100 tons).

Oilseeds.—The fourth place among exports is taken by oilseeds, the first three being cotton and jute, raw and manufactured, and foodgrains. Indian supplies were, generally speaking, plentiful as the result of good rains, and, although the industrial activities of Europe have by no means completely recovered from the war and post-war paralysis, the total off-take of Indian oilseeds improved considerably.

The total exports amounted to 1,177,000 tons, valued at Rs. 27,35 lakhs, showing an increase of 60 per cent. in quantity and 57 per cent. in value, as compared with 1921-22. The bulk of the oilseed crops are harvested towards the end of one financial year and are marketed in the following year. In 1920-21 Indian oilseeds fared badly in foreign markets, and in 1921-22, there was no marked recovery, except in groundnuts. In 1922-23, all the principal descriptions of seeds were exported in larger quantities.

Direction of Trade.

India's exports normally exceed her imports in the case of all the countries with which she deals in large quantities, excepting the United Kingdom where the reverse has always been the case.

The percentage share of the United Kingdom under imports rose from 56·6 per cent. in 1921-22 to 60·2 per cent. in 1922-23 and in exports from 20·1 to 22·4 per cent. as compared with her pre-war shares of 64·1 and 23·4 per cent. respectively. The share of His Majesty's Dominions and other British Possessions in imports dropped from 10 to 7 per cent, due mainly to the cessation of the large wheat imports from Australia and decreased imports of Mauritius sugar, Natal coal, and Kenya cotton. The share in export also fell from 21 to over 18 per cent. The whole British Empire had 52 per cent. of the total trade (67·2 per cent. of the imports and 40·7 per cent. of the exports) as against 54 per cent. (imports 66·6 per cent. and exports 41 per cent.) in 1921-22. The share of the United States in the import trade, although still considerably greater than her pre-war share, has shown a steady decline since the close of the war, and it dropped from 8·1 per cent. in 1921-22 to 5·7 per cent. in 1922-23, but her share in the export trade, which had also been on the downward grade, improved from 10 per cent. in 1921-22 to 11·1 per cent. in 1922-23. Japan made a slight recovery in imports from 5·1 per cent to 6·2 per cent, but her share in the export trade dropped from 15·7 per cent. to 13 per cent. Germany's share in imports improved from 2·7 per cent. in 1921-22 to 5·1 per cent. and in exports from 6·7 per cent. to 7·2 per cent., the pre-war shares being 6·9 and 10·6 per cent. respectively. The Belgian share of imports (2·7 per cent.) exceeded her share (2·1 per cent.) in 1921-22, owing mainly to larger importations of iron and steel, and her share in exports also increased to 3·6 per cent. from 3·3 per cent. in 1921-22. Smaller imports of sugar from Java and Mauritius accounted for a considerable decrease in their shares in the import trade; and with the practical stoppage of wheat imports from Australia, her share in the total trade (imports and exports) decreased and stood almost at the pre-war level.

Turning now to the exports the share of the United Kingdom under tea (87 per cent.), although slightly less than in the preceding year, was distinctly higher than the pre-war share (72 per cent.) due partly to the fact that Russia is still out of the market and partly to increased consumption. The share of the Persian Gulf littoral showed an improvement, while Australia is on the downward grade owing to the competition of Java tea. Under raw jute, the share of Germany fell from 30 per cent. in 1921-22 to 25 per cent. in 1922-23 and of France from 12 to 10 per cent., while that of the United Kingdom and the United States rose, respectively, from 20 and 13 per cent. to 26 and 15 per cent. in 1922-23. Apart from the increase in the share of the United States from 40 per cent. in 1921-22 to 46 per cent. in 1922-23 and the decrease in the share of Japan from 4½ to 1 per cent., no other changes under the head of jute manufactures are striking. Under raw cotton the share of Japan fell from 60 per cent. in 1921-22 to 49 per cent. in 1922-23, while China's share (15 per cent.) remained almost at the level of the preceding year—her share in the pre-war year was, however, less than 2 per cent. The shares of Germany and Italy, although less than their pre-war shares, and of the United Kingdom increased as compared with 1921-22. Of oilseeds the United Kingdom, Germany, the Netherlands and Italy took greater shares of the considerably increased total export, while the shares of Belgium and France decreased. Under foodgrains the shares of the principal importing countries showed decreases with the exception of the United Kingdom, whose share was 12 per cent. in 1922-23 as compared with 10 per cent. in 1921-22 and 27 per cent. in 1913-14. In hides and skins, the United States lost her ground considerably, and both Great Britain and to a less extent Germany made progress at her expense. The share of the United Kingdom rose from 33 to 42 per cent. as compared with 26 per cent. before the war and that of the United States, which rose from 24 per cent. in 1913-14 to 34 per cent. in 1921-22, fell to 26 per cent. in 1922-23.

The following table shows the imports from and exports to European and other foreign countries :—

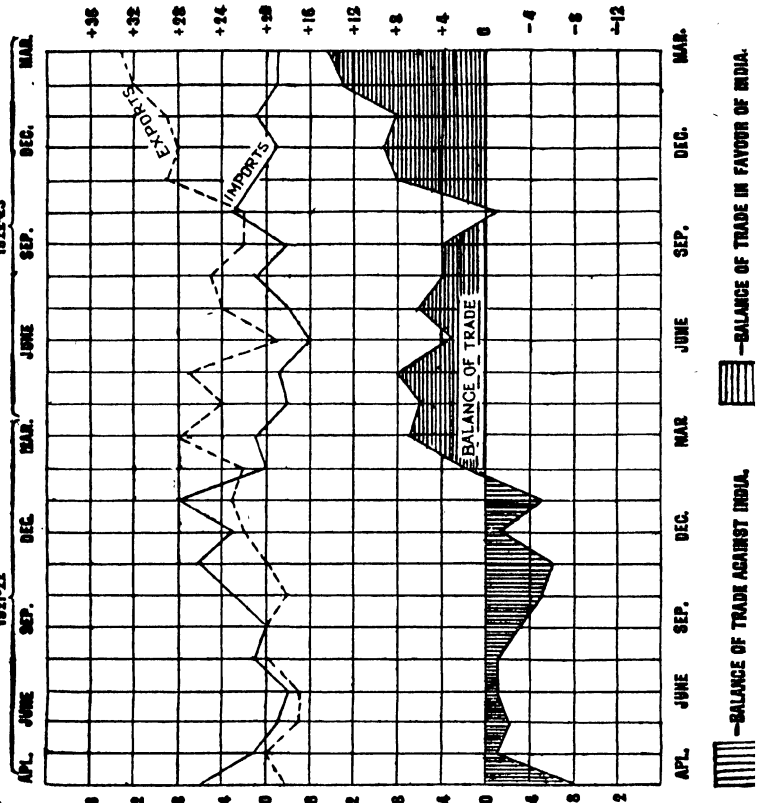
Countries.	Imports.				Exports.			
	1913-14.	1920-21.	1921-22.	1922-23.	1913-14.	1920-21.	1921-22.	1922-23.
European Countries.	Rs. (lakhs)	Rs. (lakhs)	Rs. (lakhs)	Rs. (lakhs)	Rs. (lakhs)	Rs. (lakhs)	Rs. (lakhs)	Rs. (lakhs)
Russia	6	22	5	1	2.47	..	..	1
Sweden	52	1,89	96	1.13	42	27	28	25
Norway	23	1.70	38	82	5	52	25	38
Germany	12.67	4.75	7.25	11 89	26.42	8,82	16,34	22,04
Netherlands	1,55	3,03	2.36	2.22	4.42	1,39	2,73	4,08
Belgium	4.26	5,33	5.33	6.22	12,10	12,84	8,03	11,37
France	2.69	3.64	2,23	1.96	17.72	9.54	9,90	15,57
Spain	19	34	29	6	2.23	2,83	1,84	3,17
Switzerland	69	2.28	1,02	1.10	..	26	1	2
Italy	2,20	4.13	2,00	2 10	7,89	6,71	5,85	10,29
Austria) Hungary)	4.29	64	20 ..	29 ..	10,01	86	85 ..	1,26 ..
Turkey, European	1	10	..	..	11	34	24	28
Other Countries	15	19	52	90	73	1,08	58	89
Total European Countries	29,51	28,24	22,59	29,00	84,57	45.46	46,90	70,21

DIRECTION OF TRADE.

Table Showing the Share of the British Empire and Foreign Countries in the total trade of India.

	1919-20			1920-21			1921-22			1922-23		
	Exports	Imports	Net Imports (—) or Exports (+)	Exports	Imports	Net Imports (—) or Exports (+)	Exports	Imports	Net Imports (—) or Exports (+)	Exports	Imports	Net Imports (—) or Exports (+)
	Rs. (Crores)	Rs. (Crores)	Rs. (Crores)	Rs. (Crores)	Rs. (Crores)	Rs. (Crores)	Rs. (Crores)	Rs. (Crores)	Rs. (Crores)	Rs. (Crores)	Rs. (Crores)	Rs. (Crores)
United Kingdom	99	105	— 6	56	205	—149	49	151	—102	70	140	— 70
Other British Possessions ..	47	20	+ 27	54	17	+ 37	52	26	+26	59	16	+ 43
TOTAL BRITISH EXPIRE ..	146	125	21	110	222	—112	101	177	— 76	129	156	— 27
Europe	44	8	+ 36	45	28	+ 17	47	23	+ 24	69	29	+ 40
United States of America ..	49	25	+ 24	38	35	+ 3	26	22	+ 4	35	13	+ 22
Japan	47	19	+ 28	24	26	— 2	39	14	+ 25	41	14	+ 27
Other Foreign Countries	44	31	+ 13	41	25	+ 16	32	30	+ 2	40	20	+ 20
TOTAL FOREIGN COUNTRIES ..	184	83	+101	148	114	+ 34	144	89	+55	185	76	+109
GRAND TOTAL	330	208	122	258	336	— 78	245	266	— 21	314	232	+ 82

3. Imports, Exports and Balance of Trade of India (Private Merchandise only.)



INDIAN FISCAL COMMISSION.

The Government of India in October, 1921, appointed a Commission of officials and non-officials with the following terms of reference :— " To examine with reference to all the interests concerned the tariff policy of the Government of India, including the question of the desirability of adopting the principle of Imperial preference, and to make recommendations."

The report of the Commission was issued in 1922. The main report was signed by all the members of the Commission, namely, Sir Ibrahim Rahimtoola (President), Mr. T. V. Seshagiri Ayyar, Mr. G. D. Birla, Mr. J. C. Coyajee, Sir M. B. Dadabhoy, Mr. Jamnadas Dwarkadas, Mr. E. Holberton, Mr. R. A. Mant, Mr. Narottam Morarjee, Mr. C. W. Rhodes and Sir Montagu Webb, but Sir Ibrahim Rahimtoola, Mr. T. V. Seshagiri Ayyar, Mr. G. D. Birla, Mr. Jamnadas Dwarkadas and Narottam Morarjee appended a minute of dissent.

The recommendations of the Commission as a whole may be summarised in the following paragraphs :

Preliminary Conclusions.—1. (a) That the Government of India adopt a policy of Protection to be applied with discrimination along the lines indicated in this Report. (b) That discrimination be exercised in the selection of industries for protection, and in the degree of protection afforded, so as to make the inevitable burden on the community as light as is consistent with the due development of industries. (c) That the Tariff Board in dealing with claims for protection satisfy itself (i) that the industry possesses natural advantages ; (ii) that without the help of protection it is not likely to develop at all or not so rapidly as is desirable ; and (iii) that it will eventually be able to face world competition without protection. (d) That raw materials and machinery be ordinarily admitted free of duty, and that semi-manufactured goods used in Indian industries be taxed as lightly as possible. (e) That industries essential for purposes of National Defence, and for the development of which conditions in India are not unfavourable, be adequately protected if necessary. (f) That no export duties be ordinarily imposed except for purely revenue purposes and then only at very low rates ; but that when it is considered necessary to restrict the export of food grains, the restriction be effected by temporary export duties and not by prohibition.

2. That a permanent Tariff Board be created whose duties will be *inter alia* to investigate the claims of particular industries to protection, to watch the operation of the Tariff and generally to advise Government and the Legislature in carrying out the policy indicated above.

3. (a) That no general system of Imperial Preference be introduced ; but (b) that the question of adopting a policy of preferential duties on a limited number of commodities be referred to the Indian Legislature after preliminary examination of the several cases by the Tariff Board. (c) That, if the above policy be adopted, its application be governed by the following principles : (i) That no preference be granted on any article without the approval of the Legislature. (ii) That no preference given in any way diminish the protection required by Indian industries. (iii) That preference do not involve on balance any appreciable economic loss to India. (d) That any preferences which it may be found possible to give to the United Kingdom be granted as a free gift. (e) That in the case of other parts of the Empire preference be granted only by agreements mutually advantageous.

4. That the existing Cotton Excise Duty in view of its past history and associations be unreservedly condemned, and that Government and the Legislature start again with a " clean slate " regulating their excise policy solely in the interests of India.

Subsidiary Recommendations.—5. That the proviso to Section 20 of the Sea Customs Act be repealed and that Customs Duty be ordinarily levied on goods belonging to Government.

6. That difficulties in the shape of shipping rebates or unfair advantages like dumping, depreciated exchanges, bounty-fed imports from abroad, be investigated and where possible removed.

7. That industrial development be promoted by giving a more industrial bias to primary education and providing opportunities for training apprentices, and organisations for increasing the mobility of labour.

8. That no obstacles be raised to the free inflow of foreign capital, but that Government monopolies or concessions be granted only to companies incorporated and registered in India with rupee capital, such companies to have a reasonable proportion of Indian Directors and to afford facilities for training Indian apprentices.

9. That the Tariff be not ordinarily employed for retaliation or as a means of aggression.

10. That the Tariff be elaborated with a view to remove ambiguities and that the system of specific duties and tariff valuations be cautiously extended.

Dissent.—The writers of the Minute of Dissent set out the reasons which induced them to do so in the following words :

(a) The main recommendation has been hedged in by conditions and provisoes which are calculated to impair its utility.

(b) In places, the language employed is half-hearted an apologetic.

(c) We are unable to agree with the views of our colleagues on Excise, Foreign Capital, Imperial Preference and the constitution of the Tariff Board.

2. Our first objection is to the statement in the Report that " we recommend a policy of protection to be applied with discrimination along the lines of the Report." To formulate a policy in these words is open to objection because (i) In the first place, it mixes up policy with procedure. (ii) In the second place, by emphasising the method of carrying out the policy, the vital issue of the problem is obscured. (iii) In the third place, it ignores the fact that

every country applies Protection with discrimination suited to its own conditions. (iv) Fourthly in our opinion the outlook of our colleagues is different from ours. We do not therefore feel justified in subscribing to the view that Protection should be applied with discrimination "along the lines of the Report."

In our opinion, there should be an unqualified pronouncement that the fiscal policy best suited for India is Protection.

Tariff Board Appointed.—In July 1923 the Government of India announced the appointment of a Tariff Board for a period not exceeding one year in the first instance to carry out the investigations resulting from the acceptance of their resolution and to make recommendations thereon.

The Board was constituted as follows:—President.—Mr. G. Rainy, C. S. I., C. I. E., I.C.S. Members—The Hon. Mr. V. G. Kale, Professor of Economics, Fergusson College, Poona, and Mr. P. P. Ginwala, M.L.A., Barat-Law. Rai Bahadur S. N. Banerji, Assistant Secretary, Commerce Department.

The Government of India will select the industries to be taken up for investigation and determine the order of the inquiry, and it will be the duty of the Tariff Board after such examination, as it thinks necessary to make recommendations regarding the protection (if any) to be extended to those industries and the nature and extent of the protection.

As recommended by the Fiscal Commission in paragraph 107 of its report the Board examined first the question of extending protection to the manufacture of steel in India. In considering this question the Board was directed to take into account the effect of any recommendations it may make on industries dependent on the use of steel, and in particular it will consider how its recommendations will affect the industries referred to in paragraph 9 of the report of the Railway Industries Committee and whether those industries should be accorded protection.

THE SUGAR COMMITTEE.

The Report of the Indian Sugar Committee appointed by the Government of India in October 1919 to investigate the possibility of organizing and developing the sugar industry in India was published in August, 1921. The Report of this Committee was fully summarised in The Indian Year Book for 1922, pages 281 *et seq*, to which reference should be made.

In the introductory chapter to the Report, the considerations which led to the appointment of the Committee are emphasized. These were the very low production of sugar to the acre in India as compared with the other great cane growing countries of the world and the dependence of the country on foreign supplies to supplement its own outturn. It is pointed out that the average production of sugar to the acre in India, is only 1·07 tons against 1·96 tons in Cuba, 4·12 tons in Java and 4·61 tons in Hawaii. The comparison is even less favourable to India, if it is remembered that 99 per cent. of the sugar produced in India is in the form of "gur" which is in reality a sweetmeat and yields not more than 50 per cent. of refined sugar, whilst the cane sugar from other countries yields on the average 90 per cent. the residue in each case consisting of molasses and waste. In actual sugar, therefore, India's production per acre is less than one-third that of Cuba, one-sixth that of Java and one-seventh that of Hawaii. In spite of its 2¾ million acres under sugar, seven times the acreage of Java, the imports of sugar during the four pre-war years, averaged 724,000 tons, valued at Rs. 12·71 crores and during the four war years 532,000 tons, valued at Rs. 13·43 crores. The bulk of this came from Java.

A Sugar Board.—The Committee held that the organization of the sugar industry on the Java model adapted to suit the needs of India is essential to progress. Such an organization must be largely official at the outset but the object should be to hand it over almost entirely to non-official control at as early a stage as possible. It should take the form of an Indian Sugar Board with five official and six non-official members. In the first instance, all the members would have to be nominated by Government but the first duty of the Board should be to evolve a scheme to secure representative appointments. Simultaneously with the establishment of the Board should be that of an Imperial Research Institute with three divisions, agricultural, chemical and engineering, which should control the work on the research stations proposed for the provinces as well as that on the cane-breeding station at Coimbatore, the excellent work in progress at which should be continued on its present lines except that the attempt to evolve improved varieties of cane for Upper India which will withstand the indifferent usage of the ordinary canegrower should be abandoned as impracticable. The functions of the Sugar Board would be to control the policy of the Research Institute and the administration of its funds, to advise Government on all matters affecting the sugar industry and to supervise the issue and receipt of returns by the Research Institute. The cost of the Board would be negligible as membership would be honorary. As regards that of the Institute, the sugar industry should be expected to contribute and the first representative Board should evolve a practical scheme of contribution. It is held that the peculiar conditions of India especially the importance of the gur industry preclude the complete elimination of Government interest in the Institute and that, therefore, even when the industry is in a position to take over the main control, its funds should be provided by a voluntary levy on factories supplemented by a Government subsidy to ensure consideration of the interests of the small grower. The work of the Board and the Institute must be supplemented by the establishment of a Sugar School forming an integral part of the Institute and providing the specialised technical training in field and factory which will qualify men to enter the sugar industry as competent workers. The Sugar School should eventually be affiliated to a University and should then confer a B. Sc. degree on successful students. A site in the Basti or Kheri district of the United Provinces is suggested as suitable for the location of the Research Institute and the headquarters of the Sugar Board. No announcement of action on the Report of the Commission has yet been made.

ABSORPTION OF GOLD (both coin and bullion) IN INDIA.

(In lakhs of Rupees.)

	AVERAGE OF 5 YEARS ENDING.											
	1873-74	1878-79.	1883-84.	1888-89.	1893-94.	1898-99.	1903-04.	1908-09.	1913-14.	1918-19.	1919-20.	1920-21.	1921-22.
1. Production (*b*) ..	..	..	..	..	71	2,01	2,95	3,40	3,36	3,39	2,44	2,73	3,08
2. Imports .	1,65	1,68	4,23	3,41	4,12	5,48	13,09	16,85	32,79	9,88(*a*)	45,34(*a*)	23,57	13,82
3. Exports ..	27	1,04	10	33	2,02	3,23	6,82	7,50	4,64	3,01(*a*)	3,08(*a*)	21,46	16,68
4. Net imports (*i.e.*, 2—3)	1,38	64	4,13	3,08	2,10	2,25	6,18	9,35	28,15	6,87(*a*)	42,26(*a*)	2,11	—2,86
5. Net addition to stock (*i.e.*, 1+4)	1,38	64	4,13	3,08	2,81	4,26	9,13	12,75	31,51	10,26	44,70	4,84	22
6. Balance held in mint and Government Treasuries and Currency and Gold Standard Reserves	..	..	..	..	..	66	12,88	6,57	19,11	16,93	44,49	24,17	24,32
7. Increase (+) or decrease (—) in stock held in mints, etc., as compared with the preceding year	..	..	..	..	..	+61	+2,67	—3,25	+4,47	—1,02	+27,11	—20,32	+15
8. Net absorption (*i.e.*, 5—7) ..	1,38	64	4,13	3,08	2,81	3,65	6,46	16,00	27,04	11,28	17,59	25,16	7
9. Progressive total of additions to stock	1,38	4,63	15,24	35,17	51,74	61,86	1,01,19	1,58,81	2,77,15	3,72,61	4,38,89	4,43,73	4,43,95
10. Net progressive absorption ..	1,38	4,63	15,24	35,17	51,74	61,19	88,31	1,52,24	2,58,04	3,55,68	3,94,41	4,19,57	4,19,64

Note.—The quinquennial average figures are inserted only for comparative purposes. The progressive total of additions to stock (item 9) and net progressive absorption (item 10) are calculated on the annual figures and are not based on these averages. Item 9 is the sum of the yearly figures in item 5 and item 10 the sum of the yearly figures in item 8.

(*a*) Excludes gold imported and exported on behalf of the Bank of England.

(*b*) Figures are for calendar year ending 31st December.

DEPARTMENT OF COMMERCIAL INTELLIGENCE.

The Department of Statistics was reabsorbed into the Department of Commercial Intelligence with effect from the 1st December 1922. The joint department has its office at No. 1, Council House Street, Calcutta, the headquarters of the Director-General. It embraces two distinct classes of work: (*a*) the collection and dissemination of information connected with overseas trade which may be of use to Indian firms, and (*b*) the compilation and publication of All-India statistics. The latter are published in a series of volumes of which the most important are the sea-borne Trade Accounts, monthly and annual, Statistical Abstract, Agricultural Statistics (in two volumes), and the Review of Trade. The department also publishes a weekly journal—"The Indian Trade Journal"—the principal features of which are (*a*) information as to tariff changes in foreign countries which affect Indian interests, (*b*) notices of tenders called for by Government departments and public bodies, (*c*) crop reports and forecasts, (*d*) Government orders, communiques and other notifications affecting trade, (*e*) analysis of Indian trade statistics, (*f*) market reports, prices and trade movements of the staple exports and imports, (*g*) trade enquiries for securing trade introductions, (*h*) summaries of the leading features of consular and other trade reports, and (*i*) abstracts of the proceedings of the various Chambers of Commerce in India.

The Department also administers the COMMERCIAL LIBRARY AND READING ROOM located at No. 1, Council House Street, Calcutta. This was at first a small departmental library used for the purpose of answering enquiries, but in 1919 the Government of India agreed to the formation of a combined technological library of reference in Calcutta in place of the separate libraries attached to the Departments of Commercial Intelligence, Statistics, and Patents and Designs, and the resultant Commercial Library and Reading Room was placed under the administrative control of the Director-General. It has now been expanded into a first-class technical library containing over 9,000 volumes as well as Indian and foreign statistical publications, and 200 technical and commercial journals and market reports. Ordinarily books are consulted in the Library, but they are also available on loan upon deposit of value.

The Department works in close co-operation with Directors of Industries and other Government Departments in India, with the Indian Trade Commissioner in London, with His Majesty's Trade Commissioners in India and the Dominions, and with Consular Officers in various parts of the world. And the yearly increase in its correspondence shows that it is steadily being used more and more both by firms in India and by overseas firms interested in Indian exports.

INDIAN COTTON DUTIES ACT.

The origin of this fiscal measure dates back to 1894 when the embarrassment caused to the finances of India by the fall in exchange drove the Government of India to the necessity of adopting measures to increase their sources of revenue. Among these measures was the re-imposition of the Customs Tariff which had been in force prior to 1882 subject, however, to this difference that cotton yarns and fabrics, which had formerly been subjected to an import duty, were in 1894, excluded from the list of dutiable articles. This partial re-imposition of import duties had been recommended by the Herschell Commission which, in reporting in 1893 on the currency question, had favoured this method of adding to the revenue as being the least likely to excite opposition. In point of fact, however, this recommendation which was carried into effect in the Indian Tariff Act of March 1894 gave rise to very marked opposition. In support of their policy the Government appealed to the Resolutions passed in 1877 and reaffirmed in 1879 by the House of Commons, the first of which had condemned the levy of import duties on cotton fabrics imported into India as "being contrary to sound commercial policy," while the latter called upon the Government of India to effect "the complete abolition of these duties as being unjust alike to the Indian consumer and to the English producer." It was, however, an open secret that the decision to exclude from the list of dutiable articles cotton yarns and fabrics was not the decision of the Government of India but that of the Secretary of State. It was pertinently pointed out that the volume of trade in cotton goods and yarns then represented nearly one-half of the total imports from abroad, and that the exemption of these important commodities when practically every single other commodity was being subjected to an import duty could not be justified on its merits as a sound fiscal measure, much less when it was an admitted fact that the Budget would still show a deficit.

Excise Duties Imposed.—The opposition to this measure, though it failed to secure its rejection in the Legislative Council, was strong enough to induce the Secretary of State to reconsider the matter. Yielding to the united representations of the Government of India and of Indian public opinion, His Majesty's Government eventually agreed to the re-imposition of import duties on cotton yarns and fabrics provided that it could be shown that such a measure was necessitated by the position of Indian finances, and that it was combined with an Excise duty which would deprive the import tax of any protective character. Accordingly in December 1894, consequent on the further deterioration in the financial position, two bills were introduced in the Legislative Council. The first of these subjected cotton yarns and fabrics to the general import duty of 5 per cent. *ad valorem*. The second imposed an Excise duty on all cotton yarns of 20's and above produced by Mills in British India. In introducing this latter Bill the then Finance Minister, Sir James Westland, was careful to explain that the policy underlying its provisions had been imposed on the Government of India by the Secretary of State in pursuance of the Resolution of the House of Commons quoted above. The provisions of this particular Bill are of little interest. From the first it was recognised that they were unpractical, Lancashire and Indian spinners disagreed as to the point at which the line should be drawn exempting Indian yarns from the Excise Duty. Practical difficulties were pointed out by Indian spinners as to the impossibility of spinning precisely to a particular count. From the Lancashire point of view it was contended that the Bill offered facilities for evasion while it was admitted that under the system adopted in the Bill, the taxation of Indian and Lancashire products was not being carried out on a similar basis.

Act of 1896.—The Act was in fact doomed to be short-lived, and in December 1895 the Government of India were compelled to reconsider the whole position and to introduce an entirely new measure which became law in January 1896 as the Indian Cotton Duties Act II of 1896. This measure proceeded from two conclusions, namely, that no attempt should be made to obtain any duty from yarns whether imported or locally manufactured, and that an equal rate of duty should be applied to all woven goods whether imported or of Indian origin. With the object of conciliating the opposition, the rate of duty was fixed at 3½ per cent. as opposed to the general rate of Customs duty of 5 per cent. The main provisions of the Act provided that the assessment for the purposes of collecting the Excise duty should be based on returns submitted by the mill-owners; and that provision should be made for a rebate in the case of woven goods exported out of India. No control beyond a requirement that statistical returns should be furnished was attempted in respect of spinning mills. On the other hand certain concessions in the matter of import duty on Mill stores were made by executive order so as to place Indian Mills on a footing more or less equal to their Lancashire competitors.

Criticisms of the Measure.—It is not possible within the limits of the present article to do more than summarise the criticisms with which this measure was received in India. Much of the opposition was based on grounds of a transient character; as for instance that the Indian industry was then in a state of continued depression and that it had been hard hit, particularly in respect of its export trade, by the currency legislation, and by the uncertainty as to the fiscal policy of Government. In some quarters objection was offered to the exemption of yarn, which it was alleged, would place the Indian hand weaving industry at an advantage with the Indian power weaving industry. But the hostility to this measure, as also to the earlier measures already described, clearly proceeded from the feeling that the policy of the Government of India and of the Secretary of State had been dictated by Lancashire, and that the action of Lancashire was due not so much to the fact that there was any real competition between Indian and Manchester goods, but to a desire to handicap the Indian industry whose progress was already causing uneasiness to Lancashire interests. It was argued that the imports from Lancashire were practically all of the higher counts, which, for climatic and other reasons, Indian mills could not produce; that in any case the advantage to the Indian millowner of the import duty was inconsiderable and was counterbalanced by certain drawbacks, arising from the inferiority of Indian labour, which could not be overcome; and that this advantage, such as it was, could scarcely be said to have a protective character, in view of the higher cost of initial equipment in the case of an Indian mill which has to import its machinery, and of working expenses consequent on the scarcity of skilled labour and on the necessity of importing stores required in the production of cloth. Finally, from the standpoint of the consumer, very severe criticism was directed against the reduction, in favour of imported cotton goods, of the general rate of duty from 5 per cent. to 3½ per cent. on the ground that the effect of the legislation would relieve the richer classes who were consumers of the finer Manchester fabrics and impose new taxation on the poorer classes whose requirements were met by the Indian mills.

New Factors in the Situation.—Since the passing of this measure into law the policy of the Government of India in this respect has frequently been the subject of attack in the press and in the Legislative Councils while it has also formed the subject of continued representations by the industrial interests affected and political organizations. In more recent years the agitation in favour of the abolition of the Excise duties has been revived by the growth in England of a strong body of public opinion in opposition to the policy of Free Trade. Advantage has been taken of this new phase in English economic thought to press on behalf of India the acceptance of a policy of Protection and the removal of the Excise duties is now claimed by the opponents of this measure as a necessary corollary of the application to the British Empire of the principles associated with the name of Mr. Chamberlain. A new factor in the situation which has strengthened the position of those who are in opposition to the Excise duties is to be found in the severe competition which Indian mills have to face in China as well as in India from

the Japanese industry. The Japanese market was lost to India in the early years of this century. More recently, however, Japan has entered as a competitor with India into the China market, while within the last few years it has pushed its advantage as against the Indian millowner in the Indian market itself. On two occasions within the last ten years the question of Excise duties has come prominently to the front as a result of debates in the Viceroy's Council. The official attitude is firmly based on the position that the Excise duties stand and fall with the import duties. Against such an attitude all arguments based either on the advantages of a Protectionist as opposed to a Free Trade policy or on the handicap to which the present system exposes the Indian millowner can, of course, make no head way. The Government of India are confronted with a heavy recurring loss in their revenues as a result of the abolition of the opium traffic.

Policy of 1917.—The policy of Government towards the Cotton Duties underwent a further development in 1917. In the budget of that year provision was made for interest and sinking fund charges on £ 100 millions, the contribution of India towards the cost of the war. This demanded in addition to the natural increase in the revenues fresh taxation to the extent of £ 3 millions per annum. Amongst the expedients adopted to produce this revenue was the raising of the import duty on cotton goods from 3½ per cent. to 7½ per cent. which is the general tariff rate. At the same time the cotton excise duty was fixed to remain at the previous figure of 3½ per cent. thus giving the indigenous industry a slight protection to the extent of 4 per cent. The question of the abolition of the Excise entirely had to be dismissed from consideration in view of the demands upon the exchequer, as it was estimated to produce in 1917-18 £ 320,000. By means of the increase in the tariff on Cotton Duties the Finance Member estimated to produce an additional £ 1 million per annum. The proposal was received with immense satisfaction in India as a step towards the righting of what is almost everywhere regarded as a reverse economic wrong. It aroused very vehement protests in Lancashire where the cotton industry organised its political vote and brought great pressure to bear upon the Secretary of State to withdraw the measure. Mr. Austen Chamberlain, the then Secretary of State for India, stood firm and with the Government at his back refused to budge an inch from the position which he had taken up in supporting the Government of India in this matter. There were anxious moments in the House of Commons when th Labour Party joining with the Irish Nationalists and the Lancashire vote mobilised its forces against the Government especially as the attitude of Mr. Asquith and his following was obscure. In the end Mr. Asquith gave his support to the Government policy on the understanding that this, in common with all other fiscal issues, would be reconsidered at the end of the war. With this support, the Bill was carried through the House of Commons by a large majority. The policy laid down in 1917 has been maintained. The Excise Duty remains stationary at 3½ per cent. for purely revenue purposes. The imports of piecegoods have been subjected to the same tariff as other imports in all variations of the Customs duties. (See Customs Tariff).

THE INDIAN COTTON COMMITTEE.

A resolution issued by the Government of India in September 1917 announced the appointment of a Committee to examine the possibilities of increasing the cultivation of long-stapled cotton in India, of improving existing methods of ginning and marketing cotton, of preventing adulteration, damping and mixing, of improving the accuracy of the cotton forecasts and, generally, of making the statistical information published by Government of greater utility to the cotton trade. The Committee were also directed to submit recommendations in regard to the staff required and the organization necessary for the development of the cultivation of long-stapled cotton in tracts which they considered suitable for that purpose.

The Committee consisted of the following :— Mr. J. MacKenna, C.I.E., I.C.S., Agricultural Adviser to the Government of India, President. Mr. N. N. Wadia, C.I.E., Ex-Chairman, Bombay Mill Owners Association, Mr. F. Hodgkinson, Member of the Council of the British Cotton Growing Association, Mr. H. F. Ashton, Executive Engineer, Punjab, Mr. G. S. Henderson, Imperial Agriculturist, and Mr. W. Roberts, Principal, Lyallpur Agricultural College, Members. Mr. F. Noyce, I.C.S., Secretary.

A full summary of the **Report** of the Committee, appeared on page 291-294 of the Indian Year Book, 1922. The Committee in their report conclude that, so far as separate figures are available, of the 4,728,000 bales of cotton produced by India in a normal season, 726,000 fall within the Lancashire definition of long staple cotton and an additional 478,000 bales within the Bombay definition.

They emphasize that, of the methods by which an improvement in the quality and an increase in the outturn of Indian cotton can be secured, botanical work is the most important. The Report points out that the outturn of cleaned cotton to the acre in India is only 85 pounds, whereas in the United States it is 200 pounds, and that improvements in agricultural practice should very considerably reduce this difference. The Committee recommend considerable expansion of the Agricultural Department in order to extend its work for cotton.

The possibilities of the extension of the cultivation of long staple cotton under irrigation in the cotton growing Provinces of North India —the Punjab, the North-West Frontier Province, the United Provinces and Sind—are examined in great detail in the Report.

One of the main problems dealt with by the Committee is that of securing to the cultivation an adequate price for the pure or superior varieties of cotton grown as the outcome of the recommendations in the first part. With this object, they make comprehensive recommendations. They also make important recommendations in regard to the improvement of cotton forecasts. The Committee suggest not only the better organization of the Agricultural Department but also of the Cotton Trade by the establishment of a Central Cotton Trade Association in Bombay, to be known as the East India Cotton Association which, as far as the control of the cotton trade is concerned, would take the place of the seven distinct bodies representing different branches of the trade which were in existence at the time the Report was written. Finally, the Committee make provision for much closer connexion between the Agricultural Department and the Cotton Trade, by the institution of a Central Cotton Committee to which all connected with cotton, whether agriculturally or commercially, could able to turn to for advice or assistance. They recommended that the Committee should consist of about 20 members including the following nine official members: the Agricultural Adviser to the Government of India, who would be President, six agricultural experts working on cotton from the six great cotton growing Provinces, the Director-General of Commercial Intelligence, and the Director of Statistics. The remaining members, with the exception of a representative of the Co-operative Department, who might be either an official or a non-official, should they said represent Chambers of Commerce and similar bodies and would also include a representative of Lancashire. The functions of the Committee would be almost entirely advisory but its advice would carry very great weight.

The proposal to reorganise the Bombay Cotton Trade in one efficient organisation, to be called the East India Cotton Association, at first failed through the jealousy of the small speculative element, resentful of any form of control, but was eventually brought into being, with the assent of all parties, in 1922.

The first meeting of the Central Committee recommended in the Report was held in July 1921, when it assembled in Bombay, and it has since accomplished much constructive work. It has advised the Government of India regarding the preparation of legislation for the restriction of cotton transport, the regulation of gins and presses and the compulsory rendering of cotton statistics. Legislation in regard to the first was introduced in the Central Legislature in September, 1922, and referred to a joint Select Committee of both its Houses. The Committee has placed itself in touch with such organisations as the Empire Cotton Growing Corporation and the Cotton Industry Research Association and has made arrangements for a study of changes in export demand, and for a study of Indian mill consumption in detail. Several provinces have now taken tentative action in regard to the 1917 Committee's recommendations that concern them.

The Committee is specially devoting its attention to tests of new cottons for the Agricultural Department, research work in relation to the measurable characters of cotton and their spinning value and a study of the intrinsic spinning value of Indian cottons. As regards the first and last it has urged the need for the establishment of a technological research establishment in Bombay. As regards the second it has made special representation to the Government of India.

Provision for technological research and for the other activities recommended by the Committee will require money and to raise this the Committee has recommended the levy of a cess of four annas a bale on the commercial cotton crop (excluding domestic consumption) which is estimated to produce Rs. 8 lakhs a year.

ADULTERATION OF PRODUCE.

In August 1917 the Department of Commerce and Industry, Government of India, issued a long memorandum to Chambers of Commerce in India on the subject of the adulteration of Indian produce. This memorandum said:—Cotton is still watered; jute is still watered; groundnuts, hides, indigo, oils are freely adulterated; this at least is common knowledge. It is unnecessary to dilate on the loss to Indian trade which this practice of adulteration must involve, but it appears to the Government of India to be specially important at the present time to endeavour to focus attention on the matter. It seems reasonable to suppose that the present war will be followed by a period of keen competition among industrial nations for materials of all descriptions and for products which India should be in a specially favourable position to supply. But it cannot be expected that India will be able to capture and retain the extended markets which should fall to her share, if steps are not taken to effect a radical improvement in the reputation which, the Government of India fear, some of her products have only too justly merited.

Attitude of Government.—After reviewing the facts concerning the adulteration of wheat, cotton, jute, leather, hemp, and bees' wax the memorandum continued:—it will be seen from the preceding sketch of previous discussions on this subject that the Government of India have been consistently opposed to any attempt to meet the evil by legislative measures. They have held the view that any such measures would be extremely difficult to carry into effect, would seriously hamper trade, and would probably, in any case, prove ineffectual as a practical remedy

They have maintained the opinion that the proper agency for dealing with these abuses is the trade itself, and that no intervention on the part of Government is desirable. To these views they are still inclined to adhere. At the same time, they would welcome any suggestions on the subject, and would be glad to co-operate, if further discussion should show that any action on their part is at once feasible and desirable. It seems to them, however, more probable that the situation could be most satisfactorily dealt with without any intervention on the part of Government. If the leading exporting firms of any particular commodity in India would arrange with their leading buyers that the latter should insist on freedom from adulteration, an improvement could probably be more readily effected by this means than by any action on the part of Government. This would seem to be the most fruitful line of attack, but it has also been suggested that Chambers of Commerce in India might organise some system of certifying to the purity of products before export. This suggestion seems worthy of consideration.

Adulteration of Ghee.—In the autumn of 1917, considerable feeling was evoked in Calcutta by the practice of adulterating ghee. For instance, a panchayat of Marwaris excommunicated five ghee dealers, in one case two partners were excommunicated for one year and ordered to pay Rs. 1,00,000 towards the purchasing of grazing ground for cattle. In another case a father and son were fined Rs. 25,000 and in other cases the fines ranged from Rs. 500 to Rs. 1,000. Feeling waxed so strong that a deputation asked the Governor to move the Government of India to pass an ordinance, pending legislation, penalising both the adulteration of ghee and the selling or stocking of adulterated ghee. Shortly afterwards an Emergency Bill was introduced, by Sir S. P. Sinha, in the Bengal Legislative Council to amend the Calcutta Municipal Act, with special reference to ghee adulteration. Sir Satyendra, in introducing the Bill, said that the existing law had failed to check the practice of adulterating ghee and selling adulterated ghee in Calcutta. In view of the evils resulting from widespread adulteration it was considered necessary that more stringent measures should be taken to provide for the purity of the article and to penalise the manufacture, storage, and sale of ghee that was adulterated. In this Bill a definition for adulteration had been introduced by which ghee must not consist of any article which was not extracted from milk. The penalty imposed under the Bill for offences ranged from a fine of Rs. 200 to Rs. 1,000. The Bill was taken up for consideration after suspending the rules of business and passed.

Burma Ghee Adulteration Act.—In Burma a similar Bill was passed in October, 1917, when the mover of the Bill explained that all that the Bill proposed was to ensure that a purchaser who desires to obtain ghee should be entitled to receive an article which was derived exclusively from milk. If purchaser desired a cheaper substitute, the Bill did not prevent him from obtaining it. It did, however, prevent him from receiving such substitute under the impression he was purchasing ghee. It was not anticipated that the Bill would effect any dislocation of any established trade. It would be necessary for manufacturers and dealers of mixtures which had hitherto been sold under the name of ghee to arrange to sell such mixture under distinctive names in order that the customer might be fully aware he was not purchasing ghee. If such names were speedily adopted, the evils resulting from the sale of these mixtures as ghee would be prevented without any loss or dislocation of industry.

Tea.

Tea cultivation in India is chiefly in Assam, Bengal and Southern India, the cultivation elsewhere being comparatively unimportant.

The total production of tea in India was estimated at 311 million lbs. in 1922, as compared with 274 million lbs. in 1921 and 345 million lbs. in 1920. Assam contributed 64 per cent. or nearly two-thirds of the total, Northern India (excluding Assam) 24 per cent, and Southern India nearly 12 per cent. The statement below shows the development of the industry during the past 17 years :—

	1905	1915	1920	1921	1922
ACREAGE.	Acres	Acres	Acres	Acres	Acres
Assam	339,200	382,800	420,200	417,200	412,500
Rest of Northern India ..	153,500	181,300	193,800	200,600	203,300
Southern India	33,800	68,000	88,400	91 200	91,900
Burma	1,500	2,800	1,700	..	..
Total ..	528,000	634,900	704,100	709,000	707,700
PRODUCTION	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)
Assam	151,905	245,752	234,314	181,503	198,925
Rest of Northern India ..	57,478	94,695	75,237	61,362	75,126
Southern India	11,910	31,610	35,655	31,399	36,547
Burma	107	146	134	..	..
Total ..	221,400	372,203	345,340	274,264	310,598

Exports during the same years were as follows :—

Exports of tea by sea to foreign countries.

	1905-06	1915-16	1920-21	1921-22	1922-23
	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)	lbs. (1,000)
From Northern India ..	199,768	301,429	251,508	284,378	253,990
From Southern India ..	14,399	37,035	34,238	29,493	34,296
From Burma	57	6	6	7	10
Total ..	214,224	338,470	285,752	313,878	288,296

The total exports during 1922-23 were valued at Rs. 22,04 lakhs, as compared with 314 million lbs., valued at Rs. 18,22 lakhs, in the previous year. The quantity exported to the United Kingdom decreased by 8 per cent. from 269 to 248 million lbs., but the value of the exports increased by 19 per cent. from Rs. 16,12 to Rs. 19,14 lakhs. The consumption in the United Kingdom expanded less rapidly than in 1921, but the smaller amount imported together with larger re-exports effected a substantial reduction in the heavy stocks. Direct shipments to Canada and the United States were smaller than in the preceding year, but larger than in 1920-21. Australia considerably reduced her demands from 7½ to nearly 4 million lbs., due mainly to the competition of tea from Java. The exports to Ceylon also decreased from 4 to 2½ million lbs. On the other hand, Mesopotamia and Persia increased their purchasings. Bengal supplied 88 per cent. of the exports and Madras nearly 11 per cent.

EXPORTS AND PRICES.

The following table shows the quantity of Tea exported by sea and by land to Foreign Countries from India, Ceylon, and China in the years 1896-97 to 1922-23 with variations in index numbers, taking the figure of 1896-97 as 100‡ :—

——	India.	Ceylon.*	China.†		Java.
			Black and green.	Brick, table and dust.	
	lbs.	lbs.	lbs.	lbs.	lbs.
1897-98	152,344,905 [101]	114,460,318 [104]	137,097,600 [85]	75,781,867 [98]	....
1898-99	158,539,488 [105]	122,395,518 [111]	147,967,200 [91]	68,017,067 [87]	....
1899-1900	177,163,999 [118]	129,661,908 [118]	153,669,067 [95]	71,205,067 [91]	....
1900-01	192,300,658 [128]	149,264,603 [136]	144,270,933 [90]	52,190,667 [66]	....
1901-02	182,594,356 [121]	144,275,608 [131]	119,390,000 [74]	42,740,533 [54]	....
1902-03	183,710,931 [122]	150,829,707 [137]	128,226,933 [79]	78,512,400 [100]	....
1903-04	209,552,150 [139]	149,227,236 [135]	140,607,867 [88]	83,813,600 [107]	....
1904-05	214,300,325 [142]	157,929,333 [143]	132,366,933 [83]	61,493,733 [78]	....
1905-06	216,770,366 [144]	171,256,703 [156]	112,152,533 [69]	70,784,267 [91]	25,650,156 [100]
1906-07	236,090,328 [157]	171,558,110 [156]	108,864,534 [67]	79,506,133 [101]	27,455,019 [107]
1907-08	228,187,826 [151]	181,126,298 [164]	130,022,266 [80]	84,940,000 [108]	29,286,402 [114]
1908-09	235,089,126 [156]	181,436,718 [165]	129,265,733 [80]	80,885,733 [103]	36,579,941 [143]
1909-10	250,521,064 [167]	189,585,924 [172]	120,174,800 [74]	79,617,600 [101]	36,679,003 [143]
1910-11	256,438,614 [170]	186,925,117 [170]	123,947,734 [77]	84,158,943 [107]	40,639,185 [158]
1911-12	263,515,774 [175]	184,720,534 [168]	137,788,933 [85]	57,251,467 [73]	50,362,607 [196]
1912-13	281,815,329 [187]	196,632,380 [169]	127,826,800 [79]	69,733,200 [89]	61,691,452 [241]
1913-14	291,715,041 [194]	197,419,430 [179]	109,259,733 [68]	82,274,400 [105]	64,938,907 [253]
1914-15	302,556,697 [201]	191,838,946 [174]	117,337,867 [73]	81,125,333 [103]	71,322,504 [278]
1915-16	340,433,163 [226]	214,900,383 [195]	143,662,000 [89]	93,776,667 [119]	101,603,335 [396]
1916-17	292,594,026 [194]	208,090,279 [189]	126,260,800 [78]	79,259,733 [101]	98,006,121 [382]
1917-18	360,631,933 [240]	195,231,592 [177]	89,115,333 [55]	60,936,666 [78]	80,236,200 [313]
1918-19	326,645,780 [217]	180,817,744 [164]	43,422,933 [27]	10,445,866 [13]	61,853,000 [241]
1919-20	382,033,694 [254]	208,560,943 [189]	71,801,200 [44]	20,182,400 [26]	110,792,430 [432]
1920-21	287,524,697 [191]	184,770,231 [168]	38,908,800 [24]	1,809,867 [2]	93,893,310 [366]
1921-22	317,566,850 [211]	161,610,966 [147]	53,892,533 [33]	3,158,533 [4]	67,805,905 [264]
1922-23	294,658,581 [196]	171,807,581 [156]	73,336,933 [45]	3,472,800 [47]	80,897,040 [315]

* The figures for years previous to 1905-06 and also from 1917-18 to 1920-21 relate to the calendar year as it has been found impossible to procure complete data for the official year.

† For calendar year.

‡ In the case of Java the figure for 1905-06 has been taken as 100, earlier figures not being available.

The following statement illustrates the variations in prices of Indian tea sold at auction sales in Calcutta and in average declared values of exports by sea in 1889-90 and the six years ending 1922-23 the average price of 1901-02 to 1910-11 being taken as 100 in each case :—

Year.	Average price of Indian tea.		Average declared value of Exports by Sea.	
	Price.	Variation.	Price.	Variation.
	As. p.		As. p.	
1889-90	7 7	126	8 2	117
1917-18	7 3	121	7 10	112
1918-19	8 0	133	8 9	125
1919-20	8 0	133	8 8	124
1920-21	5 1	85	6 10	98
1921-22	10 1	168	9 3	134
1922-23	13 3	221	12 3	175

The following table shows the quantity of tea, green and black, produced, exported available for consumption in India during the years 1918-19 to 1922-23 (the figures in the last column being calculated after adding stocks left from previous year and deducting those left at end of year) :—

	Production.	Net exports.	Available balance
	lbs.	lbs.	lbs.
1918-19	380,458,975	312,012,408	50,446,567
1919-20	377,055,639	370,372,501	29,897,138
1920-21	345,339,576	276,510,111	43,958,465
1921-22	274,263,771	304,829,523	30,568,748
1922-23	310,660,513	281,473,825	28,390,188

Note.—The stocks at the end of 1918-19 were abnormally high owing to lack of freight.

Quantity of Indian Tea exported by sea* (distinguished according to countries of final destination) and by land, in the years 1918-19 to 1922-23.

—•—	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.
	lbs.	lbs.	lbs.	lbs.	lbs.
United Kingdom	282,205,196	336,916,942	249,111,440	268,716,739	248,491,397
Rest of Europe	1,801,569	1,747,449	191,714	666,770	1,367,387
Africa	4,399,875	3,113,264	2,808,314	5,431,617	4,480,087
Canada	926,472	8,299,579	7,995,940	11,900,753	10,450,161
U. S. A.	1,851,289	6,594,383	3,146,515	7,981,511	4,342,551
Rest of America	4,842,875	3,726,280	2,107,815	696,079	1,415,794
Ceylon (*a*)	1,283,086	1,720,735	3,274,846	4,115,485	2,579,260
China	620,990	161,356	29,610	15,323	9,474
Persia	8,358,109	1,959,402	2,050,955	1,282,752	2,925,787
Turkey, Asiatic	7,985,443	4,645,806	5,445,880	†2,583,079	6,053,666
Rest of Asia	2,990,825	2,528,226	2,967,537	2,300,837	2,076,595
Australasia	7,397,491	7,782,976	6,521,278	8,201,313	4,433,706
By Land	2,982,560	2,837,296	1,772,848	3,644,592	6,032,656
GRAND TOTAL ..	326,645,780	382,033,694	287,524,697	317,566,850	294,658,581

* Including shipments from the State of Travancore.

(*a*) Tea consigned from British India to Ceylon is almost entirely transhipped at Colombo to other countries and does not, therefore, appear in the Ceylon Customs Returns as imports into Ceylon.

† Includes Mesopotamia.

Coffee.

The history of the introduction of coffee into India is very obscure. Most writers agree that it was brought to Mysore some two centuries ago by a Mahommedan pilgrim named Baba Budan, who, on his return from Mecca, brought seven seeds with him. This tradition is so universally believed in by the inhabitants of the greater part of South India, that there seems every chance of its being founded on fact. About the beginning of the 19th century there is no doubt coffee had found its way to India, and in 1823 a charter was granted to Fort Gloster, near Calcutta, authorising it to become a cotton mill, a coffee plantation and a rum distillery. Some of the coffee trees planted in fulfilment of that charter are supposed to be still alive, and about the same time coffee was successfully grown in the Botanic Gardens, Calcutta; but the industry of coffee planting nowhere found an abiding place on the plains of India but migrated to the hills of South India, in Mysore more especially, and thus into the very region where tradition affirms it had been introduced two centuries previously.

The first systematic plantation was apparently Mr. Cannon's near Chikmuglur. This was established in 1830. It is supposed, however, that Major Bevan may have actually grown coffee on the Wynad at a slightly earlier date and that Mr. Cockburn's Shevaroy plantation bears the same date as Mr. Cannon's. In 1840 Mr. Glasson formed a plantation at Manantoddy, and in 1846 plantations were organised on the Nilgiri hills.

The Position of the Industry.—The number of reporting plantations in the year 1922-23 was 2,998, covering an area of 227,676 acres, as against 2,964 with an area of 216,746 acres reported a year ago. New land planted with coffee in these plantations during the year amounted to 7,224 acres, while the area of old cultivation abandoned was 2,842 acres. This represents a net increase of 4,382 acres over the total area (127,272 acres) under coffee for 1921-22. The total reported area under cultivation in the year 1922-23 was, therefore, 131,655 acres, or an increase of 3 per cent. over that of the preceding year. Of this total area, Mysore accounted for 52 per cent., Coorg 24 per cent., Madras 22 per cent., and Cochin and Travancore together 2 per cent.

The total reported production of cured coffee during the year was 25,467,687 lbs., as compared with 20,586,644 lbs. (revised) in the preceding year—the yield per acre of plucked area being 296 lbs. (202 lbs.) in Madras, 251 lbs. (182 lbs.) in Coorg, 177 lbs. (179 lbs.) in Mysore, 149 lbs. (49 lbs.) in Travancore and 126 lbs. (128 lbs.) in Cochin.

It is reported that in some of the coffee-growing districts coffee is giving way to tea, or where the altitude is not prohibitive, to rubber. The advent of large supplies of cheap Brazilian coffees in the markets of Europe has, by bringing down prices, no doubt injured the coffee industry of India very seriously.

Exports of Coffee.

	Cwts.
1902-03	269,165
1903-04	291,254
1904-05	329,647
1905-06	360,182
1906-07	228,094
1907-08	244,234
1908-09	302,022
1909-10	232,645
1910-11	272,249
1911-12	241,085
1912-13	267,000
1913-14	260,000
1914-15	290,000
1915-16	177,000
1916-17	198,000
1917-18	196,000
1918-19	219,000
1919-20	272,600
1920-21	233,400
1921-22	235,000
1922-23	169,000

The principal customers of Indian coffee are France and the United Kingdom; they reduced their requirements by 20,200 cwts. and 28,200 cwts., and took 60,700 cwts. and 57,000 cwts., respectively, in 1922-23. With the exception of Asiatic Turkey (including Mesopotamia) which took 3,000 cwts. more than in the preceding year, the exports to other principal importing countries decreased. In the six months, April to September, 1923, the exports increased to 122,500 cwts., as compared with 77,600 cwts. in the corresponding period of the previous year. All the principal importing countries took larger quantities, the most noticeable increase being in France, the United Kingdom, Arabia, and the Bahrein Islands.

Labour.—The daily average number of persons employed in the plantations during 1921-22 was returned at 69,191, of whom 42,036 were permanently employed (namely, garden labour 26,209 and outside labour 15,827) and 27,155 temporarily employed (outside labour), as compared with 74,945 persons (32,598 garden and 17,736 outside labour permanently employed and 24,611 temporary outside labour) in 1920-21.

The Public Trustee.

The Public Trustee of England is a Government Official created by Statute (Public Trustee Act, 1906), whereby the State acts as an executor or as a trustee under Wills, and as a trustee under Settlements, whether these instruments are new or old, and in other offices of an analogous character.

The office has been a great success; in the seven years that it has been open the value of the trusts in course of administration have amounted, in round figures, to £50,000,000, while the estimated value of Wills lodged in the Department which have yet to mature is put at some £59,000,000, showing a total value of business of all kinds negotiated at £110,000,000.

Fees chargeable.—The office is now entirely self-supporting and is no charge upon the tax-payer. A provision of the Statute declares that the Office is to make no profit but to charge only such fees as may provide the working expenses and constitute a reserve fund against the liabilities assumed by the State for breach of trust. In accordance with this mutual principle the fees have already been reduced from their original scale, and the cash surplus of fees over expenses, regarded as the nucleus of a reserve fund for all contingencies, is now £14,585.

The main fees are of two kinds—a fee on capital and a fee on income. The fees on capital are taken in two instalments—an instalment of half taken at the beginning, and another instalment of half taken at the end of a trust—each instalment being calculated at the following rates:—

On the first £1,000, fifteen shillings per cent.

On the excess of £1,000 to £20,000, five shillings per cent.

On the excess of £20,000 to £50,000, two shillings and six pence per cent.

On the excess of £50,000, one shilling and three pences per cent. The **Fee on income** is one per cent. if, as is usual, the income be paid direct from its source to the person entitled, on any income in excess of £2,000 a year the fee is only ½ per cent. Where the income is paid through the Department then the fee is two per cent. up to £500 a year, and one per cent. on any excess of £500 a year, and ½ per cent. on income in excess of £2,000 a year. The fee on investment is ¼ per cent.; the Public Trustee, out of this fee paying the brokerage. There is power to vary these fees to meet the peculiar circumstances of special cases; but owing to the low range of the fees, and their mutual character the power of reduction is but seldom exercised, except perhaps in the case of large trusts.

The Department has been organised upon lines followed by commercial organisations. Forms are avoided wherever possible, the methods of the Office prescribing prompt attention to all matters within the day.

The particulars of any trust in which it is desired that the Public Trustee should act may be brought to his notice by letter or by personal interview, and upon his assent being obtained, his appointment should be effected in the ordinary way as in the case of private trustees. In the case of a Will about to be made, his appointment can be secured by the simple provision "I appoint the Public Trustee of England as the executor and trustee of this my Will."

One of the forms of trusteeship which would appeal to English people residing in India is a scheme known as a "**Declaration of Trust.**" An official pamphlet explains that the Public Trustee's services have been requested by people who, either because of professional or business pre-occupation, or from want of experience in dealing with money matters, or from the disadvantages which might attach to Governmental, professional or business disabilities abroad, are not well placed to select and supervise their investments. It would appear that the services of the Department in this matter were first requisitioned by officers taking up appointments in India; and, following out their request for individual assistance, this scheme of trust came to be devised, and has been found to commend itself to the circumstances of a very large circle of persons similarly disadvantaged. A Declaration of Trust is an **inexpensive form of trusteeship** by virtue of which the owner practically retains full control over his capital. The property is made over to the Public Trustee either in the form of money to be invested or specific securities transferred into his name; and thereupon the Public Trustee executes a short "declaration" setting out that he holds the money invested or the securities in trust for the transferor. The result of this is that income, as it accrues, is paid to the owner or to any beneficiary as he may direct. A wide field of investment is permissible, as the trust provides that the funds may be invested as the owner may from time to time direct. As the pamphlet sets out interest at the rate of at least 4 per cent. is to be looked for under the scheme from investments of a non-speculative character. It should be understood that this form of trusteeship is not analogous to a bank deposit, where the return of the capital at par, given the solvency of the bank, is expected. Investments are selected with the greatest care in consultation with the owner, but it must be understood that the Public Trustee does not accept responsibility for any fluctuation of any of the investments chosen. The fees payable for this scheme of trusteeship, so far as the capital fees are concerned, are half those payable in the case of an ordinary settlement. The other fees are the same as the ordinary fees.

The appointment of the Public Trustee secures certain definite advantages inasmuch as he is by Act of Parliament a Corporation Sole: and thus it is said the Public Trustee never dies, so that the expense of appointment of other Trustees is permanently avoided. His

integrity is guaranteed by the State, while the measure of his success would indicate that he is necessarily experienced and skilled in his duties.

Close personal attention is given by the Public Trustee and his senior officers to the details of every trust; and as regards the work of investment, a large organisation has been set up to give the best consideration not only to the selection of investments but to the duty of keeping them under frequent observation.

An Advisory Committee of men of recognised authority has, in the past year, been appointed by the Lord Chancellor to assist the Public Trustee by a quarterly review of the investments made. In the last Annual Report the Public Trustee speaks of having secured a return of £3-19-4 per cent. upon his trustee investments and a return of £4-10-1 per cent. upon his non-trustee investments.

The success of the Department would seem to show that there is a widespread public need in England for such an Office, and the energy and efficiency with which the Department has been constituted and conducted has been a great factor in commending it to the public. The State Guarantee is also doubtless a factor of great importance. A statutory rule provides that strict secrecy shall be observed in respect of all trusts administered in the Department.

The administration is subject to an **audit** by the Controller and Auditor-General (the Government Auditor), while the internal organisation has been built up upon the principle of a check and counter-check upon the administration.

An important section of the Statute gives the Public Trustee power to direct an audit and investigation of the condition and accounts of any trust.

Officials in India will doubtless tend to make an increasing use of the Department. As a Government Office, its stability will commend itself to them as a medium to safeguard their interests under Wills or Settlements which can be entirely relied upon, and free from the risks and expense attendant upon any other forms of trusteeship.

Further information upon details and copies of the official pamphlet, reports and rules, etc., can be obtained of the official agents to the Department, *viz* :—Messrs. King, Hamilton & Co., Calcutta and in Bombay, Messrs. King, King & Co., whose head office is Messrs. Henry S. King & Co., 65, Cornhill, London, E. C.

THE ADMINISTRATOR-GENERAL.

In India the functions of a Public Trustee are divided in each Province between two officials, the Administrator-General and the Official Trustee.

The office of **Administrator-General** was first constituted by Indian Act VII of 1849. There were several later enactments on the subject, all of which have ceased to be in force. The present law is to be found in Indian Act III of 1913, which contains the following provisions :—There are three Administrators-General in each of the Presidencies of Bengal, Madras, and Bombay. Their combined jurisdiction covers the whole of British India. The Administrator-General is entitled to letters of administration, when granted by a High Court, unless they are granted to the next of kin. In the other Courts he is entitled to letters in preference to a creditor, a legatee other than a universal legatee, or a friend of the deceased.

If any person who is not an Indian Christian, a Hindu, Mohammedan, Persian, Buddhist dies leaving within any Presidency assets exceeding the value of Rs. 1,000 and if no person to whom any Court would have jurisdiction to commit administration of such assets has, within one month from his death, applied in such Presidency for probate or letters of administration, the Administrator-General is required to apply for letters of administration. In case of apprehended danger of misappropriation, deterioration, or waste of assets left by the deceased in the towns of Calcutta, Madras, and Bombay, the High Courts may direct the Administrator-General to apply for letters of administration. He can also be required to collect and hold assets until a right of succession or administration is determined. Probate and letters of administration granted to an Administrator-General have effect throughout the Presidency but the High Court can direct that they have effect throughout one or more of the other Presidencies. A private executor or administrator may with the assent of the Administrator-General transfer the assets of the estate to the Administrator-General. There are provisions in the Act with regard to the revocation of grants and the distribution of assets When the assets do not exceed Rs. 1,000 in value, the Administrator-General may, when no probate or letters of administration have been granted, give a certificate to a person, claiming otherwise than as a creditor to be interested in such assets, entitling him to receive the assets. There is also power in certain events to give such certificate to a creditor. There is a further power to send the residue of the assets to the country of domicile of the deceased. The Government of India is required by the Act to make good all sums for which the Administrator-General would be personally liable if he had been a private administrator, except where the Administrator-General and his officers have in no way contributed to the liability.

Fees both on capital and on income are payable out of the estates taken charge of by the Administrator-General. The fees on capital vary from 3 per cent. on the gross value in the case of small estates to 2 per cent. in the case of large estates. The fees on income vary in the case of moveable property from 2 per cent. to 3 per cent., and in the case of immovable property from 3 per cent. to 5 per cent. When the Court has directed the Administrator-General to collect and hold the assets a fee of 1 per cent. on the value of the assets taken possession of, collected, realised, or sold is payable. A small fee is also payable in cases where the

Administrator-General grants a certificate, the Administrator has power to reduce the fees to one-half.

Official Trustee.—The office of Official Trustee dates from the year 1843. By Indian Act XVII of that year the Supreme Court had power to appoint the Registrar or other officer of the Court to be a trustee, where there was no trustee willing to act. Act XVII of 1843 was repealed by Act XVII of 1864, which was in its turn repealed by Act II of 1913, which contains the present law on the subject. There are three Official Trustees. The Official Trustee of Bengal has powers in the greater part of India. The powers of the Official Trustee of Bombay extend to the Bombay Presidency and the Province of British Baluchistan; those of the Official Trustee of Madras extend to the Madras Presidency and the Province of Coorg. The Government can appoint Deputy Official Trustees.

An Official Trustee can (*a*) act as an ordinary trustee, (*b*) be appointed trustee by a Court of competent jurisdiction. He has, except as otherwise provided the same powers, duties, and liabilities as ordinary trustees. He may decline any trust. He may not accept any trust under any composition or scheme of arrangement for the benefit of creditors, nor of any estate known or believed by him to be insolvent. He cannot accept a trust for a religious purpose, or for the management or carrying on of any business. He cannot administer the estate of a deceased person unless he be sole executor and sole trustee under the will. He cannot be appointed trustee along with any other person. With his consent he may be appointed trustee in the instrument making the trust, and he may accept a trust contained in a will. When property is subject to a trust, and there is no trustee within the jurisdiction willing or capable to act, the High Court may appoint the Official Trustee as trustee. He may also be appointed a trustee by the surviving or continuing trustees of a trust, and all persons beneficially interested therein.

As in the case of an Administrator-General, the Government of India is responsible for the acts or defaults of an Official Trustee. Fees are payable at rates fixed by the Government.

Freemasonry in India.

In 1728 a dispensation was granted by the Grand Lodge of England to Geo. Pomfrett, Esq., authorising him to "open a new Lodge in Bengal." Of this personage nothing further is known but under Capt. Farwinter, who in the following year succeeded him as Provincial Grand Master of India, Lodge was established in 1730, which in the Engraved Lists is distinguished by the arms of the East India Company, and is described as "No. 72 at Bengal in the East Indies." The next Provincial Grand Masters were James Dawson and Zech. Gee, who held office in 1740; after whom came the Hon. Roger Drake, appointed 10th April 1755. The last named was Governor of Calcutta at the time of the attack made on the settlement by Surajah Dowlah in 1756. Drake missed the horrors of the Black Hole by escaping and was accused of deserting his post, but, though present at the retaking of Calcutta by Admiral Watson and Clive, it is improbable that he resumed the duties of his masonic office after the calamity that befell the settlement.

The minutes of the Grand Lodge inform us that William Mackett, Provincial Grand Master of Calcutta, was present at the meeting of that body, November 17th, 1760, and we learn on the same authority that at the request of the "Lodges in the East Indies" Mr. Cullin Smith was appointed P. G. M. in 1762. At this period it was the custom in Bengal "to elect the Provincial Grand Master annually by the majority of the votes of the members present, from amongst those who passed through the different offices of the (Prov.) Grand Lodge and who had served as Dep. Prov. Grand Master." This annual election as soon as notified to the Grand Lodge of England was confirmed by the Grand Master without its being thought an infringement of his prerogative. In accordance with this practice, Samuel Middleton was elected (P. G. M. circa) in 1767; but in passing it may be briefly observed that a few years previously a kind of roving commission was granted by Earl Ferrars in 1762-64 to John Bluvitt, Commander of the "Admiral Watson," Indiaman "for East India where no other Provincial Lodge is to be found." Middleton's election was confirmed October 31st, 1768, and, as the dispensation forwarded by the Grand Secretary was looked upon as abrogating the practice of annual elections, he accordingly held the office of D. G. M. Unfortunately the records of the P. G. L. date back only to 1774, and thus much valuable information is lost to us. This Grand Lodge continued working until 1792 when it ceased to meet. It seems that the officers were selected from only two Lodges much to the dissatisfaction of the other Lodges, and resulted in most of the dissatisfied bodies seceding and attaching themselves to the Athol of Ancient Grand Lodge. In 1813 at the Union both the Ancients and Moderns in Calcutta combined and gave their allegiance to the **United Grand Lodge of England** and have since been working peaceably under the Provincial Grand Lodge of Bengal which was revived in that year and in 1840 created a District Grand Lodge.

Madras.—The earliest Lodge in Southern India (No. 222) was established in Madras in 1752. Three others were also established about 1760. In the same year Capt. Edmund Pascal was appointed P. G. M. for Madras and its Dependencies and in the following year another Lodge was established at Fort St. George. In 1768 the Athol (or Ancients) invaded this District and in 1782 established a Provincial Grand Lodge and both these Provincial Grand Bodies continued working peaceably side by side until the union. Indeed, though not generally known, these two Grand Bodies made an attempt at coalition long before any such movement was made by their parent bodies, the Grand Lodge of England, and the Ancient Grand Lodge, and Malden in his History of Freemasonry in Madras states that in a great measure they succeeded. At the Union in 1813 all the bodies in Madras gave their allegiance to the United Grand Lodge. One event worthy of note was the initiation in 1776 at Trichinopoly of the eldest son of the Nawab of Arcot, Undat-ul-Amari, who in his reply to the congratulations of the Grand Lodge of England stated "he considered the title of English Mason as one of the most honourable that he possessed." This document is now stored in the archives of the United Grand Lodge.

Bombay.—Two Lodges were established in this Presidency during the 17th century, Nos. 234 at Bombay in 1758 and 569 in Surat in 1798, both of which were carried on the lists until the union when they disappeared. A Provincial Grand Master, James Todd, was appointed but there is no record that he exercised his functions and his name drops out of the Freemasons' Calendar in 1799. In 1801 an Athol Warrant was granted (No. 322) to the 78th foot which was engaged in the Maratha War under Sir Arthur Wellesley. In 1818 Lord Moria was asked to constitute a Lodge to be known by the name of St. Andrew by eight Masons residing there and also to grant a dispensation for holding a Provincial Grand Lodge for the purpose of making the Hon. Mountstuart a Mason, he having expressed a wish to that effect. The Petitioners further requested "that his name might be inserted in the body of the warrant, authorising them to instal him after being duly passed and raised a Deputy Grand Master of the Deccan. Of the reply to this application no copy has been preserved. Lodge Benevolence was established in Bombay in 1822.

In 1823 a Military Lodge "Orion-in-the-West" was formed in the Bombay Artillery and installed at Poona as No. 15 of the Coast of Coromandel. It seems from Lane's records that in 1830 it was discovered that this Lodge was not on the records of the United Grand Lodge of England. A Warrant was subsequently issued bearing date 19th July 1833. According to the early proceedings of this Lodge, members were examined in the Third Degree and passed to the chair in the Fourth Degree for which a fee of three gold mohurs was charged. In the following year a second Lodge was established at Poona by the Provincial Grand Lodge of Bengal which however left no trace of its existence. In 1825 the civilian element of "Orion", seceded and formed the "Lodge of Hope" also at Poona No. 802.

Here "Orion" unrecognized at home, aided in the secession of some of its members, who

obtained a warrant, on the recommendation of the parent Lodge, from the Grand Lodge of England. Two years later it was discovered that no notification of the existence of "Orion-in-the-West" had reached England, nor had any fees been received, although these including quarterages had been paid into the Provincial Grand Lodge, Coast of Coromandel. It was further ascertained that in granting a warrant for a Bombay Lodge the Provincial Grand Master of Coromandel had exceeded his powers. Ultimately a new warrant No. 598 was granted as already stated in 1833. Lodge "Perseverance" was started in Bombay No. 818 in 1828. Up to this time the jurisdiction of the Grand Lodge of England in India had not been invaded; but in 1836 Dr. James Burnes was appointed by the Grand Lodge of Scotland, P. G. M. of Western India and its Dependencies. No Provincial Grand Lodge however was formed until 1st January 1838. A second Scottish Province of Eastern India was started which on the retirement of the Marquis of Tweedale was absorbed within the jurisdiction of Dr. Burnes, who in 1846 became Provincial Grand Master for all India (including Aden) but with the proviso, that this appointment was not to act in restraint of any future sub-division of the Presidencies. Burnes may be best described as being in 1836, in ecclesiastical phrase as a Provincial Grand Master "in partibus infidelium" for whatever Lodges then existed throughout the length and breadth of India were strangers to Scottish Masonry. But the times were propitious. There was no English Provincial Grand Lodge in Bombay and the Chevalier Burnes, whom nature had endowed with all the qualities requisite for Masonic Administration, soon got to work and presented such attractions to **Scottish Freemasonry** that the strange sight was witnessed of English Masons deserting their mother Lodges, to such an extent that these fell into abeyance, in order to give support to Lodges newly constituted under the Grand Lodge of Scotland. In one case indeed, a Lodge "Perseverance" under England went over bodily to Scotland, with its name, jewels, furniture, and belongings, and the charge was accepted by Scotland. This Lodge still exists in Bombay and now bears No. 338 on the Register of Scotland. From this period, therefore, Scottish Masonry flourished, and English Masonry declined until the year 1848 when a Lodge St. George No. 807 on the Rolls of the Grand Lodge of England was again formed at Bombay, and for some years was the solitary representative of English Masonry in the Province. In 1844 Burns established a Lodge "Rising Star" at Bombay for the **admission of Indian gentlemen** the result of which is seen at the present day. Thus the seed planted at Trichinopoly in 1776 by the initiation of Andat-ul-Amari has borne fruit, resulting in the initiation of thousands of Indian gentlemen of all castes and creeds, and which has gone far to establishing that mutual trust between West and East, a distinguishing characteristic of Speculative Freemasonry. A Provincial Grand Lodge was re-established in Bombay in 1860, and converted into a District Grand Lodge in 1871.

The Grand Lodge of England.—All three Constitutions of the United Kingdom, the United Grand Lodge of England, the Grand Lodge of Ireland and the Grand Lodge of Scotland hold jurisdiction in India. By far the largest is the first; the next largest is the third and the number of Lodges under Ireland is as yet small. The Grand Lodge of England divides its rule under Five District Grand Masters independent of each other and directly subordinate to the Grand Master of England by whom they are appointed.

Bengal.

81 Lodges. Rt. Wor. Bro. Hon'ble Mr. W. J. Reid, C.S.I., I.C.S.; Dy. D. G. M. C. D. Stewart; Assist. D. G. M. Durga Charan Banerjee.

Madras.

31 Lodges. A. Y. G. Campbell, C.I.E., C.B.E. V.D., I.C.S.

Bombay.

51 Lodges. Rt. W. Bro. W. A. Haig-Brown, J.P., Hon. Mag., District Grand Master.

Punjab.

31 Lodges. Rt. W. Bro. Lt.-Genl. Sir George Fletcher McMunn, K.C.B., K.C.S.I., D.S.O., District Grand Master.

Burma.

15 Lodges. Rt. W. Bro. James McKenna, C.I.E., District Grand Master.

The Grand Lodge of Scotland exercises its rule through a Grand Master of all Scottish Freemasonry in India, who is elected by the Brethren subject to confirmation by the Grand Master Mason of Scotland. ~~Maj. Gen.~~ W. E. Jennings, C.I.E., the present incumbent of the office, controls 69 Lodges. Under him the several districts are in charge of the following Grand Superintendents:—

Genl. Sir Claud Jacob. G. Supdt.,			Northern India
H. T. Acton ..	..	,, ,,	Eastern ,,
Col. C. E. Luard	..	,, ,,	Central ,,
Col. C. H. Richards	..	,, ,,	Southern ,,
Lt.-Col. A. W. H. Lee.		,, ,,	Burma.

The Grand Secretary is R. W. Bro. Arthur W. S. Wise, J.P., 17, Murzban Road, Fort, Bombay.

The **Grand Lodge of Ireland** granted a warrant to establish a Lodge at Kurnal in 1837, but it was short lived. An attempt was made in 1869 to establish a Lodge in Bombay, but on the representation of the Grand Secretary of England, to the Deputy Grand Secretary of Ireland that it would be objectionable to create a third masonic jurisdiction in the Province, there being two already, *viz.*, English and Scottish, the Grand Lodge of Ireland declined to grant the warrant. In 1911, however, a warrant was sanctioned for the establishment of Lodge "St. Patrick" and since that year two other Lodges have sprung into being.

The Grand Lodge of Ireland has no District Grand Master in India at present, the Lodges corresponding direct with the Grand Lodge in Dublin. There are ten Lodges, 4 in Calcutta, 3 in Ceylon and 3 in Bombay.

Royal Arch Masonry.—Under England, the District Grand Master in any District is nearly always created also Grand Superintendent, his Deputy as Second and another Companion as Third Principal.

Under Ireland there is no local jurisdiction and under Scotland the office is elective subject to confirmation.

The five English Districts are constituted as under :—

Bengal.

27 Chapters. Grand Supdt. Hon. Mr. W. J. Reid, C.S.I.

Madras.

15 Chapters. A. Y. G. Campbell, C.I.E., C.B.E., V.D., I.C.S.

Bombay.

23 Chapters. W. A. Haig-Brown, J.P., Hon. Mag., Grand Superintendent.

Punjab.

18 Chapters. Lt.-Genl. Sir George Fletcher McMunn, K.C.B., K.C.S.I., D.S.O., P.A.G. Soj. (Eng.), Grand Superintendent.

Burma.

6 Chapters. James McKenna, C.I.E., Grand Superintendent.

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The present Grand Superintendent of R. A Masonry under Scotland is the Hon. Maj.-Gen. W. E. Jennings, C.I.E., and there are 29 Chapters.

There is one Irish Chapter in Calcutta.

Royal Arch Masonry under **Scotland** has a separate constitution to Craft Freemasonry. The District Grand Chapter of India is at present ruled by M. E. Camp. H. P. Gibbs under whom there are about 30 Chapters in India. The Grand Secretary of all Scottish Freemasonry in India is also District Grand Scribe E. of Scottish R. A. Masonry.

Mark Masonry.—Under England, Mark Masonry is worked under the Grand Mark Lodge of England and Wales, and divided into separate Districts; but in most cases the District Grand Master is also District Grand Mark Master.

Bengal.

26 Lodges. D. G. M. Landale Johnstone, I.C.S., D. D. G. M. C. D. Stewart.

Bombay.

15 Lodges. Rt. W. Bro. W. A. Haig-Brown, J. P., Hon. Mag., D. Grand Master.

Madras.

13 Lodges. A. Y. G. Campbell, C.I.E., C.B.E., V.D., I.C.S.

Punjab.

4 Lodges. Rt. W. Bro. Lt.-Genl. Sir George Fletcher McMunn, K.C.B., K.C.S.I., D.S.O., D. Grand Master.

Burma.

6 Lodges. Rt. W. Bro. James McKenna, C.I.E., District Grand Master.

The Mark degree is incorporated with the Royal arch degree in Irish Chapters. Mark degree is worked in some S. C. Lodges, but mostly in R. A. Chapters, in which the Excellent R.A.M. and other degrees can be obtained. S. C. Chapters insist upon candidates being Mark Master Masons before exaltation. Mark degree in Craft Lodges is conferred by the Rt. Wor. Master in S. C. Craft does not recognise the ceremony of Rt. W. Mark Master. This is confined strictly to Chapters. Such Chapter has a Lodge of M. M. M. working under its charter. Separate charters for Mark Lodges are only issued by the G. Chapter of Scotland.

Other Degrees.—There are many side degrees worked in India, of the Ancient and Accepted Rite, no degree higher than the 18° is worked in India under England, but under Scotland the 30° is worked. The Knight Templar Degree is also worked in several places under both English and Scottish jurisdiction. There are fourteen 18th Degree Chapters working in India.

Roman Eagle Conclave No. 43, Bombay.

St. Mary's Commandery No. 43, Bombay.

R. A. Mariner, 72, 514 and 662, Bombay.

R. A. Mariner, 61, 81, 82 and 106, Madras.

Secret Monitor, 14, 21, 36, 37, 40 and 42, Madras.

Benevolent Associations.—Each District works its own benevolent arrangements which include the Relief of Distressed Masons, educational provision for the children of Masons and maintenance provision for widows in poor circumstances.

All information will be given to persons entitled by the District Grand Secretary in each District. The names and addresses of **District Grand Secretaries** are given below :—

D. G. S., Bengal.

C. J. Mackay, 19, Park Street, Calcutta.

D. G. S., Bombay.

J. F. Pennock, V.D., P.A.G.D.C. (Eng.), King's Buildings, Fort, Bombay.

D. G. S., Burma.

J. Meyer, D.G.S., E.C., Rangoon.

D. G. S., Madras.

C. M. Maduranayakam Pillai, Freemasons' Hall, Egmore, Madras.

D. G. S., Punjab.

Owen Roberts, Freemasons' Hall, Lahore.

Scottish Constitution.—For information regarding the Benevolent Funds application should be made to Arthur W. S. Wise, J.P., 17. Murzban Road, Bombay.

The New Capital.

The transfer of the capital of India from Calcutta to **Delhi** was announced at the Delhi Durbar on December 12, 1911. The reasons for it were stated in despatches between the Government of India and the Secretary of State published at the time. It had long been recognised as necessary, in the interests of the whole of India, to de-provincialise the Government of India, but this ideal was unattainable as long as the Government of India was located in one Province, and in the capital of that Province—the seat of the Bengal Government—for several months in every year. It was also desirable to free the Bengal Government from the close proximity of the Government of India which had been to the constant disadvantage of that Province. To achieve these two objects the removal of the capital from Calcutta was essential: its disadvantages had been recognised as long ago as 1868, when Sir Henry Maine advocated the change. Various places had been discussed as possible capitals, but Delhi was by common consent the best of them all. Its central position and situation as a railway junction, added to its historical associations, told in its favour; and, as Lord Crewe said in his despatch on the subject, "to the races of India, for whom the legends and records of the past are charged with so intense a meaning, this resumption by the Paramount Power of the seat of venerable Empire should at once enforce the continuity and promise the permanency of British sovereign rule over the length and breadth of the country."

The foundation stones of the new capital were laid by the King Emperor on December 15, 1911, when His Majesty said:—"It is my desire that the planning and designing of the public buildings to be erected will be considered with the greatest deliberation and care so that the new creation may be in every way worthy of this ancient and beautiful city." Subsequently a **town-planning committee** was appointed—consisting of Captain G. S. C. Swinton, Chairman, and Mr. J. A. Brodie and Sir Edwin Lutyens, members—to advise on the choice of a site for, and the lay-out of, the capital. Mr. V. Lanchester was subsequently consulted by Government on some aspects of the question. The terms of their original engagement (subsequently renewed) were stated by the Under Secretary of State to be:—"The members of the committee will receive their travelling and living expenses, and the following fees for a five months' engagement:—Captain Swinton, 500 guineas; Mr. Brodie, 1,750 guineas; Sir Edwin Lutyens, 1,500 guineas. The Secretary of State has also undertaken to refund to the Corporation of Liverpool the amount of Mr. Brodie's salary for the period of the absence."

Delhi and its environs.—In their first report, dated from Simla, 13th June 1912, the Committee explain that, in dealing with the choice of a site, they felt that the following considerations were paramount and must receive the closest and most continual attention:—(*a*) Health and sanitation, (*b*) water-supply and irrigation supply, (*c*) the provision of ample room for expansion, (*d*) an extent of land suitable for the location of buildings of various characters and sizes and for the provision of spacious parks and recreation grounds—to be assumed at 10 square miles for the New City and 15 square miles for the Cantonment—(*e*) Cost of land and the cost of executing necessary works on different sites, (*f*) facility for external and internal communication, (*g*) Civil and Military requirements.

On the east of the Jumna they found no suitable site. To the north of Delhi, on the west of the Jumna, where the Durbar camps were pitched they found some general advantages. The area is, for example, upwind and upstream from the present city of Delhi. The ruins and remains of the Delhis of the past do not cumber the ground. While the external communications might need improvement, the tract is fairly well served by existing railways. Roads and canals and the internal communication could be made convenient without excessive expenditure, and a good deal of money has already been spent on the area. But its disadvantages were found to be overwhelming. The site is too small and much of the land is liable to flooding. Similarly, the western slope of the hills to the south of Delhi, the Naraina plain, was found unsuitable, mainly because it cannot be considered to be Delhi, is destitute of historical associations, and is shut out from all view of Delhi.

Southern site chosen.—The Committee finally selected a site on the eastern slopes of the hills to the south of Delhi, on the fringe of the tract occupied by the Delhis of the past. They describe it as follows:—"Standing a little to the Delhi side of the village of Malcha, just below the hills almost in the centre of the site, and looking towards the Jumna, Shahjahan's Delhi on the left fills the space between the ridge and the river. Following down from the present city on the foreshore of the riverain, Firoz Shah's Delhi, the site of Indra Prastha, Humayun's fort, Humayun's tomb and Nizamuddin's tomb take the eye in a continuous progress to the rocky eminence on which Ghiyasuddin Tughlak erected his fortress city. On the right the Lal Kot, the Kutb, the Kila Rai Pithora, Siri and Jahanpanah complete the circle of the monuments of ancient Delhis. The mid space in the fore ground is filled by Safdar Jang's Mausoleum and the tombs of the Lodi dynasty, while to the left, towards Delhi, Jey Singh's gnomons and equatorial dials raise their fantastic shapes." The land chosen is free from liability to flood, has a natural drainage, and is not manworn. It is not cumbered with monuments and tombs needing reverent treatment, and the site is near the present centre of the town of Delhi.

Healthiness of Site.—In February, 1913, a Committee consisting of Surgn. General Sir C. P. Lukis, Mr. H. T. Keeling, C.S.I., A.M.I.C.E., and Major J. C. Robertson, I.M.S., was appointed to consider the comparative healthiness of the northern and southern sites. Their report, dated 4th March, 1913, states that "the Committee, after giving full consideration to the various points discussed in the above note, is bound to advise the Government of India that no doubt can exist as to the superior

healthiness of the southern site, the medical and sanitary advantages of which are overwhelming when compared with those of the northern site."

Report on Northern Site.—In the same month the Town-Planning Committee presented their second report, which dealt with the northern site. This had been elicited by the fact that in December, 1912, Sir Bradford Leslie, an engineer with a distinguished Indian career, had read a paper before the Indian section of the Royal Society of Arts in London, in which he set forth plans for building the new capital on the northern site and producing a fine water effect by a treatment of the river Jumna. This paper aroused considerable attention in England, and its publication synchronised with some letters and articles in the press in India expressing a preference for the northern site. The latter voiced a natural attraction to the north site which the Committee themselves experienced on their first visit to Delhi, and enunciated some predelictions which the Committee had at one time felt and later abandoned. The Town Planning Committee, therefore, undertook to review once more, and in greater detail, the arguments for and against the northern site. They came to the conclusion that:—"The soil is poor on the northern site as compared witb the southern. The southern site is already healthy and has healthy surroundings. The northern site even after expenditure on sanitary requirements will never be satisfactory. If the northern site is to be made healthy, this involves going outside the site itself and making the neighbourhood healthy also. The building land to the south is generally good. On the north to be used at all it has in places to be raised at considerable cost. There is no really suitable healthy site for a cantonment in proximity to a city on the northern site. The exigencies of fitting in the requirements to the limited area of the northern site endanger the success of a lay-out as a whole and tend to make for cramping and bad arrangement. The result of placing a city on the northern site appears to the Committee to be the creation of a bad example in place of a good one.

Final Town-Planning Report.—The final report of the Town-Planning Committee, with a plan of the lay-out, was dated 20th March, 1913. Work was begun in accordance with it and its main lines have been followed throughout the consructional period, but in some important details there have been wide variations from it. The central point of interest in the lay-out, which gives the motif of the whole, is Government House, and the large blocks of Secretariats. This Government centre has been given a position at Raisina hill near the centre of the new city. Advantage is taken of the height of this hill and it is linked with the high ground behind so as to appear a spur of the ridge itself. Behind the hill a raised platform or forum has been raised. This is to be flanked by the large blocks of Secretariat buildings and terminated at its western end by the mass of Government House with its wide flight of steps, portico and dome. The forum is approached by inclined ways with easy gradients on both its north and south sides. The axis of the main avenue centres on the north-west gate of Indrapat nearly due east of Government House.

Looking from the eastern end of the forum where the broad avenue enters the Governmental centre and where the great stairways are set, the view is towards the east. "Right and left the roadways go and weld into one the empire of to-day with the empires of the past and unite Government with the business and lives of its people."

Behind Government House to the west will be its gardens and parks flanked by the general buildings belonging to the Viceregal estate. Beyond these again, on the ridge itself, will be a spacious amphitheatre to be made out of the quarry from which much of the stone for roads and buildings have been cut. Above this and behind it will lie the reservoir and its tower which will be treated so as to break the sky line of the ridge. To the east of the forum, and below it, will be a spacious forecourt defined by trees and linked on to the great main avenue or parkway which leads to Indrapat.

Across this main axis, and at right angles to it, will run the avenue to the railway station. It was proposed in the Town Planning Committee's Report that this should terminate in the railway station, the post office and business quarters at its northern end, and in the Cathedral at its southern extremity. Considerable changes have been made in these plans. The railway station will be made in the place suggested, but it will not be a terminal station as was originally proposed, but a run-through station. This will adequately serve the new city and will solve the congestion problem of the existing railway equipment of Delhi in a better way than abolishing the present arrangements and providing entirely new ones would do. It will also be a cheaper solution. The new scheme is already being carried out. Its first stages are nearly completed and their principal feature is a diversion of the Agra-Delhi Chord line in order to take it round the new city instead of through it. The Post Office will be situated in the position proposed for it by the Town Planning Committee, but it will not be the Delhi General Post Office, as intended by them, but a sub-office for the service of the new city, the G.P.O. remaining in old Delhi, as at present. The proposal to build a Cathedral at the southern extremity of the avenue has been set aside, as a result of a decision not to create a Delhi diocese.

To the south-east will lie the park area in which stand the ancient monuments of Safdar Jang's Makhbara and the Lodi tombs. This area can be developed gradually as the city expands and has need of public institutions of various kinds. The axis running north-east from the Secretariat buildings to the railway station and towards the Jama Masjid will form the principal business approach to the present city. At the railway station a *place* will be laid out around which will be grouped the administrative and municipal offices, the banks, the shops and the hotels. On this *place* the post office is placed in symmetrical relation to the railway station.

The processional route will lead down from the railway station, due south to the point where it is intersected by the main east to west axis. Here round a *place* will be gathered the buildings of the Ethnological Museum, the Library and the Imperial Record Office. To the south-west of the place station will lie the houses of the local administration and the residences of the European clerks.

It was originally proposed on the recommendation of the Town Planning Committee to place the residence of the Commander-in-Chief to the south of the forum. This site has now been marked for the Kitchener College and the Commander-in-Chief's house will be located on the west side of King George's Avenue in a position close to the south block of the Secretariats. Round about the Viceregal estate and the forum lies the ground destined for the residences of the Secretaries and other officials of the Government of India. To the south-east of Government House lies the club. To the south of the club a low ridge divides the tract into two portions. That to the west is well adapted for a golf-course, while the eastern side is designed for a race-course, the ridge itself offering unusual facilities for locating stands and seeing the races.

Communications.—The avenues range from 76 feet to 150 feet in width with the exception of the main avenue east of the Secretariat buildings where a parkway width of 1,175 feet has been allowed. The principal avenues in addition to the main avenues are those running at right angles to the main east to west axis. Others form part of a system running from the amphitheatre to the railway station and the site of the Kitchener College, and from both the latter to the War Memorial lying on the axis between Indrapat and Government House which is the focal point of the roads and avenues on the parkway

A lake which can be obtained by river treatment is shown on the Town Planning Committee's plan immediately below Indrapat, beyond the end of the central parkway. The lay-out was made independent of the water effect, but the Committee thought that its ultimate creation would enhance enormously the beauties and general amenities of the new capital; and that it should and would become an integral portion of the design which they submitted. But the lake scheme has been abandoned for sanitary reasons. It was found that it would check the action of the sub-soil drains and thereby raise the sub-soil water table.

The report contained lengthy recommendations concerning water-supply, drainage, sewage system, parks and communications. The main lines of the lay-out as projected by the Committee were accepted by Government and a great deal of work has been done on them. The new central station and the difficulty experienced in meeting the various railway interests concerned will necessitate the postponement of this part of the scheme, and it has been decided that the needs of New Delhi will be met by a diversion of the existing Agra-Delhi Chord Railway to a line drawn eastward of Humayun's Tomb and Purana Killa and the construction of a new through station near the site of the proposed Central station. Another important modification consists in the reservation of the area lying south of the Delhi and Ajmere Gates of the city for the purpose of the extension of Old Delhi.

Temporary Capital.—For the use of the Government of India during the period of the building of the new capital—a period that will have to be extended owing to the conditions created by the war—an area has been selected along the Alipur Road, between the present civil station of Delhi and the Ridge. The early idea that many of the officials should live under canvas had to be given up, and there are now temporary offices and residences. The architecture and method of construction are similar to those adopted in the exhibition buildings at Allahabad in 1910; but the buildings will outlast the transitional period for which they are intended. They will subsequently be an asset of some value.

Chief Commissioner Appointed.—On October 1, 1912, by proclamation, there was constituted an administrative **enclave of Delhi** under a Chief Commissioner, Mr. W. M. Hailey, I.C.S. Mr. Hailey afterwards became Finance Member of H. E. the Viceroy's Executive Council and the Chief Commissioner of Delhi is now Mr. E. R. Abbott, C.I.E., I.C.S. The Delhi district of the Punjab, from which this enclave was entirely taken, consisted of three tahsils or subdivisions and the enclave was formed by the central tahsil, that of Delhi, and by such part of the southern tahsil, Ballabgarh, as was comprised within the limits of the police post of Mahrauli. Delhi Province as thus defined had originally an area of 528 square miles to which was added later an area of 45 square miles to the east of the Jumna river and taken from the United Provinces to serve as a grazing ground for the cattle for the city. The total area is, therefore, 573 square miles. On the basis of the Census of 1911, the population of the area originally included in the Province was 3,98,269 and of the new area 14,552, or a total of 4,12,821. The population of the Municipal town of Delhi was 2,29,144.

The Architects' Designs.—At the Royal Academy in 1914 there were exhibited drawings by Sir Edwin Lutyens and Mr. Baker, which though provisional and rather in the nature of what are called Warrant Designs, show how the architectural problems of the new capital are to be solved. Government House and the Secretariat have been planned by them as one block, as it were a Capital, facing towards Indrapat. The **Secretariat** is being built on the rock of Raisina hill, the top of which has been levelled for the purpose: behind the Secretariat is to be a raised causeway forming the approach to Government House: and Government House itself is being built on a high basement constructed on an outcrop of rock. The main processional route to Government House has been made along a sloping way (at a gradient of one in 22½) which leads from a semi-circular piazza, the "Great Place," to the level of the Secretariat buildings.

At the summit of this sloping way is the "**Government Court**", a space of about 1,100 feet in length, and 400 feet in breadth flanked to the north and south by the two blocks

of Secretariat buildings. These buildings have been designed by Mr. Baker and the aggregate cost will be some Rs. 1,24,00,000. According to the design the eastern end of each block is marked by deep loggias looking out over the Central Vista. In the centre of each block is a dome. In the case of the north block this marks an Entrance Hall: in the south block it surmounts a Conference Hall with a suite of cloak and reception rooms. Each block contains four floors: on the main ground floor are the general offices of the Departments; on the first floor are the offices of members of Council Secretaries, and other officers; whilst the remaining floors are occupied by clerk rooms and records. An essential feature of the design, and one which sets the character of the whole building, is the provision of loggias and recessed gate ways or exedrae giving views through to the fountain courts situate in the interior of the blocks, and these take the place of the continuous verandahs that are so familiar a feature in Indian buildings. The Architect relies for control of temperature on these loggias and recesses, on thick external walls, together with the thick window shutters adopted so widely in Southern Europe, and the wide *chajja* characteristic of Oriental buildings.

Between the north and south Secretariat blocks, is the way into the "**Viceroy's Court**"—the raised causeway already referred to—leading up to Government House. The Court is about 600 feet in breadth and 1,300 feet in length; it will be treated with grass and water ways and low trees: and should form a dignified approach to the final group of buildings. At a point midway in the causeway, at which will be erected a column presented by the Maharajah of Jaipur, roads lead off to the north and south, forming alternative lines of approach to Government House.

One thus reaches the portico of **Government House.** This portico raised some twenty feet above the level of the Viceroy's Court and thirty-five feet above the surrounding country. The house itself centres round the great Durbar Hall, a domed structure which dominates the scheme of the buildings surrounding it. Grouped round the Durbar Hall are the State Rooms and great stairways from the entrance Courts on the north and south sides. Projecting from this central block are four wings, that on the south-west containing the Viceroy's private apartments. In the south-west wing, accommodation is provided for the A.D.C.'s to the Viceroys Guests are accommodated in the north-west wing, whilst the north-east wing contains the officers of the Viceroy's Private and Military Secretaries and other members of his establishment. On the western side of the house will be a raised garden, walled and terraced after the manner of the Moghuls, and behind that again, on the level of the surrounding country, a park which will contain the staff houses and quarters. The park will extend to the rocky slopes of the Ridge which close in the vista on the west. The house will, with its attached quarters, garden and park, all of which have been designed by Sir Edwin Lutyens, cost approximately Rs. 1,40,00,000.

Style of Architecture.—There had been a prolonged "battle of the styles" over Delhi and if these designs gave satisfaction to neither of the extreme and opposed schools of thought, they clearly showed an endeavour to apply, with due regard for Indian sentiment, the spirit and essence of the great traditions of architecture to the solution of structural problems, conditioned upon an Indian climate and Indian surroundings and requirements. To use the language of the architects themselves, it has been their aim "to express, within the limit of the medium and of the powers of its users, the ideal and the fact of British rule in India, of which the New Delhi must ever be the monument."

The inspiration of these designs is manifestly Western, as is that of British rule, but they combine with it distinctive Indian features without doing violence to the principles of structural fitness and artistic unity. Much will depend upon the resourcefulness and ability of the Indian artificers themselves whom the Government of India proposes to bring together in Delhi to give expression, by their decorative work, to the best traditions of skilled Indian craftmanship.

Cost of the Scheme.—It was at first tentatively estimated that the cost of the new capital would be four million sterling and that sum was given in the original despatch of the Government of India on the subject. Various factors have since then increased the cost, the chief of these being the immense rise in prices since the war, and the Legislative Assembly were informed by Government on 23rd March, 1921, that the revised estimates then amounted to 1,307 lakhs of rupees. This amount includes allowances for building new Legislative Chambers and Hostels for Members of the Indian Legislature, which were not allowed for in the earlier estimates. The New Capital Enquiry Committee, in its report published in January, 1923, estimated the total expenditure at Rs. 1,292 lakhs including Rs. 42 lakhs for loss by Exchange. This figure still stands.

The Project Estimate contains certain items such as land, residences, water supply, electric light and power, and irrigation on which recoveries in the form of rate or taxes will, in addition to meeting current expenditure, partially at any rate cover the interest on the capital outlay whilst there are other items on which some return on account of the sale of leases, general taxes and indirect receipts may be expected.

Progress of the work.—The construction of New Delhi has made satisfactory progress, having regard to the curtailment of the Budget allotment, in consequence of the war and the return of officers and other establishments to their civil work has made possible a considerable speeding up of constructional operations provided money can be provided to pay for them.

Meanwhile the central point of interest in the plan has been given careful detailed consideration by the Government and the architects. The following is approximately the state of progress reached The centre portion of Government House is approaching completion to upper basement level and the state rooms will shortly be commenced In the Secretariats two storeys have been completed in all four of the sections into which the buildings are divided and the third storey has nearly been completed in two of

them. The Secretariats have so far advanced that arrangements are being made to transfer to them from Calcutta in October 1924 the offices of the Accountant General, Central Revenues. There reached Raisina, in 1920, statues of their Majesties in Coronation robes which are to be placed in front of Government House. That of the King, by Mr. Mackenna, is the gift of the Maharaja Scindia of Gwalior. That of the Queen, by Sir George Frampton, is the gift of the Maharaja of Bikaner. The keen interest of the ruling princes in the transfer of the capital, which is very welcome to them, is further shown in the gift by the Maharaja of Jaipur of funds for a Column, designed by Sir Edwin Lutyens, which is to be located midway in the Viceroy's Court. This Column is surmounted by the Star of India, and will be visible from many parts of the New City.

Col. Sir Sydney Crookshank, Secretary to the Government of India, P.W.D., informed the Legislative Assembly at Delhi on 16th March, 1921, that the "Government House work is nearly one-third finished, the Secretariat blocks somewhere about two-fifths and the Residential buildings about three-fifths finished. We have still some 52 Officers' bungalows, 73 European quarters, and 16 Orthodox quarters to construct before we shall have finished the present programme of construction of residential buildings, which in itself is only about four-fifths of the total required . . . . We have constructed "practically all the main roads and now have to carry on the construction of service roads . . . Where we are behindhand is in engineering services, and that is where we ought to make a special effort to push on, in order that we shall have our electric-light and power sewerage and drainage and water supplies on a thoroughly satisfactory basis." The residential buildings have since been completed and the Engineers hope to have the Secretariats and Parliament house ready for occupation in 1925 and Government House in 1926. These dates were confirmed in the autumn of 1922 by a special committee presided over by the Hon. Sir Malcolm Hailey which was appointed to consider ways for reducing the expenditure upon the new city and for hastening its completion.

Opinion of the Legislature.—Considerable discussion regarding the new works took place in the Assembly in 1921. A certain number of members who wished the work to be stopped, either to save the outlay or in order that a new capital might be established in some other locality with a more equable climate throughout the year, received no countenance. Strong feeling against the annual temporary migration of the Government of India to Simla led to the passage of a Resolution urging the speediest possible completion of New Delhi so that it might accommodate Government throughout the year. It runs: "This Assembly recommends to the Governor-General in Council that in the interests of economy and of general convenience alike the execution of the programme of New Delhi works may be expedited and the necessary funds provided or raised so that the Secretariat and Legislative buildings and connected works including residences may be completed as early as practicable." Sir Sydney Crookshank informed the House that at the rate of expenditure of one crore per annum, which was approximately the present rate, eight years would be required to finish the work, whereas by spending two crores a year the work would be finished in four years, but that as they had already entered on this year they could not spend fully two crores within it, so that the four-year period really meant between 4 and 5 years. Non-official Members urged Government to devise means for annually providing more funds and the Finance Member undertook to consider whether and how he could do so.

A non-official Member in the Legislative Assembly on 28th September, 1921, at Simla, moved a recommendation to Government "to appoint a Committee to inquire into the possibility of establishing a permanent Capital of India in a place possessing salubrious and temperate climate throughout the year." This proposal was ridiculed by several of his non-official colleagues and was eventually rejected without a division.

The exact expenditure on the New Capital up to 31st March 1922 was about Rs. 6,20,00,000 or approximately half the estimated cost. By 31st March 1923 the expenditure was Rs. 8,02,00,000 and by 31st March 1924 it will be approximately Rs. 9,65,00,000.

Two Cathedral Schemes.—In October 1913 a letter was published in *The Times* from the Bishop of Calcutta on the provision of a Cathedral at Delhi. He appealed for £50,000 in addition to any grant given by the Government, and quoted in his letter the following statement of approval by the King-Emperor: "I heartily approve of the project to build a Cathedral in the new city of Delhi. I trust that the appeal for the necessary funds may meet with a generous response, so that in due time the capital of India may possess a Cathedral which in design and character will testify to the life and energy of the Anglican Church and be worthy of its architectural surroundings both of days gone by and of those to come." His Majesty subscribed £100 and the Queen £50 to the fund. The Indian Church Aid Association received several contributions towards the building fund for the proposed Cathedral Church, in response to the appeal of the Bishop of Calcutta.

The ecclesiastical authorities have since decided not to establish a See of Delhi and in consequence the Cathedral scheme has been set aside. A scheme to build a church worthy of the new city has taken its place and the money collected for the Cathedral is being utilised for it. The amount in hand at the beginning of 1924 is approximately Rs. 70,000 or about a seventh of what is wanted. A further appeal for funds was issued in the new year.

Cheques may be sent to the Secretary, Indian Church Aid Association, Church House, Westminster, S.W. and crossed Lloyds Bank, St. James Street, S.W.

A Roman Catholic Cathedral is also projected and Father Paul Hughes, O.M.C., has been touring India collecting money for the Cathedral Fund.

All-India War Memorial.—H. R. H. the Duke of Connaught on 10th February, 1921, laid the foundation-stone of an All-India War

Memorial at the southern end of the Central Vista. The place chosen is a fine position in the centre of the circular Princes' Park around which the mansions of the Ruling Princes will be built and overlooking the lake on the opposite side of which lies Indrapat.

The Memorial will take the form of a triumphal arch spanning Kingsway, the avenue running down the centre of the Vista. It will generally be similar to the Arc de Triomphe in Paris, but will be simpler in a way which will probably increase its grandeur and dignity. The monument will reach a height of 160 feet and the inner height of the arch will be 87 feet 6 inches and its breadth 70 feet. Over the arch on both fronts will appear in capital letters the single word INDIA and this will be flanked on each side by the initials MCM (*i.e.*, 1900) whilst immediately below them on the left-hand will be the initials XIV (*i.e.*, 14) and on the opposite side the figures XIX (*i.e.*, 19). Lateral arches through the monument will be flanked by fountains.

The architectural features of the Memorial will contain nothing specially pertaining to any religious denomination nor any carving of figures or other ornaments that might offend any creed. The lower part will be constructed of red Bhartpur stone and the upper part of white Dholpur stone. The arch will be surmounted by a great cornice and above this will be an attic, or series of enormous steps ascending centrally. Above these will be a circular stone bowl 11½ feet in diameter. This is intended to be filled with burning oil on great anniversaries and other occasions so that there will be a shining fire by night and a column of smoke by day.

The end of each pier of the arch resembles in appearance the Cenotaph erected in Whitehall, London, in memory of the British soldiers who fell in the Great War. The memorial is solely Indian in purpose and will bear the names of Indian regiments only. The building of the foundations of the structure have been commenced.

Legislative Council Chamber.—H. R. H. the Duke of Connaught on 12th February, 1921, laid the foundation-stone of a large group of Parliament buildings in New Delhi on a convenient site shortly north-eastward of the Secretariats. The buildings will form an imposing structure circular in shape and centrally surmounted by a large dome.

The outer edge of the building will be formed of a verandah, having along its outer side a complete circle of round stone columns, while opening on to the verandah will be a circle of Secretariat Offices concerned with the Chambers to be housed within. This girdle of verandah and offices will surround a large circular site in which will be four distinct buildings linked with one another and with the offices. Three of them will be practically semi-circular in shape, having their bases upon the inner side of the girdle. They will externally be similar in size and design and will internally be arranged to accommodate respectively the Chamber of Princes, the Council of State, and the Legislative Assembly. The spaces between them will be occupied by gardens, each garden occupying the same amount of ground as one of the buildings.

In the centre of the circle will stand the largest of the inner buildings. It will be circular in shape and will be linked by a cloister with each of the other buildings. It will contain a domed circular central hall 90 feet in diameter. This will be used as a library for the members of the three Chambers and will be of a size and arrangement sufficient and suitable to accommodate a joint session of both Council of State and Legislative Assembly and probably also of the Chamber of Princes with them, if it should ever be desirable to have a joint session of all three.

There was considerable delay in beginning the construction of the building after the Architects' plans had been sanctioned. The foundations were not completed by the autumn of 1922. The Public Works Department hope to get the building sufficiently ready for occupation for the first sitting of the Indian Legislature in January or February of 1926. The whole of the building, including in particular the apartment for the Chamber of Princes, will not be finished till considerably later.

Residences for ruling Princes and Chiefs.—Sites have already been allotted on which thirty-three of the Ruling Princes and Chiefs propose to erect residences for occupation when visiting the New Capital. The States which up to the present hour signified their desire to build are Hyderabad, Baroda, Mysore, Bhopal, Gwalior, Kashmir, Kalat, Travancore, Bahawalpur, Bharatpur, Bikaner, Bundi, Kotah, Cutch, Jodhpur, Patiala, Tonk, Alwar, Datia, Dhar, Dholpur, Jaisalmer, Kishangarh, Orchha, Partabgarh, Sirohi, Faridkhot, Jind, Kapurthala, Nabha, Sailana, Malerkolta and Loharu.

Ethnological Museum.—The first wing has been built of a museum in which Sir Aurel Stein will house some of his Central Asian Antiquities. Work on certain frescoes was started under Sir Aurel's direction in the 1920-21 cold weather and has made considerable progress.

The Agra Delhi Railway Diversion.—This railway which at present runs across the site of the new city is being diverted to a new alignment running East of Humayuns' Tomb and Indrapat. The new line will be opened in April or May, 1924. Amongst other matters which are now receiving attention are the construction of the residences of the Commander-in-Chief and the Hon'ble members, afforestation of the Ridge to the west of the new city, the design for the Imperial Record Office, and the naming of the roads.

Sanitary Improvements.—While the work on the new city has been going forward various improvements in the existing Delhi have been carried out and the sanitary conditions in particular have been much improved. The fly nuisance which was extremely bad in Delhi has been much reduced, and other schemes have been formulated as the result of a sanitary survey which embraced the whole of the city. The most tangible results of these efforts is seen in the consistent fall in the death-rate, and the acknowledged reduction in the amount of sickness in Delhi.

Arboriculture.—Nearly forty miles of roads in the new capital have been planted with roadside avenues of trees. The results have varied. Temporary quick growing trees were planted alternately with slow growing permanent trees, the

idea being to remove the former when the latter reach maturity. The distance between the permanent trees varies between 40 and 60 feet, the exact distance depending on the expected final spread of the permanent trees. The aim in selecting the permanent trees has been to get hardy kinds, that naturally produce foliage and contours suitable for the various types of buildings and roads, and at the same time to obtain as many varieties as possible, but without mixing the kinds of any one road. The scientific side of the work was entrusted to an expert from Kew-Gardens. Considerable difficulty has been experienced in carrying out this plan as many trees otherwise suitable have not proved capable of withstanding the hot winds of summer and the cold of winter, while others capable of withstanding these extremes of climate have failed to thrive on the brackish water that was the best that could be supplied for them.

To the Superintendent, Horticultural Operations, has been assigned the arduous duties of laying out and maintaining gardens around the residences in the new city and the afforestation of the eastern slopes of the southern Ridge and several historical gardens round Old Delhi. The areas of the gardens attached to the residences vary from 1½ to 4 acres and in the laying out of these efforts have been made to keep each garden in harmony not only with its house and surroundings but with the adjoining buildings and thoroughfares. A pleasing appearance and shade and shelter from the prevailing winds have been the governing considerations in the lay-out. The effort to keep the formation of the gardens apace with the speed of the building of the houses has necessitated a great deal of temporary work in fast growing vegetation to cover the period required for the maturing of permanent trees, shrubs and plants. The temporary vegetation also acts as a shelter for the slower growing permanent varieties.

Owing to the vast levelling operations over the whole of the new capital sites, the quality of the garden soil greatly varies and the lack of a plentiful supply of water has added difficulties to the task of turning an arid waste into a garden city. The results in completed gardens are, therefore, very varied.

An effort is being made to clothe with trees and shrubs that portion of the rocky ridge which is visible from the new capital. Owing to the difficulty of getting water to the site and to the rocky nature of most of the area the success obtained appears small. It is believed that the scientific and hard work put into the task during the past six years will show up creditably during the next few years. The full results cannot be expected before about 1934.

Higher College for Chiefs,—It was proposed during 1914 that a higher college for Chiefs should be established at Delhi and in this connexion a conference of Chiefs and Political Officers was held at Delhi at which the Viceroy presided. It was subsequently announced that subscriptions offered towards the college amounted to about ten and a half lakhs, various recurring sums were promised, and the Government of India also promised to recommend the Secretary of State, a grant of Rs. 50,000 a year. Thus the whole capital would come to 12¼ lakhs. The proposal is still under consideration.

University.—The Government of India in the Spring session of their Legislature in 1922 introduced and carried a Bill for the establishment of a unitary, teaching and residential university of Delhi, the buildings for which would be erected in the new capital. It is intended to provide a local university on the model recommended for Dacca University by the Calcutta University Commission. Delhi is regarded as a suitable location for such an institution, being the winter capital of the Government of India and already containing three arts colleges and the Lady Hardinge Medical College for Women. The general scheme was also drawn up with regard to probable changes made in connection with the Punjab University and in consultation with the representatives of the local colleges.

Communal representation in connection with the university is provided only to a limited degree and no provision is made for such representation in the academic body. The Government will be the Government of India and the Chancellor the Governor-General. There is some modification of the usual distribution of functions between the Government, the Chancellor and the Vice-Chancellor. The existing colleges retain the name of colleges and the power of appointment of their own staff, but the recognition of the staff of a college as teachers of the university will be given by the university itself. The Faculties initially instituted are those of Arts, Science, Medicine and Commerce.

The provision of funds for the complete realisation of the university must be a matter of time and it was, therefore, decided to commence work with the existing colleges in their present buildings and to permit them gradually to modify their organisation, especially with regard to the separation of intermediate classes in such a manner as to permit of the development of the university in its eventual form. In order that this may be done without undue dislocation in the colleges, the transitory provisions are particularly wide and permit of considerable divergence during the initial years from the form of the university as eventually contemplated.

Dr. H. S. Gour, M. L. A., was in 1922 appointed first Vice-Chancellor of the new university and the initial work of organisation was quickly effected by the Executive Council. Unfortunately the inability of the Government of India to allot considerable funds was a severe handicap. It was hoped that H. E. the Viceroy would be able to lay the foundation-stone of the university buildings in November, 1922, but this proved impracticable, and the site for the new buildings required has not yet been settled. Government and the University Authorities are examining this point in consultation, particularly with reference to question whether to build in the new capital or to utilise buildings that may become available elsewhere. The Executive Council approached the Government of India with a request to assign the University a seat in the Legislative Assembly, as unanimously recommended by the Joint Select Committee of the Legislature on the University Bill to open its state scholarships to the university and to accord to them the privilege of nomination to Government posts.

The Calendars.

A full Calendar will be found at the beginning of this book. Below are given details of the other Calendars in use in India.

The *Jewish* Calendar is in accordance with the system arranged A.D. 358. The Calendar dates from the Creation, which is fixed as 3,760 years and 3 months before the beginning of the Christian Era; the year is Luni-solar.

The *Mohammedan*, or era of the Hejira, dates from the day after Mahomet's flight from Mecca, which occurred on the night of July 15, 622 A.D. The months are Lunar.

The *Fasli* year was derived from a combination of the Hejira and Samvat years by the order of Akbar; it is Luni-solar. The *Bengali* year seems also to have been related at one time to the Hejira, but the fact of its being Solar made it lose 11 days each year.

The *Samvat* era dates from 57 B.C., and is Luni-solar. The months are divided into two fortnights—*sudi*, or bright, and *badi*, or dark. Each fortnight contains 15 tithis, which furnish the dates of the civil days given in our calendars.

PUBLIC HOLIDAYS IN 1924.

Parsee (Shehenshahi).

Jamshedi Naoroz	March	21
Avan Jashan	April	16
Adar Jashan	May	15
Zarthost-no-Diso	June	16
Gatha Gahambars	September	6
Parsi New Year	„	8 & 9

Parsee (Kadmi).

Avan Jashan	March	17
Jamshedi Naoroz	„	21
Adar Jashan	April	15
Zarthost-no-Diso	May	17
Gatha Gahambars	August	7 & 8
New Year (1st day)	„	9
Khordad Sal	„	15

Mahomedan (Sunni).

Ramzan'Id	May	7
Muharram	August	11
Ashura	„	12
Mahim Fair	Dec.	12

Mahomedan (Shiah).

Shahadat-i-Huzrat Ali	April	26
Ramzan-Id	May	7
Muharram	August	11
Ashura	„	12
Shahadat-e-Imam Hassan	September	27

Hindu.

Makar Sankrant	January	14
Maha Shivratri	March	3
Holi (2nd Day)	„	22
Cocoanut Day	August	14
Gokul Ashtami	„	23
Ganesh Chaturthi	September	2
Dassera	October	7
Divali	„	27
	„	28
	„	29

Jewish.

Pesach	April	19
	„	25
Rosh Hoshana	September	29
	„	30
Kippur	October	8
Sukkoth	„	13
	„	21

Jain.

Chaitra Sud 15	April	19
Shravan Vad 13	August	28
	„	30
	September	1
Bhadarva Sud 2	August	28
	„	29
	„	30
	September	1
Samvatsari	„	3
Pajushan Bhadarva Sud 5	„	4
Kartik Sud 15	November	11

Christian.

New Year	January	1
Good Friday	April	18
Christmas	December	25

The Indian Year Book

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to
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and
BRITISH OWNED
PRODUCTS

Order only these and help knit closer the

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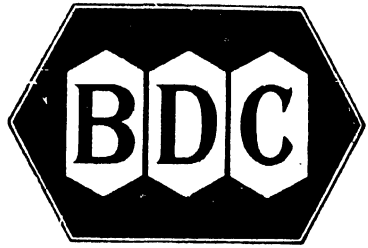

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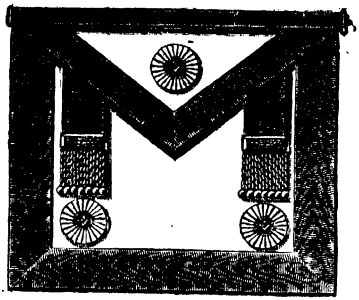

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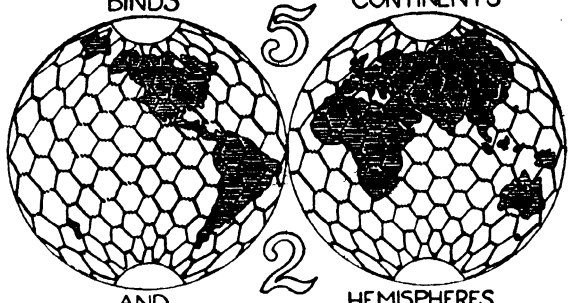

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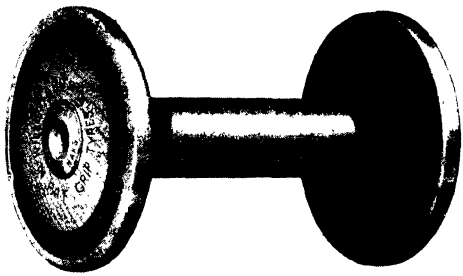

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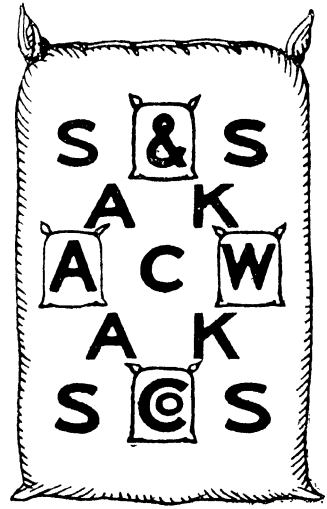

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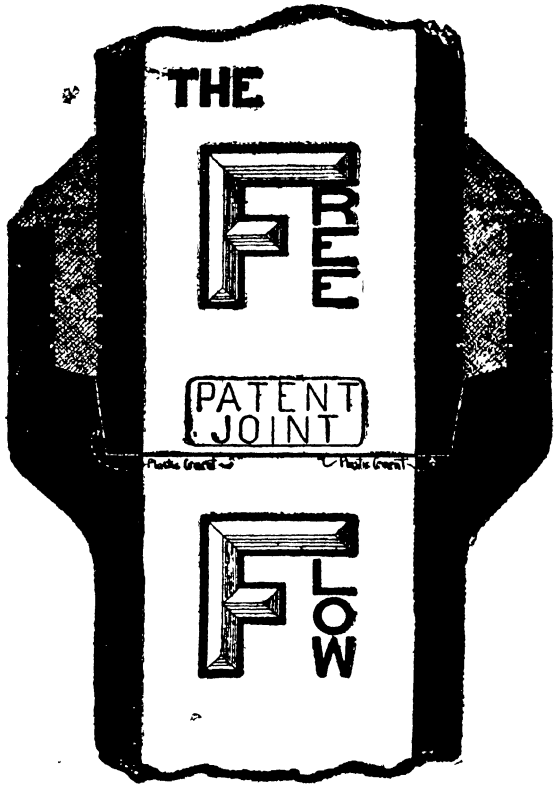

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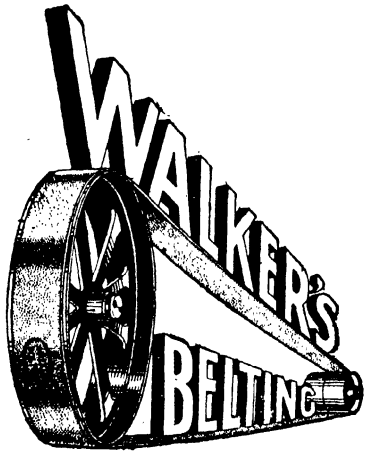

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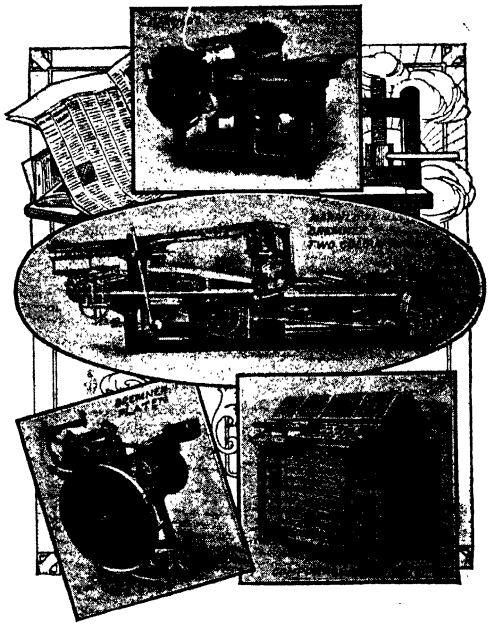

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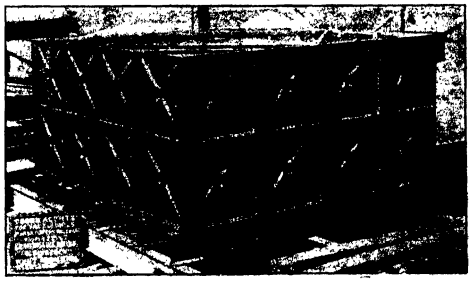

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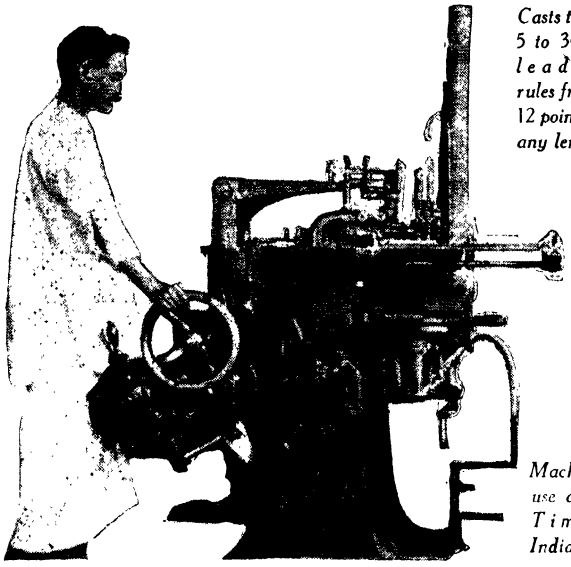

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