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Earth so huge, and yet so bounded—pools of salt, and plots of land—
Shallow skin of green and azure—chains of mountains, grains of sand!

Tennyson - Locksley Hall Sixty Years After

THE OLD WORLD
PAST and PRESENT

A Unified Course in the History
and the Geography of Europe, Asia,
Africa, and Australia

by EDNA FAY CAMPBELL
VICTOR L. WEBB
WILLIAM L. NIDA

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TO THE TEACHER

Today there exists no need to justify the combination of history and geography in a single basic text. A brief survey of educational literature of the past eight years will attest the accuracy of that statement. At the same time such a survey will disclose a shift in the viewpoints of those who have made the major contributions to these fields of teaching.

Apparently we are rapidly passing through the stage of argument as to whether or not to combine history, government, civics, and geography in a more meaningful whole than the separate subject divisions permitted. And we are just as evidently passing through a phase of argument as to what method of combination is best.

The conspicuous result of the work done hitherto has been the abandonment of the special viewpoints of the historian, the geographer, and the political scientist in favor of a broader viewpoint. This wider aim seeks to use whatever materials the narrower subjects provide in order to promote the child's adjustment to his environment.

Charles A. Beard, in the *Charter for the Social Sciences in the Schools,* says he believes that a synthesis of the various subjects "would be a skilfully wrought mosaic," and not a completely new subject in which the separate disciplines completely lose their identity. Donald L. McMurry (Historical Outlook: v. 25, No. 8) states:

> The basis for the inclusion or exclusion of material, therefore, should be, not whether a fact belongs primarily to one or the other of the separate disciplines or organized bodies of subject-matter, but whether it contributes to the understanding of the concept involved in the main topic or any of its parts.

This is an acceptable and understandable basis on which to select related materials which have hitherto been separated by treatment in different subject-divisions. As to the body of concepts involved, that, too, becomes clarified by the words of Charles W. Eliot:

> Teach groups of subjects in the natural relationships. For history is meaningless without a stage—geography—to act it on. A stage without action is inane and absurd. And group action, history, without organization—government or civics—is impossible.

After all, the concepts involved may be stated in simple terms. They are:

(1) Nature's control of man.
(2) Man's attempt to control nature.
(3) Man's social organization.

It is easy to show how these concepts are interrelated by citing examples familiar to the child who has finished fourth grade. In his reading about the Eskimo or the American Indian, the child has learned in what great measure nature controls the life of these people. He knows to what extent they have succeeded in controlling nature by adapting living conditions to environment. Further, the child has a realization, perhaps vague, that both nature's control of these peoples and their partial control of nature have something to do with the social organization of the tribes.

Developed within this book are extensions of these fundamental ideas. To cite an early one, there is the control of the Egyptians' occupations enforced by the river Nile. Here, also, man's attempted control of the vast forces of nature becomes more evident, for the child can see how the Egyptians have made the river work for them. Then, too, there is the evident (and explained) connection between these controls and man's social organization. The child sees how the sharing of water led to law, how the recording of floods resulted in a calendar, and how the use of land required the science of measurements.

The above examples show how the development of these concepts draws upon historic, geographic, civic, and scientific material. But such material cannot be presented in an encyclopedic way. The test of how meaningful each item can be made has been applied impartially. For example, of what interest or profit is it to state that Italy today exports a small quantity of zinc? That one fact, true as it is, might well obscure the far more important truth that Italy's lack of mineral resources has hindered her development as a manufacturing nation.

The development of certain geographic principles has been kept in mind so that the

child will recognize the factors which determine the following:

(1) The regions where various plants and animals thrive.
(2) The types of homes different peoples have.
(3) The various kinds of clothing worn.
(4) The occupations of different peoples.
(5) The location of cities and towns.
(6) Varying group customs.

Such a list makes evident that certain of these points are best emphasized from the historic, others from the geographic, and some from the civic or economic viewpoint.

The conventional historic treatment has been avoided because it tends to become a bald recital of names, dates, wars, and the rise and fall of monarchies. There is a minimum of proper names and dates in this book. To the child who is discovering how to become adjusted to his environment, the story of man's successes and failures in making a more comfortable life for himself is more important than the study of wars. It is of greater use, culturally and practically, for the child to know how man has united his efforts with those of others, than to memorize dates. A vital part of education is to know how certain past situations and problems compare with situations and problems of today.

Naturally all this must be in simple terms. Mature, adult concepts have to be simplified or discarded. A graded vocabulary alone is not enough. A test for the inclusion of all material and the concepts involved was devised. Stated briefly, the material selected had to help the reader in understanding the following:

(1) What was the land like when the first people of importance came there to settle?
(2) Where did those people come from and what had they been doing?
(3) How did they have to change their ways of life to be comfortable in their new land?
(4) What effect on their lives and customs did their neighbors have?
(5) How does their story (history) show changes and adaptations to their environment?
(6) What problems of that adaptation have been met, and what problems remain today?

In addition to determining the principles that governed the content of this text, there were problems about maps and illustrations. These have been selected on a basis of definite function.

Because children have difficulty in locating specific data on minutely detailed maps, simplicity and ease of reference were made prime requisites. There is a logical progression from the smaller "spot" maps, which are designed to bring home single ideas, to the larger colored maps which show the physical features of larger areas, and from these, in turn, to the single map which ties the sectional maps into a connected whole. In many of the smaller map legends the children are directed to refer, for one purpose or another, to the larger maps. This device develops a sense of the relationship of locations and prevents the isolation of various regions in the child's mind.

The graphic device used at the close of each chapter to concentrate attention on review deserves special attention. It serves to present salient facts previously learned, and at the same time it develops the child's concepts of time, change, and progress.

It is hoped that the illustrations will prove an especially effective part of the book. Descriptive legends improve the child's faculty of observation. The pictures are purposeful, each one bringing out or emphasizing important facts or ideas. In them can be found, as the pupil progresses, pictorial histories of agriculture, transportation, building, art, industry, and other manifestations of man's progress.

The authors have spared no effort to render the book meaningful and interesting, and to give it imaginative appeal to both teacher and pupil.

THE AUTHORS

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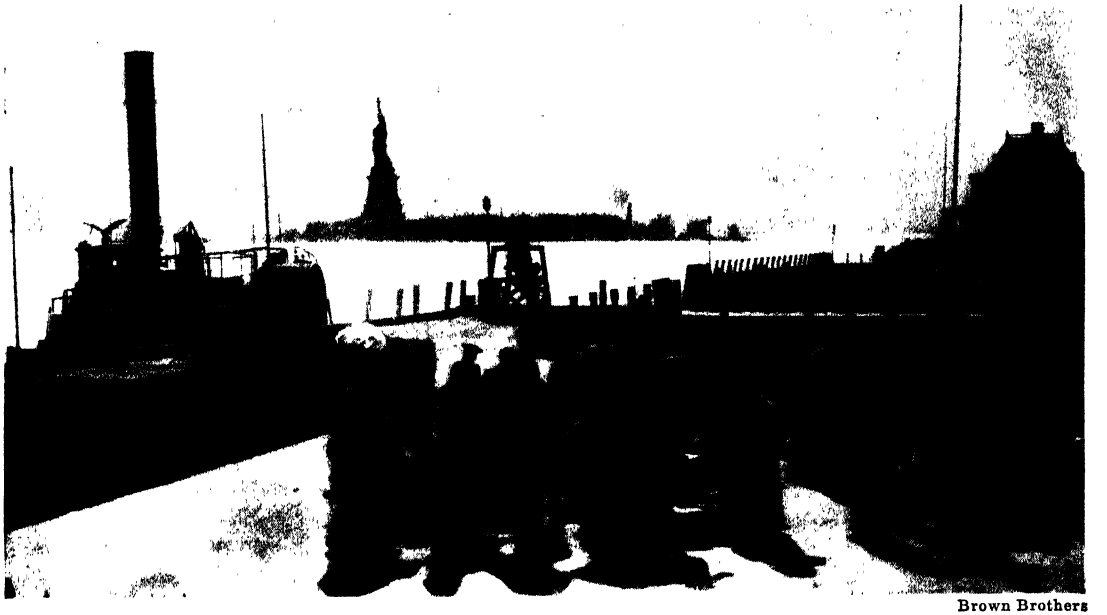
TO THE READER

In this book you are going to read about men and women and children who lived many, many years ago. We hope, while you are reading this book, that you will think about them as real people. The men had work to do in order to earn a living. Houses had to be built, and food had to be raised. The women helped, for there were homes to be kept, clothing to be made, and children to be cared for. The children helped, too, but they had time to play games and to learn lessons, even though many of them never saw a school.

The lessons they learned were lessons in how to live.

In many parts of the world men are constantly at work finding out how people lived many centuries ago, before any books were written. That is how we have learned the first chapters in the story of man.



Brown Brothers

For more than three hundred years, people have been coming to America from the Old World. Some came in little sailing vessels, others in great ocean liners. They brought with them their own ways and customs. Our American ways are a mixture of these old ways and of ways which began here.

THE OLD WORLD—PAST AND PRESENT

AMERICA AND THE OLD WORLD

HELLO! Is Bruce McDonald there? Tell him to be sure to come to my party on Wednesday."

Jim was telephoning some of his friends—John Adams, Billy Olson, Pat O'Brien, and others. While he was looking up their numbers, Jim noticed the many different names in the telephone directory. There were Browns, Dumonts, Jensens, Pastorellis, Schmidts, Van Loons, and others even harder to spell and to pronounce.

Finally he called to his father, "Dad! Where did all these names come from, and how did people get them?"

"Wait a minute," said Jim's father. "Ask one question at a time! Most of those names come from different countries. If you will make a list of them, I will try to tell you from what countries these people, or their fathers, or grandfathers, or great-grandfathers came. Of course they are Americans now."

Jim began to make a list of names in a column. In a second column he wrote the names of the countries. His father told him that the Browns probably came from England, the Jensens from Denmark, the Heinrichs from Germany, and the O'Briens from Ireland. Pastorelli was an Italian name, Van Loon a Dutch name, and Vronski a Russian one. There were names from almost every country.

People from Europe settled America. These people, or their fathers, or perhaps their great-grandfathers had come to America from some other part of the world. Before the white men came, the only people in America were Indians. There were no

Courtesy Swift and Co.

Colonists did not want to wear Indian moccasins. They wanted the kind of shoes they had worn in their old homes in Europe. So once a year the traveling shoemaker called and spent several days making and repairing shoes for the whole family.

cities, no factories, no hotels, no roads—just land and woods. The first white men came from Spain, France, England, and the Netherlands. Later, men came from other countries.

In order to be comfortable here the white men who came to this country had to bring with them things they had used in their old homes. They had to build their own houses from the trees of the forest.

What were some of the things these people brought with them? The Spaniards brought the first horses. The Scotchmen brought with them their own kind of dairy cows, the Ayrshires. The English brought steel axes and other tools. One man had worked in a shipyard and knew how to build boats. A German knew how to make glasses and bottles from melted sand; and so he started a small glass factory. A Frenchman who knew how to make fine shoes of leather set up a shoe shop.

These white people brought with them many things that we think of as everyday necessities. But there were still many things lacking. More people came later from other countries and brought new trades and new ways of farming. Some of them brought a love of music or a liking for fine pictures. But all of them brought something to our country. It was like bringing furniture, books, and tools from mother's old home to furnish the new home just built for a daughter.

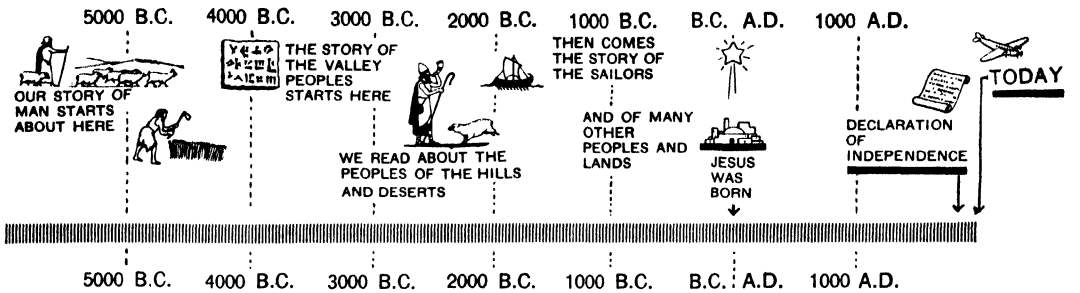
People from Asia settled Europe. People have been bringing customs, ideas, and things to us from Old-World countries for more than three hundred years. And all this time Americans have had ways and customs of their own, too. If Jim could have turned the clock backward many, many years, he would have found out that this very same thing happened in the Old World. From far-off lands people moved into England, France, Germany, Spain, and other countries of Europe. They brought with them whatever made life comfortable in their old homes. And as they and their children and grandchildren grew up in their new homes, new ways and new customs grew up, too.

Instead of having to go back three hundred years, as in this country of ours, to find a time when people had no good homes, no roads, and no cities, Jim would have to go back three thousand years. At that time people were coming into Europe from Asia and finding a land of plains, mountains, plateaus, and valleys.

What is civilization? For thousands of years men have been thinking, discovering, and inventing. All this time men have been learning how to live in a better way. They

Courtesy Wm. H. Wise & Co.

The Quakers brought with them their own religious ways, as did other colonists. They built this meeting house in Philadelphia so they could follow their own customs. Think of other customs brought here.



PICTURE HISTORY

Our story of man goes back 8000 years. Study this Picture History to see how long a time that is. Do you know what "A.D." and "B.C." mean? Can you make a Picture History of events that have happened in your life?

learned how to make fire and to use metals for making tools. They found ways to weave cloth and to make houses warm in winter. They discovered how to make boats and wagons to carry people and goods. They learned to write down the things they did and to read the records left by other men. They built better and better homes, libraries, churches, and schools. They learned to provide playgrounds and parks. They found out how to cultivate the land to feed their families. Can you name any other things men learned?

All this better way of living is called the civilized way, or civilization.

It took all of the three thousand years from the time of the many-times-great-great-grandfather of the Browns, the Jensens, the Van Loons, and others, for the people of Europe to become as civilized as they were when John Smith came to Virginia. But what about the ancestors of these many-times-great-great-grandfathers? Were they civilized? We shall find out. And we will discover that it took them many more thousands of years to learn the ways which they brought with them when they came to Europe.

Perhaps we may never find out just where the first men lived or what they were like. But we can pay a visit to some people who lived in a certain valley about eight thousand years ago. We call this valley a "cradle of civilization," a place where men slowly began to learn better ways to live. Do you understand how long ago eight thousand years is? Perhaps it will help you to look at the pictures on this page and then work a little problem in arithmetic. You can see that we really became the United States a little more than one hundred fifty years ago. How many times that long is eight thousand years?

University of Pennsylvania Museum

Each man you see is carrying a basketful of dirt which was carefully dug away from the ancient buried city. You can see the walls of houses, doorways, towers, and steps. In such a place a great deal can be found out about people who lived many centuries ago. What can you find out by studying this picture?

I. THE VALLEY OF THE TWO RIVERS

Discovering the Past

SUPPOSE we pay a visit with Jim to the land where our story begins. We find ourselves in the midst of some tents which are pitched on the edge of a great desert. Sitting in front of one of the tents is a young man. Imagine our surprise when he speaks to us in English: "I suppose you have come to see our buried city."

Then the young man explains. He is a student at an American university. As a part of his school work he has come from America and is helping to uncover this ancient city. The men in charge of the work are archaeologists, men who study ancient life and peoples. For hundreds of years the desert winds had been blowing sand over this city until it was covered up. Nothing was left but a low mound when the American expedition came to see what could be found.

How we find out about the past. Carefully the workmen dug down, carrying away the sand. All of it was sifted to find little things that might otherwise be thrown away. The men had boxes and boxes full of things sifted out of the sand. There were children's toys, rings, bracelets, little clay bricks with queer marks on them, pieces of broken jars, and many other things. The young archaeologist explained how these objects help students to find out about the people

Metropolitan Museum of Art

This bead necklace and mirror were made in ancient Egypt. You can see that the men who made them knew how to work in metals, cut and polish stone, and use paints and colors. The metal mirror was once highly polished. What else could one of the workmen do? Look at the handle of the mirror.

who had lived there so many hundreds of years ago.

Suppose you found a deserted house in a forest. If you looked carefully at everything in the house, you would find out a great deal about the people who had lived there. If there were toys, you would know there had been children, and you might even be able to tell the ages of the children and whether they had been boys or girls. The clothes would tell you how the people had dressed. The kitchen and pantry would tell you what they had eaten. Even the tools would tell you a story.

Archaeologists and their work. Many places where ancient man lived have been examined carefully by archaeologists. Everything they find tells a story. One archaeologist sifted the dirt, gravel, and ashes in a cave and found pieces of broken pottery, stone tools, and many other things that told him how the cave-people lived. A broken fish-hook of bone told him that the cave-people ate fish. A carefully chipped stone ax was proof that they knew how to make weapons. Broken bones of animals told him that these people ate meat and liked the marrow in the bones. Ashes and bits of burned wood proved that they knew how to build fires.

Sometimes whole cities are discovered, buried under the sand and dirt of centuries. It is hard to believe that whole cities could be buried, except perhaps by ashes or lava from a volcano. But it has happened many times in history. Sometimes drifting sand does it, just as sand dunes cover up bushes and even trees. Often a city was left empty, to fall into ruin. This happened when the people in a city were driven away during a war.

From this work of archaeologists we know how ancient peoples lived, what they did for a living, and what sort of people they were. Now we are going to turn the clock backward eight thousand years, and visit the people who were living in this land long before there was a city.

A visit to a distant land of the past. We are standing beside a wide river. All around are little green fields, each with its own

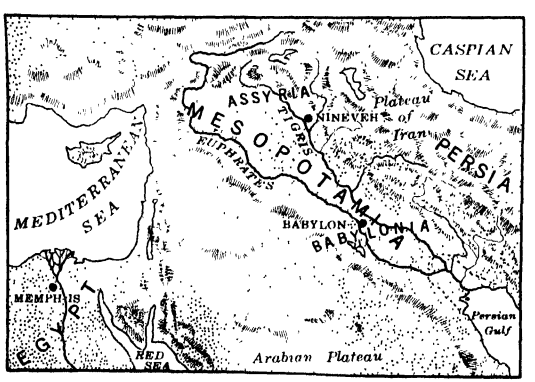
Acme Newspictures, Inc.

These workmen are uncovering a buried building in Egypt. The little round things on the ground are baskets for carrying dirt. What is being dug out?

ditch full of water. Looking westward toward the setting sun, we can see a few more fields, and then rolling, barren, brown land, with here and there a few rocky hills. Eastward we can look across the river and see more green fields, and beyond them the dark purple of the mountains. To the north and south, along the river, are more green patches of wheat and growing vegetables, with shining, water-filled ditches between the fields.

The mountains to the east are like a wall to keep out enemies. It would not be easy, we can see, for people to come across the desert from the west. The people living here, we think, must be almost as safe as they would be in a garden with a high wall around it.

How the valley got its name. Suppose we look at the map on this page and find the valley where we are standing. It is the valley of the Tigris and Euphrates rivers in a country which has been called Mesopotamia for many centuries. Mesopotamia means "in the midst of rivers." As you see, the land lies along two rivers which flow down from the mountains in the north and empty into the Persian Gulf.



MESOPOTAMIA

Mesopotamia is also called the "Valley of the Two Rivers." Why? The dotted line shows where the shore of the Persian Gulf was when our story begins. In the centuries since that time the rivers have brought down soil and made new land. Turn to the map on page 25 and find this same country. How far from America is it?

Follow the course of the two rivers from the Persian Gulf northward to their sources in the mountains. Although it seldom rains in the lower valley, there is plenty of moisture in the mountains. Heavy rains and snows fall in the highlands and feed the two rivers. The warm weather of spring melts the snow, and the swollen rivers rush along, tearing rich earth from the banks.

When the two rivers reach the lower valley, the banks are not high enough to hold all the water. The rivers overflow, and the muddy waters cover the land. They bring fertile soil and moisture to the lower valley. With plenty of rich earth and water, it is easy to grow crops, particularly if the weather is warm and sunny.

How the people were living. As we stand by the river bank, looking at the hundreds of little green fields, two boys approach. Each is dressed in a single garment, very like a short skirt. Their bare feet are muddy from working in the wet fields. They are going home after their day's work. Let us follow them to the little village where they live. Suppose we call the boys Chad and Ser. No one has any "last" name. Everyone has just one name.

The village where Chad and Ser live is a cluster of little huts, built of chunks of dried mud. Each hut has a small yard with a wall around it. The two boys sleep in the yard. Their father and mother sleep on mats inside the hut. In the morning all of them go out and work in the fields. The boys pull weeds, while the father turns the water from the ditch into the little fields, which are not getting enough moisture.

We can see that the river is a great help to the farmers. Seeds sprout very quickly in the soft, warm mud and soon grow into strong plants. The river keeps the ditches filled with water, and the fields never become dry and hard.

Now we can understand why the many-times-great-grandfather of Chad and Ser

settled in this valley. Probably he had planted seeds and grown plants in some other place, but in a rather hit-or-miss fashion. Sometimes cold weather had ruined his crops. Sometimes there had been too much rain, and other times not enough. But here, in this valley of the Tigris and Euphrates rivers, the weather was always warm, water was close at hand, and the soil was rich. He could be sure of raising enough food for his family and for his animals every year.

What shall we call this old-time ancestor of Chad and Ser? Was he a savage or a barbarian? We ought to know the difference between these words because they will be used many times in our reading.

Keystone View Company

Probably the country looked like this when Chad and Ser were living, centuries ago. Perhaps the houses were not so large, nor the gardens so well kept. But you can see the fields, the river, and the bare mountains.

Savages and Barbarians

How savages lived. The savages lived in a way only a little better than the animals. They took what the forests and the fields offered them. They ate berries, roots, fruits, nuts, seeds, and raw meat. They wore leaves and grasses for clothing or else had none. Later on, savages learned to make fires and to cook food. They learned how to build some sort of home. Perhaps it was a hut of sticks or a tent of skins to protect them from the weather. It took a long time for savages to learn that much. But you can see that they were learning to live more comfortably.

Have you ever found it hard to tell whether a certain color is blue or green? It is often just as hard to say whether certain people are savages or barbarians. After a savage has learned how to make nature work for him a little, we say he has become a barbarian. He made nature work for him when he baked clay dishes in a fire and so invented pottery. Suppose we say, then, that when man invented pottery, he began to be a barbarian instead of a savage.

How the barbarians lived. Now we must remember another thing: Not all the people in the world stopped being savages and began to be barbarians at the same time. You know that there are savages in the world even today. Some of the inhabitants of Africa are savages. Some of them are barbarians. And there are also many civilized people now living in Africa.

Long before our story begins, some of the savage people in the world were able to improve their way of living. Then they became what we call barbarians. They had weapons and tools of wood and stone, for at first they knew nothing of metals. They had homes, built out of materials which they found close at hand. In one place the homes might be of logs or bark. In another place skins might be used. Some built homes of reeds plastered with mud. Others used chunks of dried mud. Very few made houses of stone.

The first farmers. The barbarian thought more and used his mind better than did the savage. Perhaps he noticed that grain sprouted from wild seed which had been trampled into the moist ground. And so he tried putting some seed into the ground. In this way he learned how to plant seeds and grow grain for food.

This was a very important discovery for man to make. Now he could save up grain

for use when other food was scarce. He also learned that grain does not spoil quickly like meat or fish. In some regions the barbarians learned first to plant wheat. In other places it was barley or millet. In still other regions they learned how to grow rice.

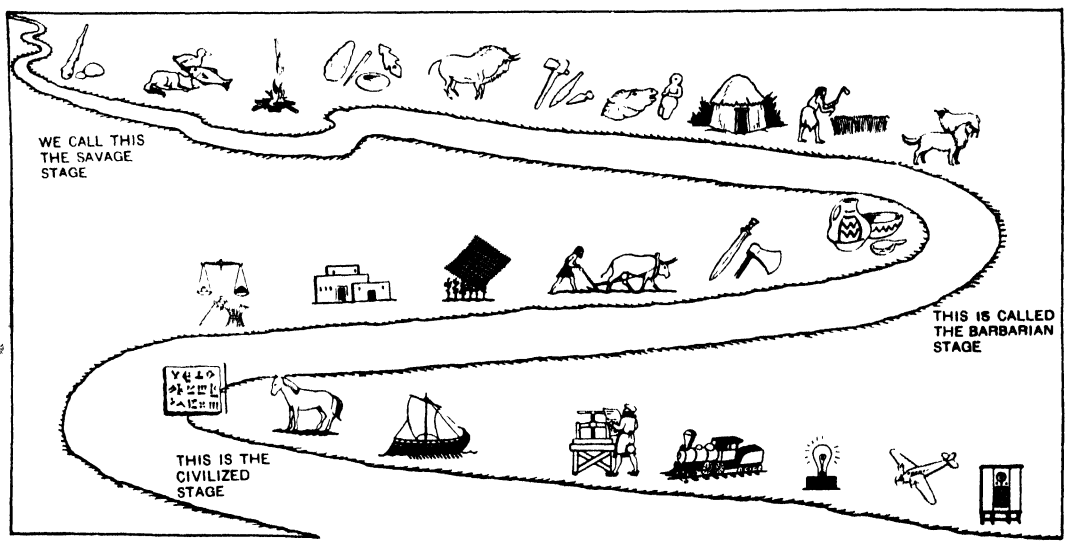
Learning how to raise grain was important in another way. People who could raise grain for their food could live in one place. They did not have to wander about looking for food, but could settle down.

The first shepherds and herdsmen. What about the people who lived in places where grain would not grow? Did they have to remain savages? No, some of them learned how to tame different kinds of animals. They had flocks of sheep or goats, or herds of cattle. The animals supplied food and materials for clothing. But these people who raised animals were longer in becoming civilized than were the farmers. We shall soon see why.

Nomads and town dwellers. People with flocks and herds had to move often to find fresh pastures. Where would be the best places for grazing animals? They would be the wide, grassy plains. The herds could move slowly along, and the people could follow them and live in tents close by. We call such people *nomads*, which is another word for wanderers. The herdsmen and shepherds had to be on a constant hunt for grass. Without grass the animals died, and without animals the people died.

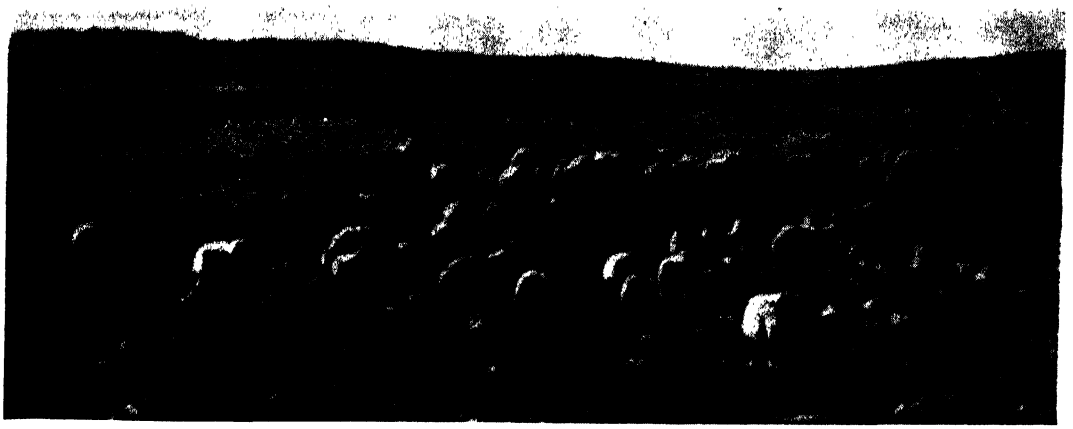
It is important that we "stay-at-homes" should know something about nomads. We shall meet them many times in our story. We shall read about first one group of nomads and then another. We shall see how they wandered about, fought the "stay-at-homes" and many times decided to settle down and become "stay-at-homes" themselves. Now we shall see why settling down meant beginning to be civilized.

Clans and tribes. Chad's far-away ancestor had been the chief of a tribe of nomads. The families of the tribe probably stayed together. Each family grew until the father became a grandfather and there were many sons, daughters, aunts, cousins, uncles, and grandchildren. Such a big family is called a clan. Probably the grandfather was the



THE ROAD TO CIVILIZATION

Here are some of the things man found out on his way from savagery to civilization. Of course, not all of the important discoveries are shown here. After naming those in the picture, can you think of others?



On bare land like this, even a small flock needs a large pasture. Can you tell why people who kept flocks had to be always on the move and could not settle in one place? What happens if the pasture gives out?

leader because he was the oldest and the most experienced. Perhaps he knew the right time to look for seeds and nuts; perhaps he was the best hunter. Sometimes he might be the leader because he was the strongest man. Usually, though, he was the leader because he saw to it that the clan had plenty of food.

Generally the clans lived apart, each clan by itself. Sometimes a number of clans would come together to hold a feast or perhaps to fight an enemy. We call a group of clans a tribe. The leader of the tribe we call a chief. He had to be a fighter and know how to make others follow him.

Tribes could not become very large. If many people tried to live close together, there was not enough food. The barbarian tribesman had to find his food near the place where he lived or else starve. Often he did starve. The life of Chad's far-away ancestor was a constant hunt for food.

The First Settlers in Mesopotamia

Thousands of years before Chad's time, a chief and his tribe came to Mesopotamia during their wanderings in search of food. We may never know just where they came from or how long ago it was when these nomads first pitched their tents in the Tigris-Euphrates Valley. Their flocks and herds found enough to eat. Months passed, and the nomads did not have to move away to find new pastures. Wild seeds grew so fast that the nomads had a crop of grain every three or four months.

The beginning of building. Can you think what they did to their tents to make them more comfortable? Probably they plastered them with some of the soft mud from the river. It made a better home, for the thicker wall kept out more of the heat. The tribesmen did not mind the extra work, because they intended to stay in this place where it was so much easier to live. After a time someone tried making a house with chunks of dried mud. Tall reeds from the river made a good roof when plastered over with soft mud.

All the members of the tribe lived close together. They had learned to do that in the old days. Since fierce neighbors might swoop down on them and carry off everything of value, they pitched their tents in a circle for protection. Their new homes of mud were close together, too. Sometimes the river flood washed some of them away, but the people learned how to build homes on clay terraces. They built walls around the whole village. The wall not only kept out the river, but it kept out enemies, too.

Underwood & Underwood

Perhaps the first settlers had little villages like this one in Mesopotamia. The houses are made of mats. Sometimes mud is plastered on the sides. Notice the mud walls and the piles of fodder for the animals. The two Arabs are on an old brick tower.

Learning to live together. Those old ancestors of Chad and Ser learned something else. They found out how to get along with their neighbors. In the old, wandering days, if a man quarreled with a neighbor, one of them could pull up his tent and move away. Now that they had mud houses, it wasn't so easy to move. They stayed and argued out their trouble. If a fight started, probably the other neighbors stepped in and stopped it. They learned to settle their troubles peaceably. They also learned to help each other, to "coöperate," as we often say. If one man had a big harvest, his neighbor helped him gather it. Then the neighbor would expect help when he had a hard job to do.

In such ways, then, the early settlers in the valley learned new customs. They learned how to build homes and how to live together, two things they had not known how to do when they were nomads. Now we are ready to find out how the land itself and even the climate changed them still more and actually pushed them along the road to civilization.

Learning to control nature. The first-comers did not learn all these things in a short time, nor was it easy for them. Fathers showed their sons the way to do things. The boys were told about their fathers' mistakes and what not to do, so that they would not make the same mistakes. The sons told their sons, and so on.

A little at a time the people found out more about farming. Sometimes the river floods were high and tore away part of the farms. Sometimes the river was low, and the land did not get enough water. All that, of course, depended on the rains and snows in the mountains, hundreds of miles to the north. None of the farmers could control the rains any more than we can.

Each year between floods there was a dry spell. The hot sun baked the land and shriveled the plants. Plants wouldn't grow without water, and there wasn't enough water in the river. The villagers tried saving up enough grain to last them during the dry season. Many times there wasn't enough; and they looked for a better, surer way of having enough food.

It was natural for someone to think of saving part of the water that flooded down past the farms on its way to the sea. Someone had the idea of making ponds to hold the water. The picture on the next page shows how it was done. Then ditches were dug to carry the water from the ponds to the fields. Bringing water to the land is called irrigation. In this way the first irrigation works were built.

Digging ditches helps civilization. Perhaps you wonder what digging ditches has to do with civilization. It had a great deal to do with better ways of living. Chad's neighbors had to have water from the ponds during the dry season. The water had to be shared fairly. The farmers had to work

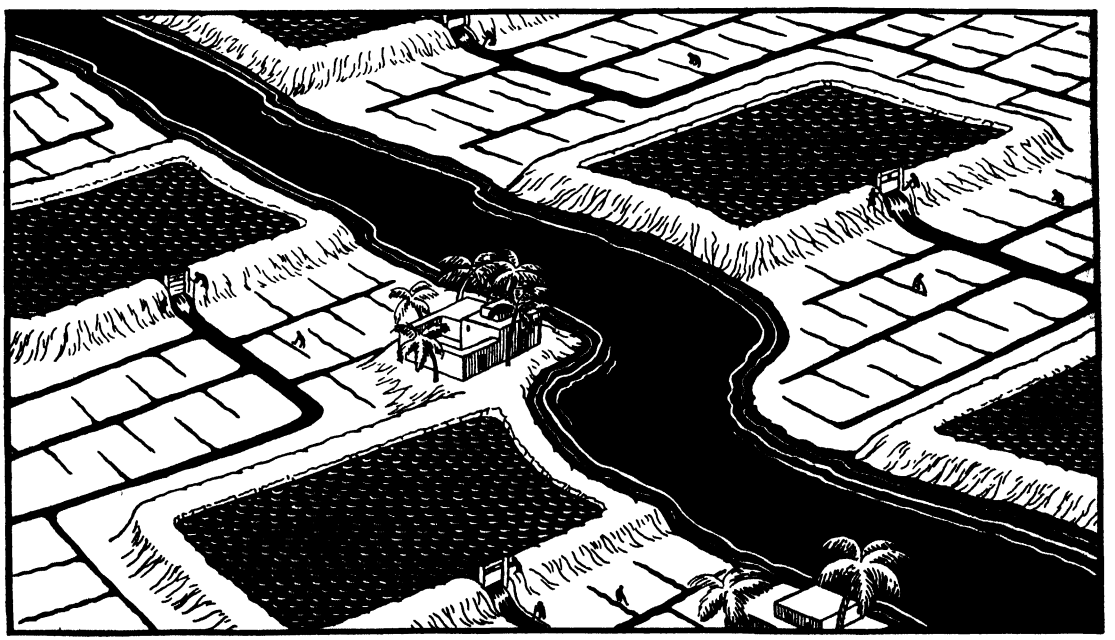
together to make the banks for the pond and to dig ditches. They had to agree on when to let water into the ditches and when to shut off the water.

The first laws. The farmers made simple rules about sharing the water. Probably the men who made a pond and the ditches leading from it met together and decided what was fair and right, just as boys decide on the rules for some game. Such rules for a country or nation are called laws. From that time on everyone had to obey the rules made for the entire group. In this way men learned to have respect for the law, because it was good for all. Learning to obey the rules is an important step in becoming civilized.

What the people ate and wore. If you had dropped in for a meal with Chad and Ser, you would have found enough to eat. There was goat meat. It was tough and stringy, as only the older animals were used for meat. The younger goats were too valuable to kill. They produced hair for making cloth as well as milk to drink or to make into cheese and butter. There were cows and donkeys, but they were used to do some of the heavy work and were not often used for meat. Long ago, Chad's ancestors had tamed these animals, some for their milk or their wool, and others because of the work they could do.

Perhaps you have never thought of taming plants, but that is one of the first things the valley-dwellers did. People noticed that some kinds of plants gave them more food than others. They gave those particular plants good care and made them grow year after year in the same place.

You would have found the people eating lentils, lettuce, onions, mulberries, dates, and figs. There were date palms along the Tigris and Euphrates rivers in those days, just as there are today. But you would have missed potatoes and corn. Those plants were found in America several thousand years later by the white men who first came from the Old World.



When the river overflowed, the water filled up the ponds. The ridges or walls kept the water from running off when the flood went down. Small ditches led from the big pond to the different fields.

How land was cultivated. The people were just learning how to plow. You see, they were amateurs at farming. They had not yet invented anything to help them in their work of cultivating the soil. At first they had just scattered the seed in the soft mud and trampled it in with their feet. Sometimes they drove a flock of sheep over the field and let the animals trample in the seed.

Sometimes the sun dried the soft ground too quickly after a flood, and the mud became a hard crust. If any planting was to be done, the crust had to be broken up. Chad's neighbors were just learning that it was easy to pull a forked stick through the dirt before the sun dried it too much. One smart neighbor was trying to train his oxen to pull the stick for him. Perhaps the others thought him lazy, but in a few years all of them were plowing with animals. Horses did not come into the valley for many hundreds of years. In place of the horse was the little donkey.

The women of the village spent a part of their time making clothes. They pounded wet goat hair with sticks until they had a kind of felt. Some of them twisted sheep's wool together into yarn which they could weave into coarse cloth. Others soaked and scraped the skins of sheep, goats, oxen, and donkeys and so made leather. Out of leather they made sandals to wear, as well as bags to hold water and milk. These things they had known how to do for a long time. Later they learned to weave a little better and found out how to make linen cloth out of the fibers of the flax plant.

How Men Learned to Trade

Finding new ways to work. One thing was certain to happen in this rich valley. A good farmer would have more food than he needed for his family. Warm sunshine and plenty of water on the rich land gave the people several crops each year. The animals had plenty of feed. What could be done with the extra food? Suppose we see what happened to the family of Chad and Ser.

The father of Chad and Ser was a good farmer. So was their elder brother, Ezza. He worked hard in the fields and learned

American Colony Photo from Wm. Thompson

The blindfolded donkey is grinding grain for these people of Mesopotamia. Their ancestors pounded the grain until someone found out how to make animals do the heaviest part of the work. Notice how much clay has been used. The mill is clay, and so is the platform where the grain is threshed. If the donkey were not blindfolded, he would stop work and try to eat the grain.

Oriental Institute, The University of Chicago

Farms along the Euphrates are much the same now as they were many centuries ago. Find the land which is flooded by the river. Can the higher land be farmed? Notice the road at the edge of the farms. Under the groves of palms are houses. Do you know why there are high walls around all of them? The arches in the river lead to water-wheels which pump water into a canal. Trace some of the ditches. In the midst of the grain fields you can see vegetable gardens with hedges around them.

all that his father could tell him. Chad and Ser were different. Chad spent too much of his time playing in the mud along the river bank and the ditches. Ser used to go away by himself and spend his time in the tall reeds that grew in low places near the river. People shook their heads. It was plain that the two boys would never be able to raise enough food for themselves when they grew up.

When the father died, Ezza told them that they were lazy farmers and would either have to go to work or starve. But by this time the two brothers knew how to do something besides grain-growing and flock-tending. Chad could make good mud bricks, all of one size, faster than any farmer for miles around. He could make a house with a door and window in it, without having it fall down while he was working. His brother Ser could make reeds into strong baskets to hold grain.

Trading food for work. Instead of starving, Chad and Ser got along very well. Farmers with plenty of food would offer Chad enough to live on if he would make their houses. Others were glad to give Ser food in exchange for his baskets. The two brothers had good homes and plenty of food without having to raise it themselves.

Chad and Ser married, and each of them had two sons. One of Chad's sons became a better brickmaker than his father. But the other son spent his time playing with a kind of clay that his father told him would never make good bricks. You see, this boy was finding out how to make jars and pots out of that clay. When the neighbors saw the jars and pots, they were glad to trade food for them. Water kept in a jar did not have the unpleasant smell it had when kept in a goatskin bag.

Finding more occupations. One of Ser's boys became an expert basket-maker. The other boy never was interested in making baskets. Instead of keeping the reeds straight and weaving them carefully, he split them and twisted the split pieces together. He seemed to be wasting his time, but he found out how to make rope and cord. And so this young man had learned a new trade and had all the food he needed. When he wanted a house, his cousin built it of clay bricks in exchange for some rope.

Of course, we do not know who really made the first bricks or the first rope, but

Century Photos

This brickmaker mixes mud with straw, packs it into a box, and then turns out the soft brick to be dried hard in the hot sun. This old, old way is still used. Probably Chad made his bricks the same way.

people like Chad and Ser probably found out such things in much the same way as in our story.

You can see that times were changing, as people say. In the old days, everyone had been a farmer or a herder, and had either raised his food or hunted for it. Now that people had settled down in one place, some of the farmers could get part of their work done by trading food for it. Some men became so expert at some occupations that other people were glad to have them do that kind of work. There were brickmakers and builders, potters, rope-makers, basket-weavers, and many other skilled workers.

As you know, Chad and Ser and their families lived with their neighbors in a little village near the river. Such little villages were scattered along the banks of the Tigris and Euphrates for many miles. We think that each little village was probably the spot where the first-comers pitched their tents in order to be together if enemies attacked them. In the morning the people went out to work in their fields. At night they all came back to the village.

How the villages grew into towns. People came from other villages to the village of Chad and Ser to get jars and baskets and ropes. Because they traded their farm produce for these things, the village came to be a trading center. As men who had been farmers learned other occupations, they came to the village to work. They, too, traded what they made for food and other things. Many of them stayed in the village and built homes there. It was a good place to work because farmers came there to trade. And so the trading village grew into a large town.

In the time of Chad and Ser the farmers traded food for the few extra things they needed. But as they learned to farm better and to raise more food, they wanted more things. It became the custom for the farmers to carry to the large town all the produce they did not need for their families. They traded this extra food for the things the family wanted. There was no money in those days. For a long, long time the people of the valley had to exchange something they owned and did not need for whatever they wanted.

It was not very many years before the different towns along the river began trading with each other. It was easy to carry goods in boats. Probably the first boat was a log that had been hollowed out. Then someone thought of putting several logs together into a raft. Later a wiser man split the logs into planks and made a real boat. Chad's family may have had boats with oars or sails, and we can be sure that people in the river towns had boats of some sort.

How towns grew into cities. With boats to carry produce up and down the rivers, and with animals such as donkeys, oxen, and camels to carry loads and pull carts, the towns could trade with each other by water and land transportation. Some of the towns grew faster than the others and became cities.

Life in the cities was quite different from that in the little farming villages. There were hundreds, sometimes thousands, of people crowded together. They worked at different trades. There were boat-builders

and sailors, weavers and tailors, butchers and bakers, and many others. There were men who made a business of trading, because it was too much trouble for some people to find others willing to exchange goods with them. These merchants did the trading and took part of the goods as their pay.

Most of the trading was done in an open place in the city where the people and the merchants could meet to exchange goods. All these lands, today, have such places called *bazaars*. Food and all kinds of wares were displayed in the market-place. Food had to be brought in from the farming villages near by, as few of the city dwellers were farmers. Even carrying in the food became a business. We call the business of carrying goods transportation.

Trade with distant places. The city people traded with places farther and farther away, and the cities grew. Caravans of traders with trains of camels and donkeys brought goods across the deserts. Traders brought finer and softer cloths, perfumes, and even strange foods. Boats from far-off places came up the rivers. As the farmers learned to raise more food with less effort, and the workers to make more wares, people had time to do something besides work every hour of the day. People began to want pretty things as well as useful ones. And so the boats and the caravans brought copper and gold and silver, which men learned to make into ornaments.

This trading meant progress, for the traders brought new things for the city people to use. Life was easier and more comfortable. The dwellers in the valley were well on the road of civilization. The traders were making the acquaintance of people who lived in other valleys, near and far.

How Leaders Became Kings

All this was not so peaceful and easy as it sounds. The Valley of the Two Rivers was sheltered, to be sure, but sometimes enemies did get in. Groups of barbarians from the mountains or the desert came into the fertile river plain to plunder and destroy. From the very first the settlers had to have armed men to fight off attacks.

Each little village and each city had its chief. After a time one of the chiefs became stronger than the others. He conquered the village next to his own, and then another and another. Then he made himself king of all the cities in that region.

Babylon is built. The first important king of this valley built a great palace of clay bricks in a city called Babylon. We call this country Babylonia. It was a country of cities, towns, villages, and farms. The farmers lived in villages and went out to work on their farms each day. The city people were merchants and traders, lawyers, doctors, workmen, and wealthy men who did not want to live on their farms. There were brickmakers who made bricks and tiles out of desert clay and river mud. There were bricklayers to build houses and palaces. There were no stone-masons, because there was no stone in Babylonia. There were real estate men, for land was important to all.

Ewing Galloway

You can still see this very old kind of boat on the Tigris River. It is called a "gufa," and natives use it for carrying all sorts of things. It is made of woven reeds, plastered with a kind of pitch. It is like a water-tight basket. Notice the brick foundations of the buildings. Why are they so high? This picture was taken at Bagdad in Mesopotamia.

Acme Newspictures, Inc

Traders still carry their goods on the backs of donkeys, just as they did hundreds of years ago. In this way cities get their food, and people in villages get the things made in the cities. Trade must go on all the time, or city people cannot live.

Invaders settle in the valley. Sometimes enemies from the north came down the valley. Sometimes fierce nomads from the valleys in the eastern mountains came, looking for better pastures. Once in a while desert people from the west invaded the Valley of the Two Rivers. Almost every time, after raiding the rich fields and prosperous cities, the invaders settled down in the valley. They found life easier here.

The invaders often brought new ideas with them. They adopted many of the customs which they found in the valley. Sooner or later, however, some new invader came and conquered the valley again. Although many nations conquered and then were conquered, each time the people became a little more civilized. They kept learning newer and better ways of living.

Hammurabi and his code of laws. A great king of Babylonia was one called Hammurabi. With his armies he conquered all the tribes and peoples up and down the length of the two rivers.

But Hammurabi is not to be remembered just because he was a great conqueror or because he built huge canals to water the land and large storehouses to hold the grain. Nor is he to be remembered because he built large brick palaces and temples. The best thing that Hammurabi did was to make the laws alike all over his kingdom. There had been plenty of rules and laws before his time, but each little village and each city made its own. Hammurabi knew that he couldn't really rule the country he conquered unless all the people in the different parts of his kingdom obeyed the same laws.

You know that you cannot play a game if the leader changes the rules whenever he likes. Before the game starts, you want to know what the rules are. Hammurabi realized that his people wanted to know what the laws were. And so he chose the best laws from each part of his kingdom and added some of his own to them. These laws he arranged into a single set, or "code," of laws, and had them carved on a stone column.

Hammurabi's code of laws is the oldest one that we know anything about. Perhaps it was the very first set of laws written down so that people could really know what the laws were. That is why you will remember Hammurabi as the first great lawmaker.

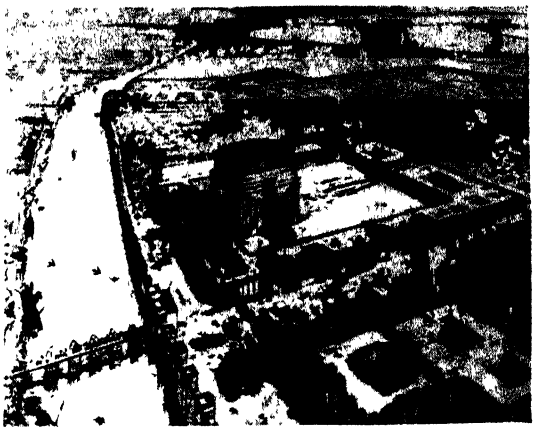
Our code of laws today is much longer

Underwood & Underwood

For many centuries the camel has carried goods in the desert regions. A good baggage camel can carry a load of six or eight hundred pounds. Do you know why camels are so useful in the desert regions?

than Hammurabi's and not so simple. It is printed in books instead of being carved on a stone column. But there is a more important difference. Our laws are made by the people, or by men who have been selected by the people to make the laws. Hammurabi was the only one who decided what laws should govern his people.

Many of Hammurabi's laws were about water and ditches. Can you see why that was so? According to that code, a rich man who took too much water from the irrigation ditches did not receive the same penalty as a poor man who took too much water. Rich men paid bigger fines. What do you think of that? What do our laws today try to do about penalties for the rich and the poor?



Oriental Institute, The University of Chicago

A great archaeologist thinks Babylon looked like this. The big building is a temple. At the bend of the river is Nebuchadnezzar's palace. The Hanging Gardens are near it. Do you know what they were?

Babylonia and Its People

Reading and writing. From Hammurabi's laws we can find out a great deal about Babylonia. First of all, because the laws were written down, we know that the Babylonians could read and write.

At first the Babylonians used pictures for words. Little by little they made the pictures much simpler, so that they would be easier to write. Some of the pictures were finally so changed that it is hard to say what they were once supposed to be.

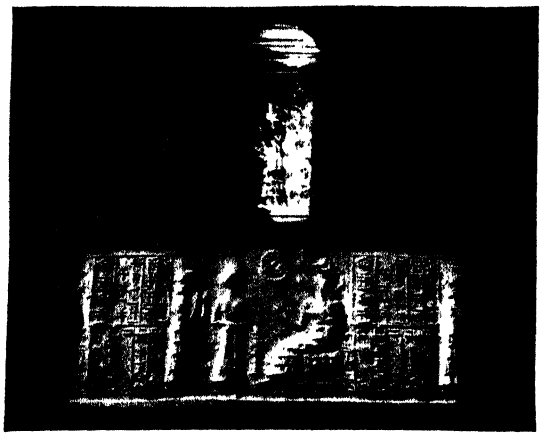
Raffius from Acme Newspictures, Inc

All that is left of Babylon today. Compare parts of the wall and the tower gates with the other picture on this page. The river changed its course many centuries ago and is no longer beside the city. Notice the rough, hilly land in the distance.

It was no easy task for a Babylonian child to learn how to write. There were between three hundred and four hundred different pictures, or signs, to remember. How many signs did you have to learn? A sentence on a clay tablet found in one ruin tells us how hard the pupils must have worked. It reads: "He who shall excel in tablet writing shall shine like the sun."

A few boys in Babylonia learned to write because they wanted to be merchants. Merchants had to use writing, for they kept careful accounts of their trading. Most of the people, though, never learned how to read and write, for they had no chance to go to school. If they wanted to have letters written, they went to a man called a *scribe*. The scribe could write and keep accounts, and earned his living by doing this work.

The Babylonian writing, called *cuneiform*, as explained in the picture on page 18, was used for several thousand years. Then other kinds of writing took its place, and it was forgotten until about a hundred years ago. At first, European travelers who found these



Oriental Institute, The University of Chicago

A rich Babylonian gave this seal, cut out of a blue stone called lapis lazuli, to his son. The son used it to sign letters. He rolled the seal in the soft clay, and it made the writing and picture you see. It was almost like printing, yet that invention did not come for many thousands of years afterwards.

queer marks on bricks and rocks and temples thought them a kind of decoration. But when whole libraries of clay books were found, men knew that the marks were a forgotten kind of writing.

The story of the Behistun Rock. One day an archaeologist traveling in the hills east of Babylonia came to a great rock rising straight up, one thousand feet above the valley. Far up on that smooth rock he saw carvings that looked like writing. He climbed to the top of the rock and had his helpers lower him over the side by ropes so that he could examine the carvings.

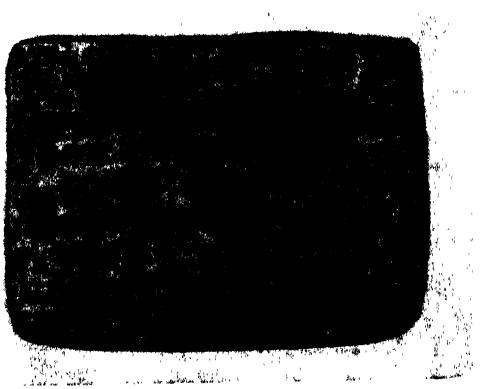
There were columns of writing on this cliff, which is called the Behistun Rock. One column told a story in the language of Babylonia. Another column told the same story in Persian. The archaeologist took wet paper and squeezed it against the carvings until he had a mold of it all. Then for three years he studied the marks. He could read the Persian story. By comparing it with the other he discovered how to read the Babylonian, or cuneiform, writing. After that many men learned to read the brick books of the Babylonians. Then people began to understand the story of that ancient civilization.

Nobles, common people, and slaves. Hammurabi's laws tell us that there were not only nobles and common people in Babylonia but also slaves. Probably the first slaves were captured soldiers who were made to work on the farms. But when more and more men were captured in war, slave labor was used everywhere.

Most of the slaves led hard, bitter lives, but there were some who were more fortunate. Those who were skilled in weaving cloth, making jewelry, cooking food, playing musical instruments, or some such activity, were highly prized by their owners. Probably such slaves lived much more comfortable lives than the slaves who worked on the farms and boats, or even than the poor farmers who were free.

After a time slaves were allowed to own property. If they could save enough, they might buy their freedom. According to the laws of Hammurabi, the slaves were better off in Babylonia than in most of the ancient countries.

There were nobles in Babylonia, as we can tell by reading Hammurabi's laws. They



Metropolitan Museum of Art

Babylonians wrote letters, sent bills, and kept accounts and records on little clay bricks. The writing was done on the soft clay with a sharp reed or metal pen. The pen-point was wedge-shaped, as you can see by looking closely at the marks. Cuneiform writing means "wedge-shaped" writing. Do you see why?

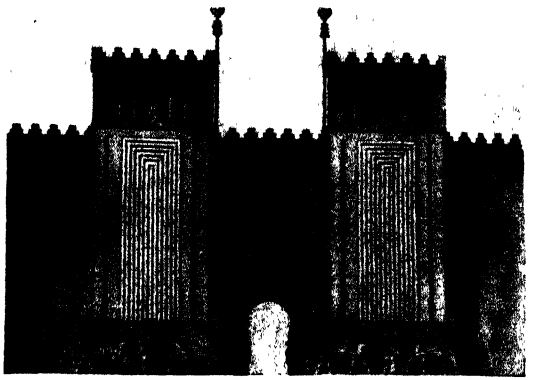
were wealthy and powerful men. Most of them were government officials. Some of the nobles were priests. The priests managed the temples of the gods. People gave property to the gods, and the priests took care of the gifts. They often helped farmers to get seed or loaned food in a year when the crops were poor.

All the rest of the Babylonian people we call the "common people." They were the farmers who owned small farms, the storekeepers and traders, and the men who worked at different trades, such as building and manufacturing.

Counting and measuring. On the clay tablets we can read about many things the Babylonians discovered. They worked out methods of counting, measuring, and weighing. You would expect people who were merchants to do that. They learned how to count by ones and tens on the fingers. Then it was easy to count up to twenty on the fingers and toes. When they had to count more than ten or twenty, they had to use a letter or mark to stand for the first ten or twenty and then start counting over again from 1. For very large numbers they had a mark that stood for 60. That number is convenient because you can divide it evenly by many other numbers. From their marks or signs for 1, 10, 20, and 60, the Babylonians made all their numbers.

Studying the sky. The Babylonians spent much time in studying the sky. In that country everyone notices the wonderfully starry skies, brilliant and clear in the dry and cloudless air. Some men became astrologers. That meant they thought they could tell what was going to happen in the future by watching the stars. For a long time astrologers were important advisers of kings and nobles. Sensible people do not believe in astrology today, but we do use some of the knowledge about the heavens which these people discovered.

One thing they found out by watching the sun and stars was how to divide the day.



Oriental Institute, The University of Chicago

A French archaeologist thought a palace in Nineveh looked like this. The walls were brick, but the carved figures were on huge slabs of stone.

The Babylonians divided the day into twenty-four hours. Each hour had sixty minutes, and each minute had sixty seconds.

How Assyria Spread Out

Hunters from the northern hills. Babylon did not continue to be the most important city of the Tigris-Euphrates Valley. People from the north conquered the Babylonians. Now look at the map on page 6. Find the region marked Assyria. What kind of country is it? Is it a level, fertile plain like the lower valley? What would people who lived in such a region do for a living? The land wouldn't be rich enough for them to grow many crops. But they could hunt wild animals in the hills and perhaps keep some flocks and herds.

These warlike hunters, the Assyrians, became expert with weapons. From some place in the East they brought horses and trained them to pull chariots. These were the first horses the valley dwellers had ever seen. For a time the horse was called "the wild donkey of the East."

In their war chariots the fierce Assyrians were greatly feared. They conquered the foot-soldiers of the southern valley. As the Assyrians had invented war machines, such as battering-rams and movable towers, they

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This picture, cut in stone, shows Assyrians with their horses. The Babylonians had never seen horses until the Assyrians arrived with their war chariots. Probably the first horses came from the lands farther east, because the horse was called "the wild donkey of the East" by the Mesopotamians.

easily captured the walled cities. In a few years they conquered far and wide and governed the peoples of several countries. We call such a government an empire.

The Assyrians conquer the valley. Finally the whole valley of the Tigris-Euphrates came to be ruled by one man. An Assyrian king named Assurbanipal ruled the vast empire shown on the map on this page. On the map on page 6 find this same land. Where are the mountains in this great empire? Where is the hilly country? Trace the course of the two great rivers. What seacoast did the Assyrian Empire touch on the northeast?

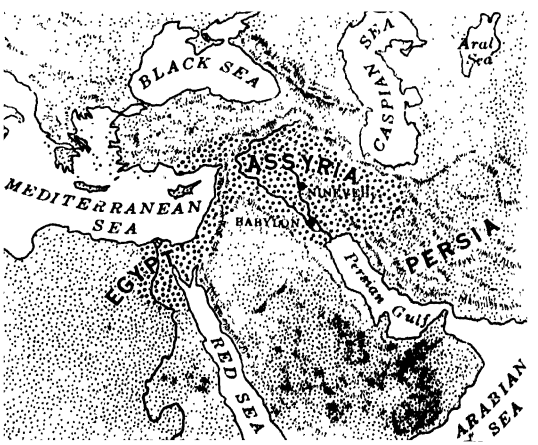
The capital of the Assyrian Empire was Nineveh. Find Nineveh on the map on this page. Here the Assyrian kings built grand palaces. On the walls were splendid carvings of war chariots and hunting parties. Today we can see some of the ruins and examine a few of the carvings and statues.

The Assyrians, as you have read, were hunters from a hilly country. There was some stone in the hills, and the Assyrians became expert at carving the stone. As you would expect, they were particularly good at carving figures of animals. But there was not enough stone for large buildings; and so these were built of bricks, just like the palaces and houses of the Babylonians. Both peoples, you see, had to use the materials they found close at hand.

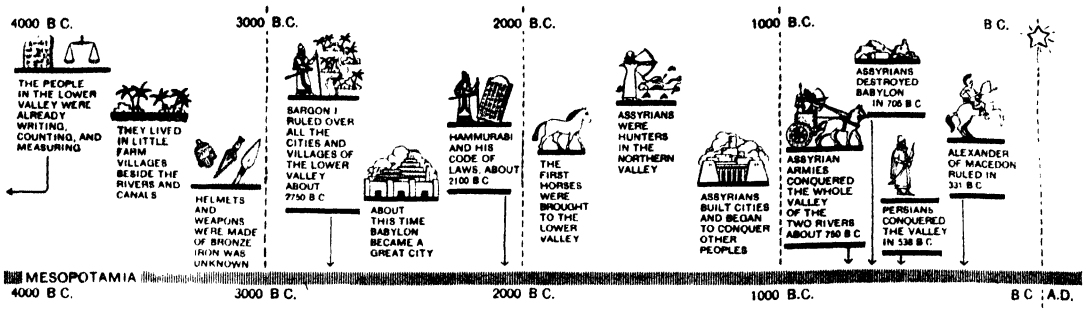
How the land "conquered" the Assyrians. When the Assyrians conquered a country, some of them settled down and adopted the ways of the people living there. Assyrians who captured farms in Babylonia could not make a living hunting, for there were few wild animals in that country. The land practically forced them to become farmers. They had to change their hunting habits to farming habits or else starve.

Assyrian soldiers who returned to Nineveh from foreign lands told their neighbors about new and better ways of doing things. In this manner the people of different countries exchanged ideas. Slowly they learned the better way of life which we call civilization.

The great Assyrian Empire did not last forever. It was conquered by people from the southern valley, and once more Babylon was the capital of a great empire. But the new Babylonian Empire did not last, either. It was conquered in turn by a people from the mountainous land still farther east. We shall read about these warlike people, the Persians, a little later in our story.



The part of the map with heavy dots shows how far the Assyrians conquered and extended their empire. They ruled the people living in the Tigris-Euphrates Valley and also peoples along the shores of the Mediterranean.



PICTURE HISTORY

The little pictures tell you some of the important happenings in the story of the Tigris-Euphrates Valley. The arrows point to dates. You can tell about when the other events happened by measuring. The space from one dotted line to the next represents 1000 years.

Talking Things Over

1. A year is the time it takes the earth to go around the sun. This is what we call a "natural" measure. Can you think of other ways of measuring time that are natural? Would twenty be a convenient number of hours to have in a day instead of twenty-four? Do you have "favorite" numbers that are easy for you to use in figuring?

2. One way in which you can measure the civilization of a people is to find out how carefully they plan for the future. The savage looked for water only when he needed it. The barbarian stored water. Has your community made plans for its water supply in the years to come?

3. In some communities there are laws about the amount of water that can be used. In many communities there are also laws that help to keep the supply of water pure. Find out about such laws in your community.

4. Think of some of the foods you use daily. From what distance does each food come?

5. In this chapter you find over and over again the words: "he noticed," "he tried," "he learned," "now he could." Many, many years ago, men had to learn everything for themselves. Later they learned from the experiences of others as well. Most of our learning nowadays is from the experience of others. Try to recall some things you have noticed, tried, and learned all by yourself. What are some things you have learned from others?

Doing Things Together

1. With people of very early times, everyone was interested in providing his own food and shelter. Later some of the people traded their skill at doing some special thing for the necessities of life. Make a list of as many occupations of men as you can. Put all your lists together and in class separate the occupations that supply us with food, clothing, and shelter from those that do not.

2. Today some men exchange knowledge for their food and other needs. Archaeologists discover how peoples lived in ancient times, before books were written. How do they get their knowledge? Try to find stories and pictures about their work. You will find that archaeologists are at work in many different parts of the world.

3. If there is a museum within reach of your school, visit it to find out if there are any articles from ancient Babylonia or Assyria. Talk about the ages of the exhibits and the distances they have traveled.

4. It is hard to imagine a large city buried by the wind. Can you find a place for an experiment that will help you to picture this? You need a place exposed to the wind, a small pile of dry sand, and a rock against which to measure the movement of the sand. Remember that it takes a long time for a whole city to be buried. One hundred years may seem like a long time to us, but it is not very long in the history of civilization.

5. Would you like to make a cuneiform tablet for a paper-weight? Where can you see cuneiform writing to imitate? What materials will you need? What difficulties may you have to overcome?

6. Making mud bricks is more difficult than making mud pies. Why is this? What do you have to add to the bricks? Experiment in brickmaking, baking the bricks in the sun.

An old Hebrew shepherd is showing his grandson the strange, new sights in the wealthy and fertile land of Egypt. Ancient Egypt became a rich country because there was always plenty of food and enough left over to trade for other things. Peoples in other lands heard about Egypt and often went there.

Ewing Galloway

Egypt is just as much a land of ditches and farms as it is a land of pyramids and palm trees. See how the farmers have planted vegetables underneath the palm trees. Every inch of land is valuable.

II. EGYPT—ANOTHER CRADLE OF CIVILIZATION

The Gift of the Nile

PERHAPS you are wondering if the Tigris-Euphrates Valley was the only place where men learned the ways of civilization in the great long-ago. No, there were other valleys that are also called cradles of civilization. We shall visit one of them. But first we should look at the map on page 25 in order to have some idea of the kind of country we are to visit.

We are going to find out that the kind of country—the land itself—is really very important. It makes a difference in the story of the people. You saw how the fertile land of the Tigris-Euphrates Valley made peaceable farmers of the Babylonians. And you read how the hilly country to the north forced the Assyrians to be warlike hunters. If we find out enough about the land, perhaps we can do some "detective work" which will tell us about the people.

The Old World

Continents. Our country, America, is between two oceans. Turn to the map on page 24 and name them. If you cross either one of these oceans, you come to the continents of the Old World. These continents are in that part of the world which we call the Eastern Hemisphere. Hemisphere means "half a globe," or half of the world. America is in the Western Hemisphere, as you can tell by looking at the maps on page 24. Which hemisphere has more land? How many continents are there in the Eastern Hemisphere? Find them on the map and name them. Which is the largest? Which is the smallest? Is Africa as large as Asia? Which two are all in one piece? Africa, Europe, and Asia are called Old World continents. Now turn to the map on page 25.

Oceans and seas. Name the four oceans surrounding the Old World. Find the big inland sea between Europe and Africa. Mediterranean means "in the midst of land." Why is that a good name for this sea? Find the Black Sea, the Caspian Sea, and the North Sea. Between what two continents is the Red Sea? Find the Arabian Sea, south of Asia. Name the four seas along the east coast of Asia.

THE EASTERN HEMISPHERE

This is the hemisphere in which the Old World is located. Most of the land, you see, is in the northern part. How far from the top would you draw the Equator?

The land. Now look at the land itself. There are three main kinds of land: plateaus, mountains, and plains. You know that plains are level country, usually not very high above sea-level. Plains are shown in green on the map on page 25. You also know that mountains are high, rough, jagged country. Mountainous regions are colored yellow and orange on our map. Plateaus may be rough, uneven country, almost like low mountains, or they may be flat and very much like plains. As you must climb to reach plateaus, you know that they are higher than plains. Plateaus are shown in light brown on our map.

Plateaus. Do you see that most of Africa is a great plateau? Parts of the African plateau are flat, and parts of it have hills and high mountains rising above it. Now find the Arabian Plateau in southwestern Asia. Do you see the hills and mountains around three edges of this plateau? Now find the Iran Plateau, a little to the northeast. What familiar country did you pass over to reach it? Notice that the Iran Plateau is very rough. Find the plateau of Tibet. It is the highest plateau in the world.

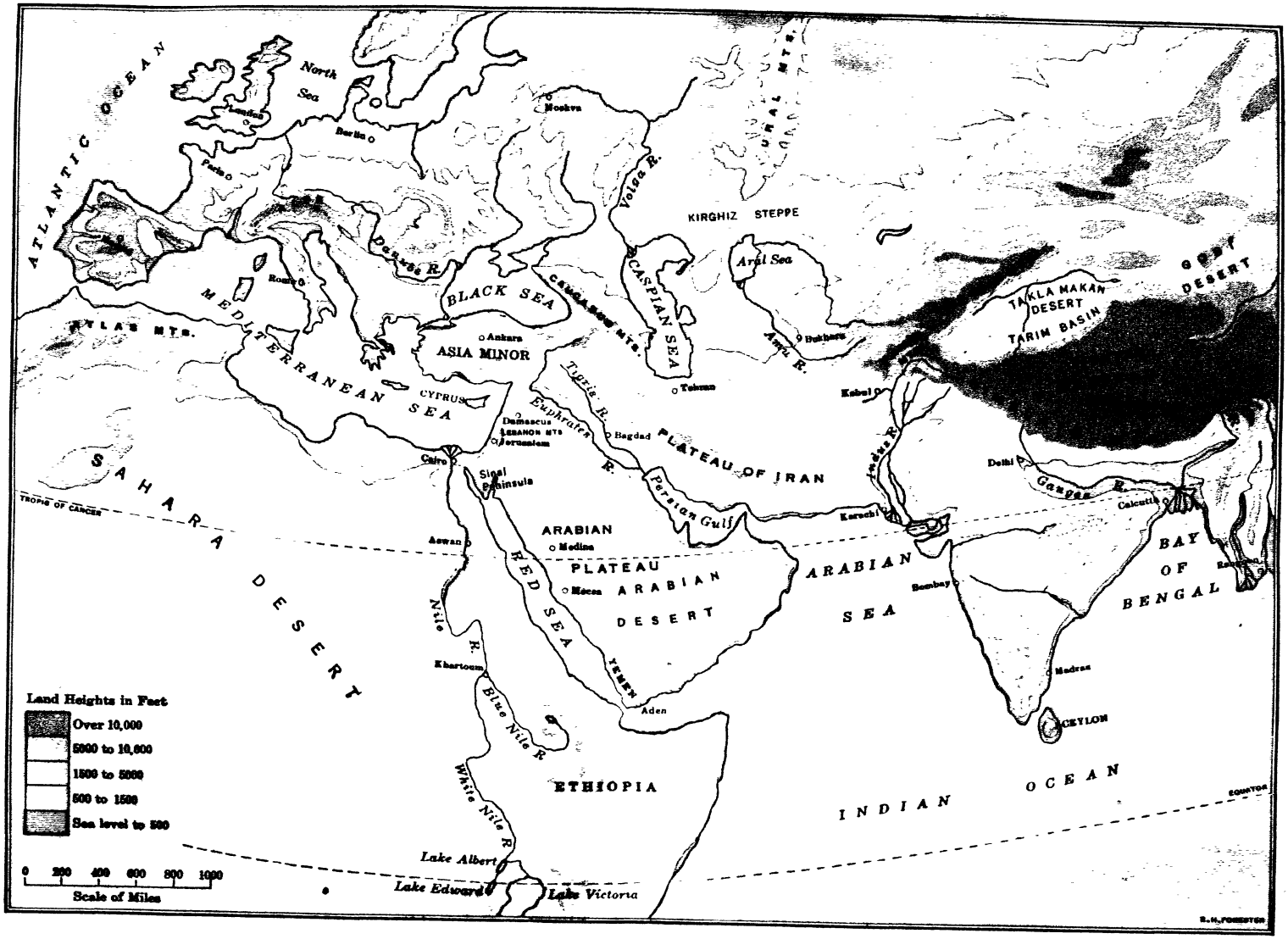
Mountains. Where do you find the highest mountains in the Old World? Notice how the Himalayas are connected with the Pamirs. Chains of mountains seem to stretch out from the Pamirs both east and west over Asia.

What are the highest mountains in Europe? Can you see why it is that high mountains are like walls that keep people from moving about? As we go on with the story, you will hear much about mountains, and how they walled in people.

Plains. Where is the greatest plain in the Old World? It is like our western prairies in many ways. On this great plain there are thousands of miles of grasslands. Do you notice a number of smaller plains along the rivers in other parts of the Old World? Find some of them. There is one in Europe along the Danube River.

THE WESTERN HEMISPHERE

Our country is located in the Western Hemisphere. There is much more ocean and less land in this hemisphere than in the Eastern Hemisphere. There is almost as much land in the southern half as in the northern part.


ATLANTIC OCEAN
North Sea
London
Berlin
Paris
Moskva
Volga R.
KIRGHIZ STEPPE
Aral Sea
CASPIAN SEA
Amu R.
Bukhara
Tehran
Kabul
TAKLA MAKAN DESERT
TARIM BASIN
GOBI DESERT
Danube R.
BLACK SEA
Caucasus Mts.
Ankara
ASIA MINOR
ATLAS MTS.
Rome
MEDITERRANEAN SEA
CYPRUS
Tigris R.
Euphrates R.
Damascus
LEBANON MTS
Jerusalem
Bagdad
PLATEAU OF IRAN
Indus R.
Delhi
Ganges R.
Calcutta
Cairo
Sinai Peninsula
Persian Gulf
Karachi
SAHARA DESERT
TROPIC OF CANCER
Aswan
ARABIAN PLATEAU
Medina
Mecca
ARABIAN DESERT
RED SEA
YEMEN
Aden
ARABIAN SEA
Bombay
BAY OF BENGAL
Madras
CEYLON
Nile R.
Khartoum
Blue Nile R.
White Nile R.
ETHIOPIA
INDIAN OCEAN
EQUATOR
Lake Albert
Lake Edward
Lake Victoria
Land Heights in Feet
Over 10,000
5000 to 10,000
1500 to 5000
500 to 1500
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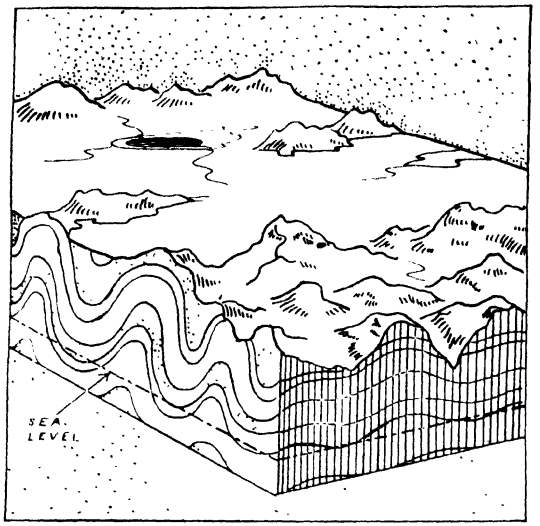
Scale of Miles
R. H. FORSTER

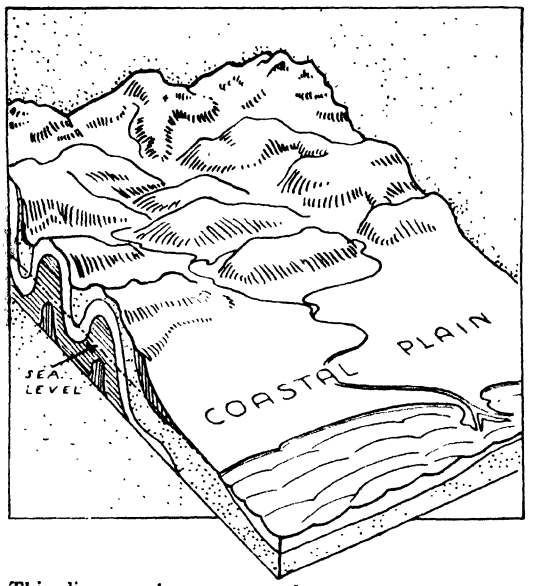


A picture like this, called a "block diagram," gives a good idea of a plateau. It is high above sea-level, and the land may be rough or level.

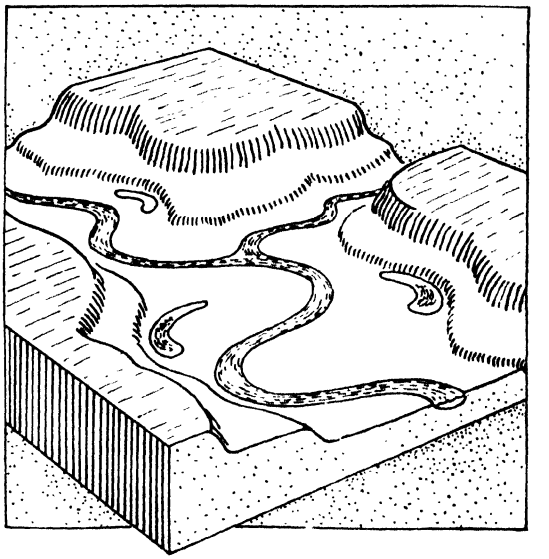
Now look for the river valleys. Find the green strip of fertile land along the Nile River in Africa. Then locate again the valley of the Tigris and Euphrates rivers. Moving farther eastward, find the valleys along the Indus, the Ganges, the Yangtze, and the Hwang Ho. Can you find them all? These river valleys, with their fertile plains, were very important in the story of civilization.

Now look again at the wide stretch of grasslands reaching across part of Asia and Europe. This was just the place for wandering tribes to live. Usually their flocks and herds could find plenty of grass in this land. There were some seasons, though, perhaps several in succession, when the land did not get enough rain. The grass was then scanty, and the tribes had to wander still farther to find pasture. Would they wander to the north, where it is colder, or to the south?

Naturally these tribes wandered southward. Some of them came to valleys, found good pasture, and stayed there, just as the first settlers in Mesopotamia stayed beside the river where food was easy to raise. Just staying there changed the people, as we have seen, and they learned new ways to live, ways we call civilized ones.



This diagram shows a coastal plain with a river and the delta built up by the stream. The land slopes from the highlands down to the shore of the sea.



Here is a river valley. Sometimes the floor of the valley is called a flood plain. Once the floor was much higher, but the river has worn it down.

The Nile Valley

A safe and comfortable place to live. Suppose we visit the Nile Valley in Africa, another place that became a cradle of civilization. First of all, find the valley on the map on page 25. By discovering what happened here, we can find out still more about *how* and *why* men changed from barbarians to civilized people.

Of course there is a river in this valley. Otherwise people would not have settled there. Men had to have water, and the river gave it to them. There is fertile soil along the river. We shall soon find out why the soil along the Nile is particularly fertile.

Now look at the mountains and hills that hem in this valley. Those valley walls protected the early settlers from the winds and storms. The walls kept out enemies, too, just as the valley walls did in Mesopotamia. The first settlers felt safe and comfortable in the Nile Valley. They were sure of enough food and water, and were well protected from enemies. No wonder they were glad to leave their wandering life of hardship and settle here.

The nomads who settled in the Nile Valley, like those who settled in Mesopotamia, did not know they were going to build up a civilization, for they had never heard of such a thing. They didn't know that their descendants were going to learn how to build homes and palaces and temples of brick and stone, how to use metals, and how to read and write. All they thought important was that they had found a better and easier place in which to live.

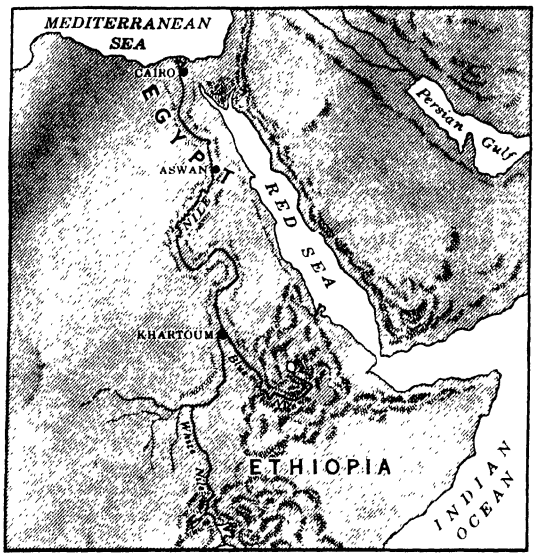
We know that learning to do such things as building, using metal, and writing is important. Learning to write is especially so. Do you know why? Well, when a people learned how to write, they could make records of what they did. Those who came later could read those records and find out what had been discovered. They could make use of the knowledge of other people. When a people can write, we say that they have stopped being barbarians and are on the way to civilization.

Publishers' Photo Service

The houses in this Egyptian village are of mud bricks. The wall, so carefully built to save the tree, is of pieces of stone, with rows of brick on top. Ancient villages were very much like this, but the old villages did not have two-story houses, nor did the people make quite so many windows.

How the ancient farmers raised their food. If we had dropped down into the Nile Valley eight thousand years ago, we should have found the Egyptian people living very much as did the people of Mesopotamia. Suppose we visit the village where Neb, the farmer, and his wife Set are living. (Of course, we don't know their real names, but Neb and Set will do.) Their village is really not very different from the Nile villages of today.

There is a group of flat-roofed, one-story mud huts under a grove of palm trees. Each house has a walled yard. Set does most of her cooking in the yard, as the house is small, and there is only one window. The walls of the house are thick, made of several layers of mud brick to keep out the heat. The mud roof is piled high with hay and straw. The children throw down some of the fodder for Neb's animals to eat. The neighbors' houses are like Neb's. Most of them have only one room.



On this map follow the Nile to its two sources. Now turn to the map on page 25 and trace the White Nile and the Blue Nile from where they join to their sources. How many thousand miles long is this great river? Through what kinds of land does it flow?

All about the village are little green fields. In some of them wheat is growing. In other fields we see the tender shoots of onions. There are still other fields of lettuce, lentils, and barley. Ditches run from the near-by river bank to all the fields. There are no great ponds, such as the ones we saw in Mesopotamia. It is plain to us that these Nile dwellers lead the same kind of life as the people who live in the Tigris-Euphrates Valley at the same time.

Right now there seems to be plenty of water for the fields. Men are dipping it out of the river in jars swung from the ends of long poles. All the water for the land must come from the river, for it almost never rains here. As far as we can see, the floor of the valley is smooth and green. It must be fertile and well watered.

Neb tells us that once a year floods come down the river. The whole valley, several miles on each side of the river, is covered with water. Where do these floods come from, and why do they come? Turn again to the map on page 25. Move your finger up the Nile to its sources.

Where the Nile gets its water. Old Father Nile, as the river is often called, really has two sources, the White Nile and the Blue Nile. The White Nile rises in the mountains on the other side of the heavy line we call the equator. In what belt or zone is most of the Nile? What lake do you find to be the source of the White Nile? Through what other lake does the river run? Do you think much or little rain falls in the mountains?

In this warm country, close to the equator, the water in seas and lakes and rivers is evaporated rapidly and rises in the air to form clouds. The heavy clouds strike layers of cold air, far up in the sky, and rain falls almost every day. The equatorial rains, as they are called, fill the river with water. The White Nile is a big stream the year round, especially during the summer. It is called the White Nile because the water is clean. The dirt in it is dropped when the river slows up in the swamps and lowlands of southern Sudan.

The Blue Nile streams down from the mountains of Ethiopia. Ethiopia is a country close to the equator. It is uncomfortably hot in summer, but it is so high up in the mountains that the winter is comfortably cool. The winter is a dry season, too, and the Blue Nile is then a small stream. But when the rains begin in the spring, the river becomes a rushing torrent. For months it rains every day. The river rises higher and higher. Great quantities of rich dirt are torn from the banks and carried downstream. Although the river is called the Blue Nile, the dirt it carries is reddish brown.

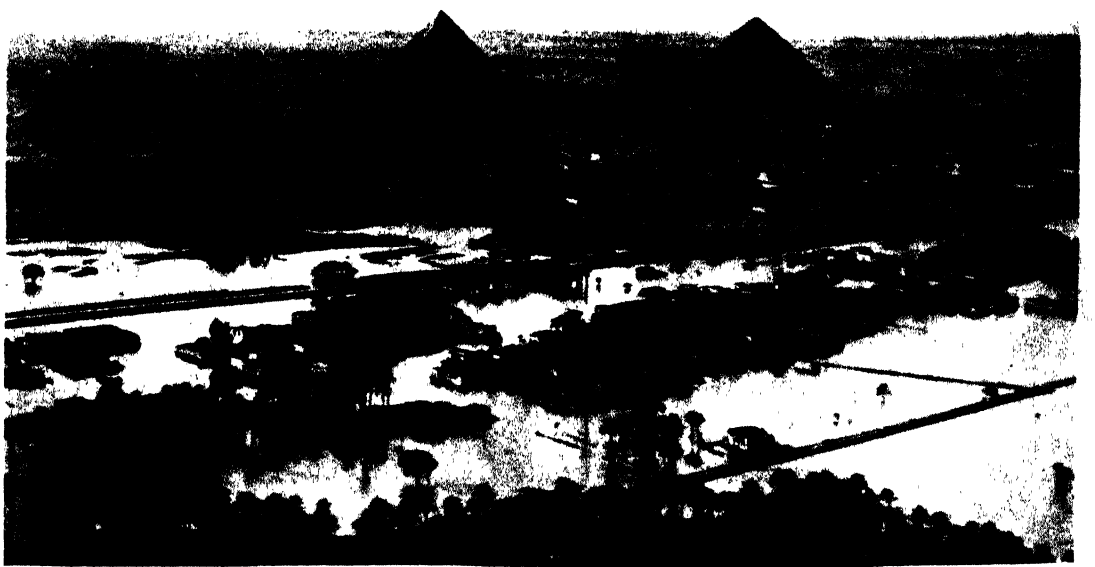
The load carried by the river. For many miles the Blue Nile flows between great rocky cliffs. There is no chance for the mud to settle, as the river flows swiftly down a steep slope. At Khartoum the Blue Nile

joins the White Nile. Then the whole river becomes a muddy torrent because the water moves too fast to drop the dirt. Down over cataracts (low falls) and rapids for a thousand miles, the Nile rushes northward between high, rocky walls. Suddenly, just below Aswan, the cliff walls spread out to the east and west, making a wider valley. At some places the valley is only ten miles wide, but in other places the cliffs are a hundred miles apart.

The floor of the valley, from the First Cataract at Aswan to the Mediterranean Sea, is level. The channel of the river is too shallow to hold the flood waters. The river overflows its banks, and the muddy water spreads over the flat valley.

Look at the map again and see how many miles it is to the Mediterranean Sea from the place where the two rivers join. The flood waters of the Blue Nile reach the valley about the middle of May. They do not reach the sea until the middle of August. The Nile is very long, you see.

How the Nile renews the farmers' land. As the flood waters soak into the ground or evaporate into the air, the dirt in the water settles. This is what Neb and his neighbors were awaiting. The river spreads a thin layer of fresh, fertile soil over their farms. Neb was a great deal better off, in one way, than American farmers are today. Our farmers do not have new soil given them each year. To keep their land fertile, they must spread fertilizer on it. Or, as you know if you live on a farm, they must change crops. They cannot grow the same crop on the same field year after year. Perhaps you know that the early farmers of America quickly wore out the soil in some of the states by growing tobacco on the same land year after year. They should have used fertilizer, or at least given the land a rest once in every few years by not planting anything in some of the fields. Or they could have "rotated" their crops, as we say. That means planting a field for a different crop once in a while. If one of these things is not



Acme Newspictures, Inc.

When the Nile overflows, some villages are surrounded with muddy water. See how the fields are covered. The two black lines are the banks of a canal which will bring water to the fields in the dry season. Do you see how boats and rafts could be floated almost to the pyramids at the edge of the desert? What kind of land is there beyond the flooded farms? Do you see any villages there?

Oriental Institute, The University of Chicago

This stone carving, from a tomb, shows how the ancient Egyptians plowed. Why is this plow better than the one the modern farmer has in the picture on page 61?

done, the soil wears out, and the crops become poorer and poorer.

Neb and his neighbors did not need to know anything about fertilizers, idle fields, or rotating crops. The river kept their farms fertile by spreading on them a new layer of fresh earth each year. All they needed to do was to wait for the flood. At flood-time they could tell if there would be enough water for all.

Progress made by the Nile Valley people. The farmers of the lower Nile Valley solved the problem of getting water, just as did the farmers in Mesopotamia. They dug ditches from the river and shared the water. They also had laws about using the water. Perhaps they did not find out the scheme of making ponds to hold extra water as early as did the people in Mesopotamia, but finally the Egyptians built such ponds.

Probably the people along the Nile learned to build houses, make pottery, cloth, ropes, and baskets in much the same ways as the farmers of the Tigris-Euphrates Valley. The Egyptians learned how to use metals—copper at first, then bronze, and later, iron. They began to raise more food than each family needed and to trade what was left over for things they wanted and could not make. There were little villages along the banks of the Nile as thick as beads on a string, and some of them grew into trading towns.

Boats sailed up and down the Nile. Perhaps the first boat big enough to be called a ship was launched on the Nile. Land was precious for raising food, and the roads between the towns were narrow and poor. The river made a road good enough for all. The Nile was crowded with boats and ships. Some had oars, some had sails, others had both. We could almost say that the river "tied" all of Egypt together. It made Egypt a long and narrow land.

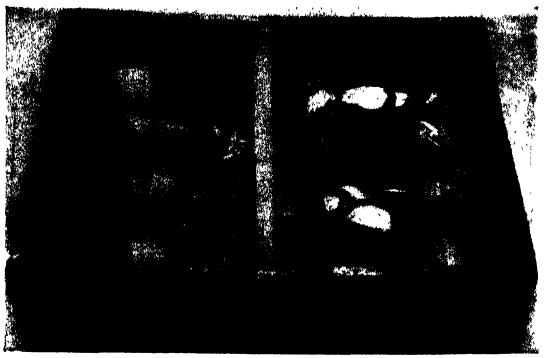
How Some People Became Landlords and Nobles

Gaining more land. While this was going on, while people were learning to barter their extra food and towns were growing up into cities, some of the people were becoming rich and important. Suppose we see what happened to Neb's son, whom we shall name Kut.

Kut was a good farmer and a very shrewd man. When he grew up, he worked very hard and made his whole family work in the fields with him. There was always plenty of grain stored away in the big clay jars in his yard. He traded in the town and was able to have many sheep and goats and a few oxen. The neighbors said he even had hidden away a lot of the copper rings which

Metropolitan Museum of Art

This model boat was put into the tomb of a rich Egyptian, many centuries ago. It was like the boat he used when hunting along the Nile. Some of the figures are spearing fish; others are throwing sticks at birds. Notice the large oar for steering the boat.



Metropolitan Museum of Art

Probably Kut's barn looked like this model, which was found in a tomb. There are cows in the stalls and three men working. Only the rich, with plenty of land and feed, could afford to keep cows and oxen.

some of the Egyptians used for money in those days.

Not all of Kut's neighbors were so good at farming. One year the flood was late in coming. One of Kut's neighbors had not worked very hard and had only a little food saved. Long before the new crop was ready, this neighbor had used up all his grain and had eaten the last of his few skinny sheep. He went to Kut for help.

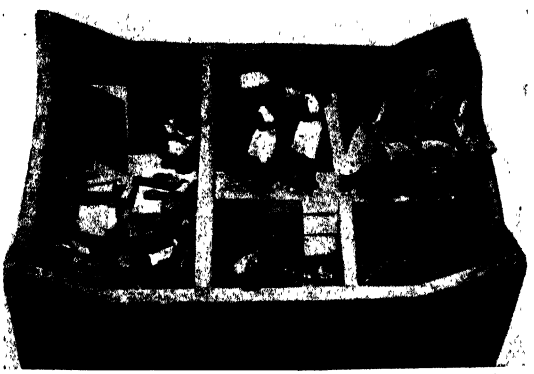
Kut was the only man in the village with grain to spare, and he drove a hard bargain. He agreed to give his neighbor grain and meat, but the neighbor had to promise Kut a third of the next crop. As no one else had any grain to lend, there was nothing for the poor man to do but to agree.

How some men became rich. The next season the crop wasn't very good. When the poor farmer had given Kut a third of his grain, he saw that there wouldn't be enough left for his family to live on until the next harvest. But Kut was very nice about it. He agreed to give the poor farmer enough food for his family, but this time Kut said that he must have half of the next harvest.

Next year it was the same story. This time Kut lost his patience. If the poor farmer could not raise enough food, why did he keep on being a farmer? Then Kut offered to teach the neighbor to be a better farmer. All the poor man had to do was to turn his land over to Kut and to work the way Kut told him. Kut promised to give him enough to eat. But all the crops would go to Kut. The poor farmer did not see how he could be any worse off, and so he agreed.

Little by little Kut got more and more land. After a while many of the farmers were working for him. Kut's sons stood in fields and watched the men work to make sure that they followed Kut's orders. Kut was now a rich landowner and did not have to work unless he wished. But Kut had spent his lifetime working, and he worked up to the very day he died.

Why landlords could live in cities. After Kut's death, his eldest son, Nath, grew tired of working in the fields. There was plenty of everything produced on his lands to make him rich, and so he went to the city to live. He hired a builder to make him a big house beside the river. It had a large garden surrounded by a high wall, and there was a landing for boats on the river bank. The house was cool and dark inside, and on the second floor, overlooking the garden, was a roofed porch where he could sit in the evening.



Metropolitan Museum of Art

Perhaps the granary where Kut stored his grain was like this model. Workmen are dumping grain into bins. At the entrance are scribes who are keeping track of the harvest for the rich landlord. There is a picture of a scribe on page 38.

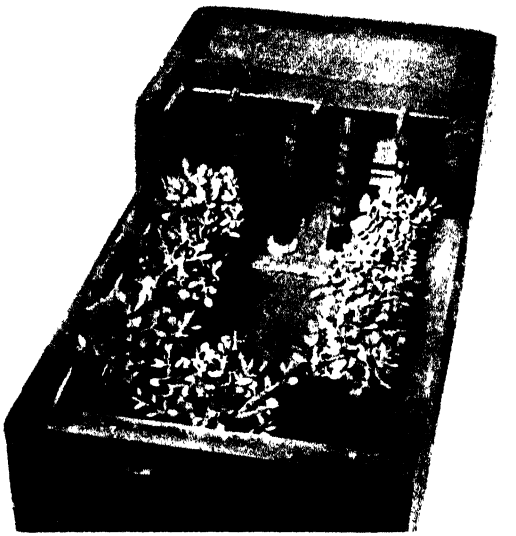
Nath became an important man in the city. He did not need to live in the farm village, for he had hired some faithful men to take his place watching the laborers in the fields. All the extra food raised on his farms was sent to him, and the merchants were glad to trade with him. Nath took the best things the traders had to offer. The workers in the city wanted him to hire them. Soon he had a reputation for being not only rich, but wise. People brought disputes to him to be settled. He became a leader in the city.

How city leaders became "nobles." By this time the task of being a leader for a large number of people was not easy. Someone had to see that the laws were kept and that the people were protected. There were so many people in the city, all living close together, that simple laws about land and water wouldn't do. There had to be different rules, or laws, for city people to follow.

As a leader, Nath found his job too big for one man. He soon had two of his cousins and a nephew helping him. He hired strong men to keep order in the streets and to catch robbers. The city was well managed, and soon people began to speak of the Noble Nath. His son was called "Noble," too.

Metropolitan Museum of Art

Nath's slaves might have looked this way when they came home from market. These little figures are not toys, but little models of slaves. They were put into a rich man's tomb because the Egyptians believed that the rich man could have slaves to do the work even when he was dead.



Metropolitan Museum of Art

The garden of a rich city Egyptian was somewhat like this model. There was a high wall around the garden. The house had a porch overlooking the garden as you can see. Sometimes the houses were two stories high and had upper porches also. Almost all houses were built of mud bricks.

Something like this went on all over Egypt. Rich landowners like Nath controlled a great deal of the land. Thousands and thousands of poor farmers had to get their work and their food from these nobles. The nobles were powerful because they were wealthy and because so many people depended upon them for a living. To stay in power the nobles hired guards and fighting men to keep order and see that the laws were obeyed. We call such nobles a "ruling class" because they actually decided how the country was to be ruled. We shall hear a great deal about ruling classes as we read more of our story.

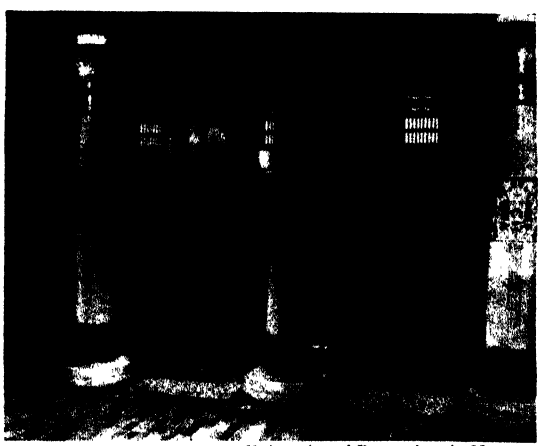
The man from the "great house." Finally one of the nobles became much more powerful than the others. He had more men to obey him, better guards and soldiers, and more wealth. He had the largest house of all. He was called the "man from the great house." The Egyptian word for great house

was *Pharaoh*, and that is how the Pharaohs got their name. It came to mean the same as king.

The Pharaoh was so powerful that he could have taken all the land for himself if he had wished. The other nobles knew this, and in order to keep their own land, they agreed to pay the Pharaoh a part of the crops every year. They also promised to bring their men and fight for the Pharaoh when he called them.

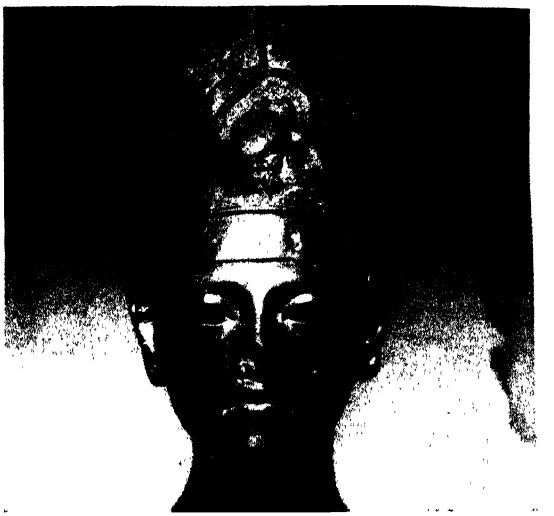
Who paid the bills? The Pharaoh used his share of the crops to feed and clothe and furnish homes for the people who helped him. We would call such a share a "tax." The tax was collected from the farmers, and from the workers and city dwellers, too. Soon everyone was paying something to the ruler. Perhaps a potter had to pay a certain number of jars and a metal-worker a certain number of spears. Everyone had to help by paying part of what he raised or made or earned. This has always been true. No matter who rules, the people must pay.

The first kingdom. We know the name of one of these early Pharaohs. He was powerful enough to bring the whole valley together under his rule. His name was Menes, and he lived about 3500 B.C. Look at the picture history on page 43 and see how long ago that was. Perhaps Menes was the first really great Pharaoh of Egypt. He built his capital at Memphis, on the banks of the Nile. Can you find this place on the map on page 42?



University of Pennsylvania Museum

This room, in the Museum of the University of Pennsylvania, is just like a palace room in ancient Egypt. Notice the wall paintings, the painted pillars, and the Egyptian writing. The floor is of clay bricks, and the walls are painted plaster. The roof beams are wood.



University of Pennsylvania Museum

Not all Egyptian art was stiff and awkward. This head of a Pharaoh looks very lifelike in spite of the damaged nose. It was carved in a hard stone called red jasper. Sculptors also carved wood.

Houses and Other Buildings

We know that the Egyptians learned very early to build their houses of mud bricks. They found out how to make larger and more comfortable homes. Years passed, and their builders learned a great deal about making buildings.

Perhaps you have seen pictures of the ruined church which was built by the colonists at Jamestown, Virginia, about three hundred years ago. That seems a long time. But in Egypt you can see buildings that were constructed more than three thousand years ago! Let us see what kind of buildings the Egyptians learned to erect and what kind of materials they used.

Mud and clay for houses. The valley dwellers had to use mud and clay for a

long time. Nature provided them with plenty of this material for bricks and plaster; it dried hard in the hot sun. There wasn't rain enough in Egypt to wash the dried mud away. You remember that the rains which fill the Nile fall in the mountains, about two thousand miles to the south. Mud bricks did very well in the rainless climate of Egypt.

You may wonder why the people did not use wood. Well, there were practically no trees along the Nile, except date palms and a few fruit trees. And the wood of the date palm is not strong enough to use for building. Fruit trees do not grow large enough to use for lumber. Besides, date palms and fruit trees were too valuable for the food they furnished to be cut down.

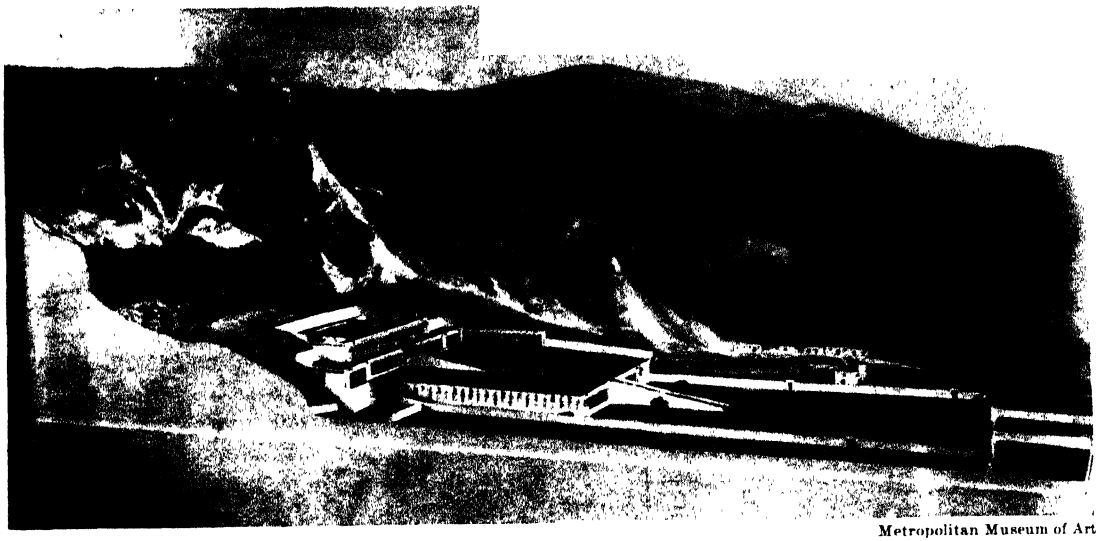
Stone for tombs and temples. The mountains that hemmed in the Nile Valley were full of good building stone, but for many hundreds of years the people could not use it. They did not have metal tools with which to cut the stone into the right shape. But after several thousand years the people found ways to build with stone. Hard bronze tools have been found in the old quarries where the Egyptians got their stone.

Stone was hard to cut and hard to move, and so only the very richest men could afford it. Most of the people, even the nobles, had to get along with brick houses. However, their temples were built of stone. But the most famous things made with stone by the Egyptian builders were the pyramids.

Why were the pyramids built? The pyramids are on the edge of the valley, where the desert begins, not far from where Cairo now stands. The Pharaohs and nobles had these great pyramids built as burial places for themselves and their families. The

Ewing Galloway, N. Y.

The Sphinx is the stone figure of a crouching lion with a man's head. The paws, as you can see, were built of stone blocks, but the body was carved out of a ledge of rock jutting out of the desert. Perhaps one of the Pharaohs had it made to guard his tomb in one of the pyramids. Or it may be a monument to the Egyptian god of the morning, for it faces the rising sun. The dark stone between the paws tells the story of the Pharaoh Thutmose, who lived 1300 years after the Sphinx was built. In the time of Thutmose the Sphinx was almost covered with sand. Thutmose had the sand dug away and put the story on this stone. After Thutmose died, sand again covered the lower part of the Sphinx. Only lately, when the sand was dug away once more, did we know about the story, the hidden paws, and the temple just in front.



Metropolitan Museum of Art

Archaeologists made this model to show how one great Egyptian temple must have looked. A famous queen built it in the rocky desert land east of the Nile. All the hard work of cutting into the mountain and making the temple and terraces was done by hand.

Egyptians believed that some time, long after death, the soul of every person came back to the body. And so they wanted to keep the body safe for the soul's return.

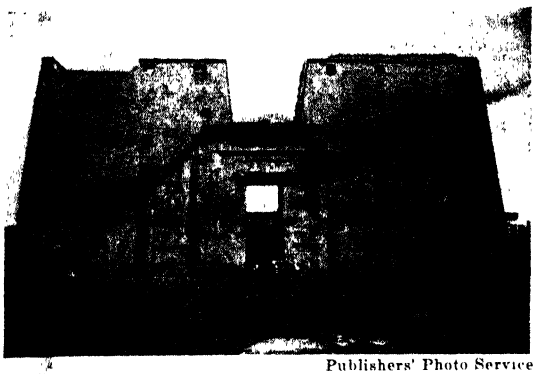
At first the early dwellers in the valley buried their dead at the edge of the desert. Stones were piled on top of the grave to keep wild animals from digging out the body. The richer men had larger piles of stone. The Pharaohs had the largest and finest of all. Builders were hired to make these monuments smooth and even, and to fit the stones together carefully. The Egyptians found out a way to preserve dead bodies by making mummies of them.

One of the Pharaohs decided to build a pyramid so enormous that no one would dare try to build another one so large. This great pyramid is four hundred fifty feet high and seven hundred feet square at the bottom. It contains nearly five million tons of stone —enough to build a wall around the whole state of Texas!

The amazing thing about the pyramids is that every bit of stone in them was hauled, pushed, and tugged into place by the muscles of men. There were no powerful engines, cranes, or derricks to pull and lift materials. It was simply a question of getting enough men to push and pull.

The Pharaoh was able to get all the men he wanted. The story of the Great Pyramid is that he ordered a hundred thousand men to work for him. They worked for three months, and then another "relay" of a hundred thousand men took their places, while the first ones went back to their farms and workshops. Even then, the story says, it took twenty years to build the Great Pyramid.

For a long time these tombs for the dead were the only buildings in Egypt in which stone was used. The houses and palaces sometimes had stone doorsteps or foundations, but sun-dried bricks were used for the walls, and reeds plastered with clay for the roofs. Even today bricks are the main building material in Egypt. You can get a fairly good idea of how the valley towns looked in ancient times by seeing how the villages appear today. The picture on page 27 shows that in Egypt, as in many countries in this



Publishers' Photo Service

How high, do you think, is the entrance to this temple of Horus at Edfu, Egypt? The ancient builders liked enormous temples. Perhaps the Pharaohs thought that great buildings proved they were great rulers. The large figures cut into the building are of Horus.

part of the world, ways of making things and doing things have not changed a great deal in many centuries.

Great public buildings. In your town or city there are buildings which you call "public" buildings. Some of these are schools, churches, railway stations, and museums. What do you think were the first public buildings among the valley dwellers? Not the palaces of the Pharaohs and nobles, for at first they were only large private houses. The first public buildings were the temples of the gods. The first building that man made was his own home, of course. But after a while, centuries later, he thought that he should build a home for his gods. That is how temples came to be built. In Egypt the temples were made of stone, and some of them were especially large.

Stone was quarried in the mountains and carried on boats as close to the buildings as possible. When the Nile was flooded, the rafts carrying stones could be floated right over the fields. When we see the size of some of the stones used, we know that the Egyptians must have been expert workmen. Not only did they have to be expert quarrymen to cut such huge stones from the mountains, but they had to be expert boat-builders to make craft large enough to carry such enormous weights. Moving such stones would be a big task even today.

How the Egyptians Progressed

Craftsmen and good tools. We have read how traders brought in many strange things from different countries. In this way the Egyptians learned about metals. People in near-by parts of the world knew how to make copper into ornaments and tools. Some unknown inventor, somewhere, then discovered that if tin was mixed with copper it made a much harder metal that we call bronze. Bronze was a very useful metal to ancient peoples. It was hard and could be given a sharp edge, though not as sharp as iron. Today we do not use bronze for tools, because iron and steel are better. It was many years before the Egyptians had iron tools.

With good tools people could make many things. Egyptian craftsmen, as we call such workers, had good tools and kept finding out new things to make. Egyptian potters found out how to use a potter's wheel. Others learned how to cut stone with tools,

Publishers' Photo Service

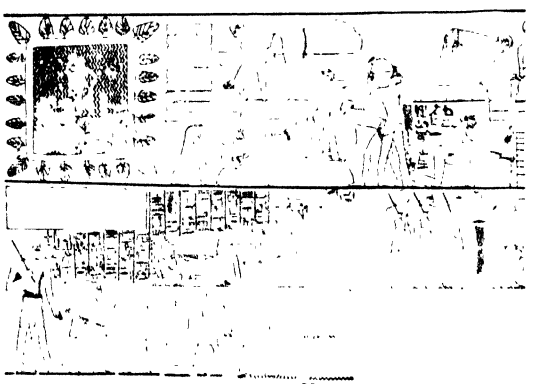
The dam at Aswan was built, not long ago, to hold back the flood waters of the Nile. The high banks of the river, as you can see, help to make an enormous reservoir. When the floods begin, the water rises and almost covers this temple. But during the dry season the water is allowed to run into the irrigation canals. Then you can see the entire temple and the island on which it stands. Notice how square and even the stones are.

to make beautiful things of precious metals, to carve gems, and to inlay wood.

Men were finding out other things at the same time. They were discovering a way to make a record of what they knew and what they were doing. Like all other important things in civilization, this did not happen suddenly. It took many, many years for men to learn this way to make records.

The story of Egyptian writing. Like the people of Mesopotamia, the Egyptians did not know how to read or write at first. Men only knew what they could remember or what others told them. If they forgot a date, that date was gone forever. No one could go to a book and look it up as you can do.

Men used pictures to help them remember long before they began to write. Perhaps a hunter wanted to remember a certain day when he killed a great many beasts. He made pictures of them. Possibly a king wanted to tell the story of a victory. He might have pictures of the battle carved on stone or cut into brick, as the Assyrian kings had done. But that was not exactly writing, because the pictures always had to be explained by someone who knew the story.



Metropolitan Museum of Art

In the upper picture men are making bricks. Two slaves are drawing water from a pool. Notice how the artist showed the water. Men are mixing the water and mud with picks. Other men are making bricks in molds. The artist did not know how to show the bricks lying flat on the ground; so they look as if they were piled up. Below you can see men with levers and ropes trying to move a huge stone on a kind of sledge. The stones for the pyramids and all the buildings were moved in this way. In the background are several rows of Egyptian writing which explains what the men are building.

Oriental Institute, The University of Chicago

In this market scene the artist shows Egyptian men and women bartering different things. In the top left-hand corner the woman is trying to trade two bowls. The next woman wants to buy a fish. In the next picture a necklace is being bartered. The picture writing explains what is going on. In the writing you can see birds, snakes, feathers, an eye, and other objects. This kind of writing is called hieroglyphics.

Gradually a little picture came to stand for a word. It is easy to see how a circle could stand for the sun. But words are made up of different sounds, and so the next step would be to have a picture or a letter stand for a sound. Then a man could write any word by putting down the right picture or sign for each sound in the word. This seems like a very simple step to take, but some of the ancient peoples never took it. Some of them never did learn to make their writing signs stand for sounds instead of for whole words.

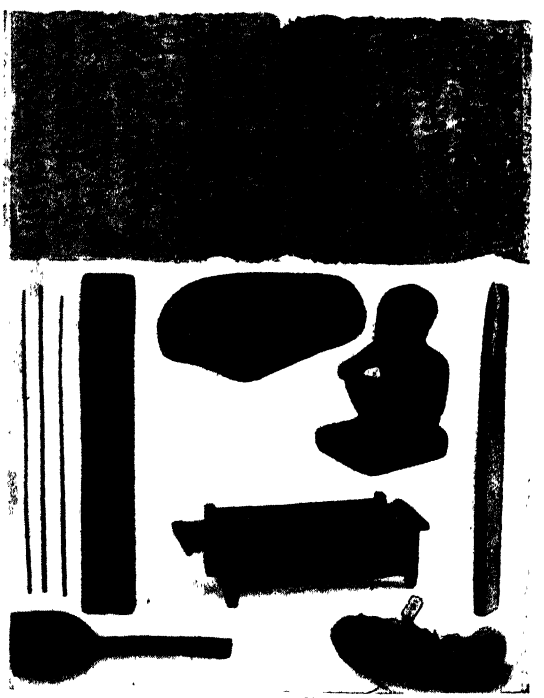
The writing of the ancient Egyptians is called *hieroglyphics*. It means "sacred carving." For a long time only the priests knew how to write. You can see what this kind of picture writing was like in the pictures on this page. After a time the people wanted an easier way to write. They made the pictures with fewer lines. Then they even shortened this way when they wanted to write with a pen on paper for everyday use. This writing was almost like shorthand. See the next page for a sample of it.

Paper, pens, and ink. Father Nile helped the Egyptians in this business of writing.

The Egyptians found a tall reed growing along the banks of the river. It was called *papyrus*. They sliced the stems lengthwise into strips and laid the strips side by side in a thin layer. Crosswise over this they laid another layer. Then they pressed the papyrus until the layers were stuck together and had become quite dry and smooth. These sheets had a good surface on which to write.

We make paper today from the fibers of linen, cotton, or wood. And we use the word *paper*, which comes from the old word papyrus. The Egyptians made good use of their invention of paper. Their traders sold sheets of papyrus to the other countries of the ancient world for many years.

The Egyptians also had to have pens and ink. They made the pens out of quills or pieces of reed with the end sharpened and split. You can make a pen the same way. For ink they used soot mixed with oil or thin glue.



Metropolitan Museum of Art

Here is the equipment of a scribe. The long cases contain pens and blocks of paint-like ink. The case with covers is an inkwell. The shell is for mixing ink. The mallet was used to smooth the papyrus sheets. The thread was used to tie rolled-up letters. The little figure is a seal for stamping the wax which sealed the letters. Above is a letter, now in the Oriental Institute, Chicago, telling the story of a shipwreck.

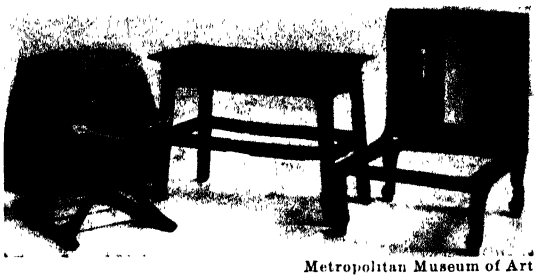
Metropolitan Museum of Art

This stone statue shows an Egyptian scribe writing on a roll of papyrus. Scribes were hired to write letters and to keep accounts. Only a few men could do this important work, and so most scribes became wealthy.

Now the Egyptians had a way to write down what they learned and what they wished to remember. Men could read and gain knowledge from what other men had written. It wasn't necessary to listen to a man in order to learn from him. Men wrote down what they found out. Other people, living later, read what these men had written, and that helped them to discover more things. In that way knowledge increased.

What the Egyptians Studied

How the Nile dwellers learned to measure time. As people became more civilized, they found a need for keeping track of the days and for measuring time. Would you imagine that the Nile was responsible for



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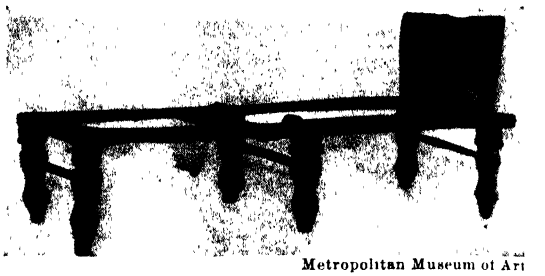
The stool, table, and chair were made in Egypt 3500 years ago. The basket was used for clothes. The stool has a leather seat. The chair had a seat of rushes.



Metropolitan Museum of Art

The high part of this wooden bedstead is not the head but the foot. Instead of a spring, such as we have the ancient Egyptians used woven cords or leather.

measuring time or that the Nile floods brought about the first calendar, which was made more than six thousand years ago?

The first day of the Nile's overflow was a sort of New Year's Day for the Egyptians. It was a festival, for the people were then sure of water, new soil, and good crops. They knew that there would be plenty to eat during the coming year. Naturally, they wanted to know when to expect the floods, just as you want to know when Christmas will come. At first they counted the days between floods. Probably the people in Mesopotamia did much the same thing, although their rivers did not have such big floods as the Nile.

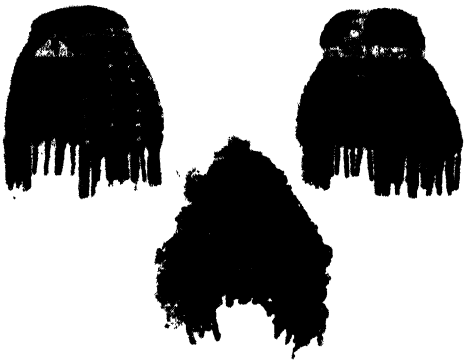
Even in those days men studied the sun, moon, and stars. We already know that the Babylonians watched the heavens closely. So did the Egyptians. Someone noticed that these heavenly bodies did not stay in the same place in the sky. Then it was noticed that each of them seemed to have its own way of moving. From the way the sun, moon, and stars seemed to move, the Egyptians figured out a calendar. They had a year of 365 days. They divided the year into twelve months of thirty days each. The extra five days they celebrated as festival days at the close of the year. They knew about leap-years, too, and were also able to tell when eclipses were going to happen.

Metropolitan Museum of Art

Piles of woven linen sheets were used for mattresses by the richer Egyptians of ancient times. The wooden support at one end is a pillow! How would you like it?

The Egyptians had ways to tell time. They divided the day into two parts of twelve hours each. They measured time with a kind of sun-dial. Later on they measured time by letting water drip from a small hole in a jar.

Why the Egyptians learned to measure land. Surveying was another thing for which Old Father Nile was responsible. Surveying is measuring land, so that people may know exactly where one man's property ends and another man's begins. Every year the Nile flood washed away the boundary marks between the farms. When the flood was gone, the Egyptians had to measure the land all over again and put up new marks. Sometimes disputes arose, until finally a way was found to survey the land. Corners of a man's property were marked with a stone or a tree or a post, or perhaps the corner of a house. Then a map was made showing in what direction the boundary line ran and how far. After that every man could know just where his farm was.



Metropolitan Museum of Art

Some of the richer Egyptians wore wigs ornamented with gold bands and buttons. Sometimes the hair was curled; sometimes it was straight or braided.

The Valley People Spread Out

Thus far our story has been about valley dwellers who had safe homes. They were fairly well protected against enemies by natural walls—the mountains and deserts. In the story of Mesopotamia we read about kings becoming powerful and winning land until they had empires. Now, in this story of Egypt, let us find out more about how kingdoms grow into empires.

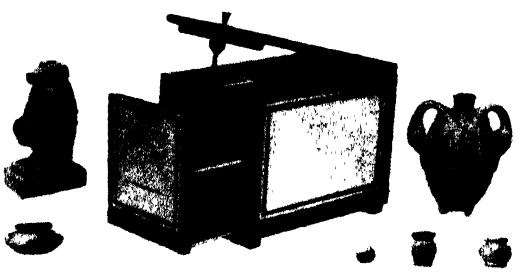
From our study of the map on page 25 we know that mountains and deserts protected the Egyptians on both sides. Can you name and locate the deserts and mountains? At the north was the Mediterranean Sea, and to the south were many miles of rough land and high mountains where very few people could live. For many centuries the people living along the Nile Valley were at peace. They did not have to drop their tools and go to war. They spent their time and energy working at peaceful tasks. They became civilized faster than if they had been interrupted.

How the Egyptians learned about other lands. But did the Nile dwellers always stay in their own land and keep away from peoples living beyond the borders of their country? We know they did not. The traders who wanted to sell the extra food raised in Egypt went to other countries to barter it. Other traders took wool and pottery and glassware and other things made by Egyptian workmen. They looked for places where these things could be bartered. The same traders brought back to Egypt such things as copper from the island of Cyprus, gems from the Sinai Peninsula, lumber from Lebanon, paints and dyes from Ethiopia, and many other articles the Egyptians wanted. Find these places on the map on page 25.

If you were a traveler, you would tell the people in a strange land about your own country. When you returned, you would tell your friends about the lands you had visited. In this and other ways the Egyptians came to learn about other countries outside their own.

Sometimes traders would seize men in the far-away countries and make slaves of them. They always needed slaves to row ships. Such men were fed but not paid, and the trader would have guards to see that they could not run away. When these slaves reached Egypt and learned to speak Egyptian, they told tales of their home countries.

Why the Egyptians wanted other lands. Occasionally a trader might come back and report that the people in some land would not barter their gold or copper or something



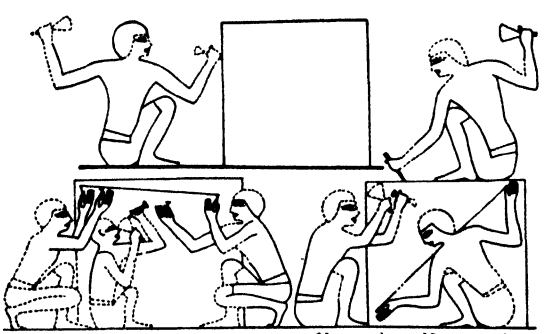
Metropolitan Museum of Art

A slave carried this "make-up" box for her rich mistress, who used it when she dressed for parties and banquets. There is a mirror and spaces for jars of cosmetics. At the side are perfume bottles and a pot of paint for coloring the eyelids.

the Egyptians wanted. Perhaps the Egyptians would then decide to go and take what they wanted. We know that one Pharaoh sent soldiers to the mines and quarries on the Sinai Peninsula to make the people there work for him. Another Pharaoh sent soldiers even farther to the north along the shore of the Mediterranean. Perhaps he wanted to get wood for his ships, since Egypt had no good trees for lumber. There were fine forests of cedar trees in the Lebanon mountains.

In ways like these, Egypt spread out Instead of remaining in their peaceful valley, the Egyptians began to conquer other people and to make an empire. An empire, as you know, is a number of peoples and countries under one ruler. Let us look for a moment at one of the first empires of the Egyptian Pharaohs.

Thutmose and his army. An Egyptian Pharaoh called Thutmose III was a great general. By this time the Egyptians had an army that was always ready to go to war. Before this, the farmers and other workers went to war and returned to their work when trouble was over. But Thutmose had an army of men who had no business except being soldiers. We call such an army a "standing" army, because it always stands ready.



Metropolitan Museum of Art

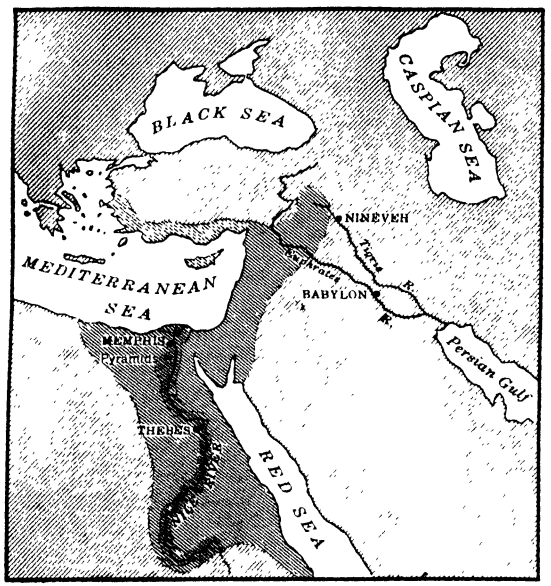
These Egyptian workmen are smoothing a huge block of stone for a building. Stone-cutters today use mallets of almost the same shape. Some of the men are testing the surface of the stone to see if it is straight and even. This painting is so old that some of the lines have disappeared. Dotted lines take their place.

Photo from European

These men are putting together a papyrus manuscript. It became dry and brittle from age and broke into pieces. It must be put together, like a jig-saw puzzle, before it can be read. You should read about the Rosetta Stone and learn how men found a way to read the Egyptian picture writing.

Thutmose used his standing army to reach out and conquer countries near Egypt. Soon he was ruling the lands along the Red Sea and some of the country west of Egypt. Then he reached out still farther and conquered some of the islands in the Mediterranean and the countries along the eastern shore. He even reached the lands near the sources of the Tigris and Euphrates rivers. The map on page 42 shows the empire of Thutmose III. What seas did ancient Egypt touch? Did the empire of Thutmose include the sources of the Nile? How much of the conquered country is desert land?

The downfall of the Egyptian empire. There were other famous empire builders among the Pharaohs of Egypt. Perhaps one of the best known is Rameses II. He extended the empire much farther than before. But it was a costly business. Armies had to be fed and clothed and supplied with weapons. Men had to be taken from the business of raising food and building homes and



The dark part shows the lands which were conquered by the Egyptian Pharaohs to make an empire. They fought in the small area just north of the Mediterranean Sea, but did not conquer it. Now turn to the map on page 25 and locate the conquered lands. What countries occupy those lands today?

making useful things and be turned into soldiers. Other men had to take their places and do their work.

At first the conquered nations furnished the Egyptians with many slaves. These captives were taken back to Egypt to do some of the work there. But no slave would ever work as hard as a free man, and all of them had to be watched. Rameses did not dare to bring back too many slaves from other countries. If there were too many slaves, they might revolt and take possession of the country.

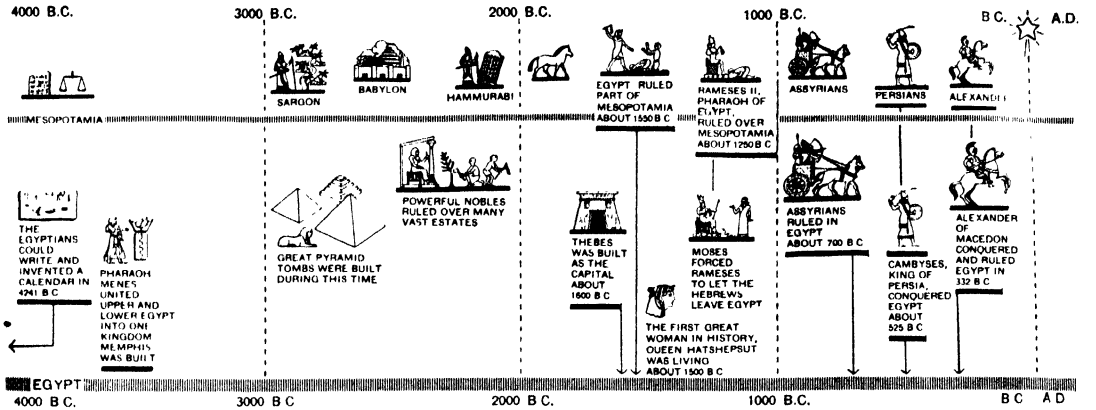
Fighting so many wars cost Egypt too many lives and too much wealth. Even that rich valley could not feed and clothe all the soldiers and have enough food and clothing left over for the farmers and other people. The common people became poorer and poorer. Then armies from other countries marched in and conquered Egypt. One conqueror came from Mesopotamia. Another conquerer came from Persia. We shall read about still other countries which conquered and ruled Egypt for a time.

Modern Egypt. Today Egypt contains people of many countries. Turks, Arabs, Greeks, and people of many different countries live together in the valley of the Nile, especially in the cities. But the farmers look just about the same as Neb and Set must have looked eight thousand years ago. They live in much the same way and raise almost the same things on the same little farms. After all, you see, it is the land that tells them what they must do for a living. There is little else for Egyptians to do but farm and carry on trade, even today.

Later in this story we shall return to Egypt and see how the people are living. There will be many things to remind us of the very ancient days when the first Egyptians were learning to be civilized.

Metropolitan Museum of Art

The sculptor who made this head of Queen Nefertiti painted the limestone to make it lifelike. We can imagine it was a good likeness of this beautiful woman.



PICTURE HISTORY

Now you can follow the story of Egypt and see what was going on in Mesopotamia at the same time. Do you notice that people from one valley sometimes ruled the people in the other valley? Toward the end you can see that the valleys were conquered by still other rulers from far away.

Talking Things Over

1. A written language is an idea that makes a difference in the way people live. A standing army is another such idea. Both of these new ideas became a part of the Egyptian civilization. Make a list of other new ideas that were mentioned in this chapter.

2. We still use these ideas, which are no longer new. In what ways have some of the ideas changed since Egyptian times? Which seems more important in changing the way people live: the idea when it was new, or the changes made in the idea later?

3. Some new ideas which change people's ways are discoveries; others are inventions. When men accidentally learn a better way to do their work, we call that a discovery. But inventions are made deliberately by experimenting. Take the list you made and mark the discoveries D and the inventions I.

4. If we should start over again to make new ways of measuring time, we should keep some of the same measurements used by the Egyptians. Other measurements might be different. The length of a year is the time it takes the earth to move around the sun. We cannot change that. But we could change the number of months in a year if we agreed to. Which of the Egyptian measures cannot be changed?

5. Learn from someone who knows about building the names of some of the tools and machines used to haul material to a new building, to lift the material, and to put it into place. Make a list in three columns. In the first column put the name of the tool or machine. In the second column put the kind of power used to run the tool or machine. In the third column put the kind of power the Egyptians used to do the same kind of work.

Doing Things Together

1. In this chapter and in other books, you will find what foods, cloths, and building materials were used by the Egyptians. We use some of the same materials today. From materials that can be found in our homes, make an exhibit of things used in Egyptian times.

2. When Nath was building his house in the city, he had to talk with different people—with nobles, workers, merchants, and others. Could several members of the class pretend to be these Egyptians? There will be plenty to talk about if you will remember that Nath had to buy land, bricks, furniture, and other materials, to hire workmen of many trades, and to become acquainted with his new neighbors.

3. Why don't you have your room look Egyptian while you are studying this country? If there is a blank wall space in your room, get a large sheet of heavy paper to cover it. Divide the paper into smaller sections. From this chapter in your book, and from other books, you can get ideas for subjects to draw in these spaces. Use colors, just as the Egyptians did. Their artists showed Egyptians with brick-red skins. They were fond of bright colors, such as yellow, light blue, and brilliant green.

Kaufman & Fabry Photo

Do you think of this kind of land when you hear the word "desert"? Do you think of camels plodding over great dunes of sand to an oasis? There are other kinds of desert land, too. Look on the next page.

III. OTHER CRADLE LANDS

Valleys in Desert Lands

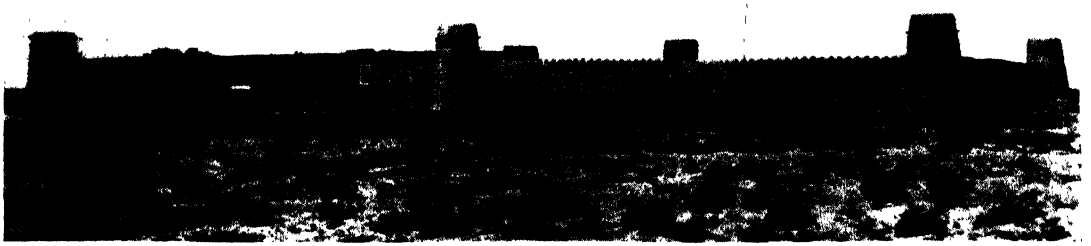
NOW that we have read stories of two "cradles of civilization," there are several questions we want to ask. Which came first, Egypt or Mesopotamia? We cannot be sure; perhaps we shall never know. Some archaeologists say that men learned to be civilized in Mesopotamia first. But we know more about Egypt because archaeologists have studied Egypt longer and have found more ruins there. There are more ruins because the Egyptians built many temples of stone, while the other people built with bricks, which were more easily destroyed.

Another thing we want to know is whether these two valleys which we have studied were the only places where barbarians learned to be civilized. There were at least two other valleys where the very same thing was happening. These valleys are far from the first two. In all four valleys men found all the things they needed for an easy life—water, fertile soil, and warm climate.

In such places, where living was easy, men did not have to spend all their time fighting or working hard, or struggling to keep warm. They had time to think, to try new ways to make themselves more comfortable, and to become acquainted with one another.

Four great valley cradles. Turn again to the map on page 25 and find the two valleys which we have been studying. Now look for the two other cradles. First, find the plain in the region of the Indus and Ganges valleys. It is at the southern foot of the Himalaya Mountains. This plain in the Indus and Ganges valleys was a third cradle of civilization. The fourth cradle you will find on the map on page 465. Among the mountains of China find the river Wei. It has a small valley, which leads eastward out to the great plain of China where millions of Chinese people live today.

Unlike the two valleys we have studied, these two valleys had little to do with the civilization of Europe and America. We may never learn as much about early life there as we know about the two western valleys. Archaeologists have not found many



Underwood & Underwood

Here is another kind of desert—not sandy, but stony and rough. This one is in Persia. The building is not a fort but a desert hotel. It is called a "caravansary." Camel and donkey trains can find shelter here with stables for the animals and rooms for the men. It is walled and has lookout towers so that travelers can defend themselves against desert bandits. It is built of mud bricks, and the gates have heavy wooden doors.

places where the early eastern people lived. But we do know that people settled in each of the four valleys and that each group gradually became civilized.

It was many years before the peoples living in these different valleys learned about each other. For a long time they stayed peaceably in their own valleys and did not travel far. One reason they did not learn much about other peoples is that the valleys were hemmed in by mountains, as the map shows. But there is another reason. These valleys, which we call cradles of civilization, are located in the midst of a vast desert region or on the edge of it. If you look at the map again, you will see why it was hard for the valley dwellers to cross the deserts and become acquainted with each other.

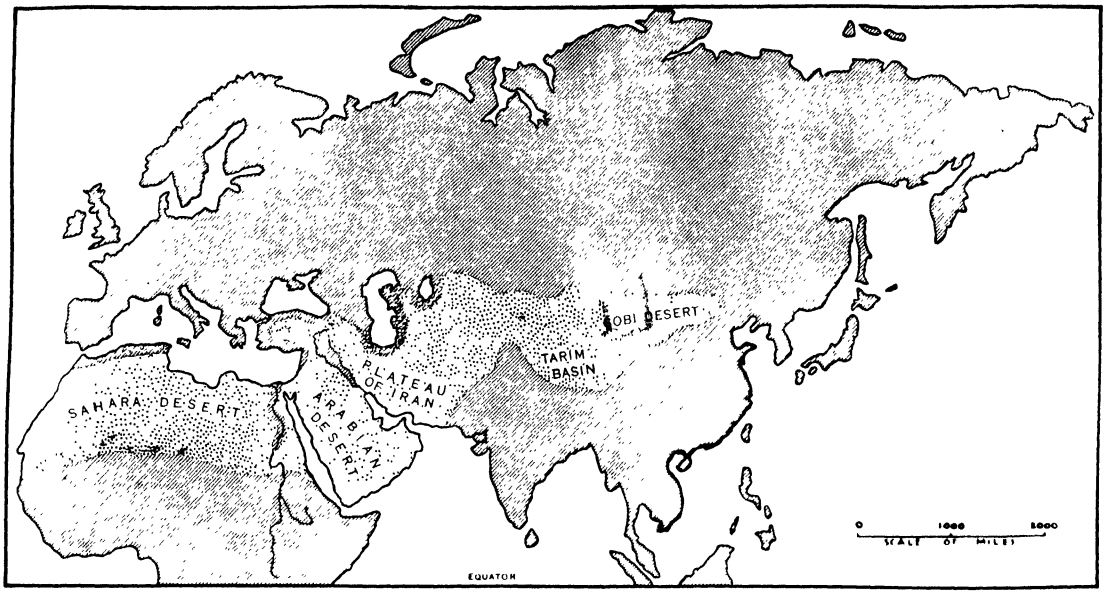
A great belt of desert land. Our four valleys are shown on the map as green splashes. Around them is a huge, far-reaching brown desert land of sandy plateaus, mountains, and hills. The valleys seem very tiny in this great desert region that extends from the Atlantic Ocean on the west, across northern Africa, southwest Asia, and central Asia, nearly to the Pacific Ocean.

Find the Sahara Desert in northern Africa. See how it runs into the Arabian Desert to the east. Northeast of Arabia is the Persian Plateau, which is a dry, desert region. North of Persia find the region called the Tarim Basin. This is a bare, treeless desert region. From the Tarim Basin run your finger eastward across the Pamirs and the Tien Shan Mountains to the Gobi Desert. You have traced a great band, or belt, of desert land.

Traveling in the desert. A journey across this belt of desert land would be ten thousand miles long. That is more than three times the distance across the United States. But such a journey would take you much longer than would three trips across our own

Underwood & Underwood

Here is still another kind of desert, this time in Tibet, where it is cold and windy. The buildings belong to a powerful lord and are like fortresses. You can imagine how little can be grown on such land as this. Do you see any trees, bushes, or grass?



THE DESERT BELT

Notice how far this belt of desert land stretches. Measure it by the scale of miles in the corner. How far is the northern part of it from the equator? How close to the equator is the southern part?

country. In America you can take a train that will carry you three thousand miles in a few days, or an airplane that will fly the distance in less than a day. But in the desert country there are no trains, except for short distances around a few cities.

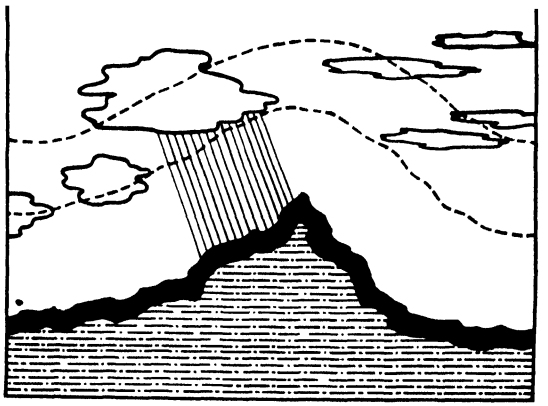
Ancient peoples, of course, had no railways. For thousands of years they did not even have horses or camels. They had only sheep and cattle, with slow donkeys for those who wished to ride. You can imagine, then, how long it would have taken the earliest peoples to make such a journey.

Hot and cold deserts. If you were traveling over this band of desert, you would find a number of things to surprise you. You would probably expect a desert to be hot all the time. The Sahara is hot during the daytime. You think the day will never end. The glare of the sun from a cloudless sky hurts your eyes. But when the sun goes down and night comes, the dry air cools off quickly. Before you know it, you are shivering. But there is no winter in the Sahara Desert. It is hot in the daytime and cool at night the year round.

If you were to travel the length of this dry region to the Gobi Desert, you would find that a desert can have real winter temperatures. The Gobi is farther from the hot belt and is much cooler than the Sahara. You would find the winters there about as cold as any you have known in your own country. Would you expect much snow?

How the desert land looks. Do you think a desert is all sand? It is not Most of the pictures of deserts show sandy places. There are hundreds of miles of sand in the Sahara and Arabian deserts. The wind blows the sand into hills which are called dunes. As the wind keeps blowing the sand up one side of a dune and down the other, the dune gradually moves. Then the wind may turn and move the dune another way.

The great desert belt is made up of rocky plateaus, hills, sandy stretches, mountain ridges, and still more sandy stretches. In some places there is clay.



The second paragraph below will tell you why clouds lose their rain. Now do you see why one side of a mountain is likely to have more rain than the other?

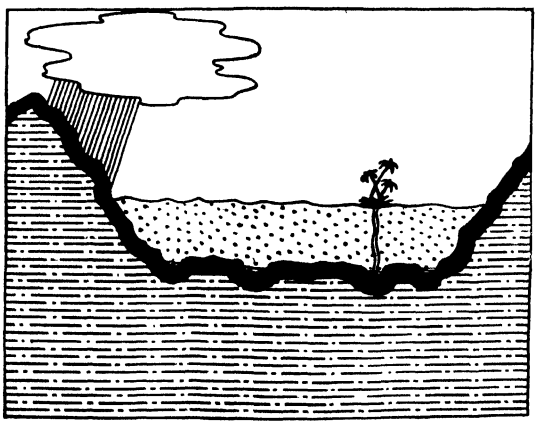
In some parts of the great desert belt there are miles and miles of bare rock and hard, uneven ground. Here and there a bit of tough grass may grow, or a bush with a few leaves. But even this scanty growth is brown and withered. Only a goat, a camel, or a donkey will eat it. Occasionally a rocky hill or range of mountains rises out of the rolling waste. The grass is greener around these hills, and the bushes grow a little larger because there is moisture here.

Water in deserts. Some rain will usually fall on a mountainside. You know that clouds which are filled with water vapor are blown along by the winds. As the wind blows over mountains, the clouds are carried higher. It is cold enough, so high in the air, to turn the water vapor in the clouds to rain. Sometimes the clouds drop all the rain on the side of the mountain facing the wind, and the other side gets no rain at all. Since there are usually mountains around deserts, you can see that some rain is likely to fall near the desert edge.

There are places in some deserts where rain occasionally falls in torrents, like a cloud-burst. For a few hours a river may stream into the desert from the hills or mountains near by. But just as suddenly the river disappears. The water sinks into the sand and is gone. But it does not go very far. Under the sand of the desert are layers of rock. The water sinks down until it reaches this rock. The sand, deep down, is always soaked with water, and here and there it collects in underground hollows. Wells can be dug in such places, and then the water will ooze out of the sand and partly fill the well.

Fertile spots in deserts. A place in a desert where water can be found is called an oasis. There may be a well in an oasis, with a few trees growing about it. Perhaps there may be a spring, or even a small river. Some oases are small, while others are large enough to have towns around them. It all depends on how much water there is.

We can think of the valleys of the Nile and the Tigris-Euphrates as two great oases. They are well-watered spots in the midst of an enormous desert, as we know. It seems strange that civilization should have begun in the midst of desert lands. But now we know that the desert really helped the first settlers. It kept other people away, so that the settlers could lead peaceful lives and gradually become civilized. Suppose we see who these other people were—these people who lived around and about the edges of the valley cradles.



If rain falls on the desert side of the mountain, do you see how it will follow the dark line of the rocks and finally settle in hollows? The sand next to the rocky floor of the desert will be moist.

Wide World Photo

Even today the farmers of Palestine must work hard to make a living, for their land is not very fertile. The women help the men to gather up every stalk of grain. The farmers in Bible times were just as careful.

IV. THE STORY OF THE HEBREWS

Dwellers in the Holy Land

WHERE the Hebrews' ancestors lived. The Hebrews were a people who lived in a land near the two valleys we have studied. The first great hero of the Hebrews was Abraham, a shepherd who lived in a Babylonian city called Ur. The ruins of Ur have been dug out by archaeologists, and we know where it was and what it was like thousands of years ago.

The Bible tells us that Abraham left Ur with his family and his flocks of sheep and goats and a few cattle, because his God had told him to go. Probably some friends went, too. Abraham struck out westward, away from the irrigated fields in the Valley of the Two Rivers. He moved from one tiny oasis to another, stopping at the desert wells, but always traveling toward the hills. The flocks must have had scanty pasture, but they slowly worked their way to the mountains, where Abraham knew there would be more grass.

The hilly land of Canaan. At last the travelers reached the hill country, or Canaan, as the Bible calls it. It was not so rich a land as Egypt or Mesopotamia, but it did look inviting and green in the midst of the desert lands around it. Let us see what kind of country Abraham found.

Look at the map on page 54 and find the lands at the eastern end of the Mediterranean. These lands lie between Egypt and Babylonia. Compared with those two great valley regions, what kind of lands are they? Do you think a people could find a good home there? Today this part of the country is called Syria and Palestine. We also call it the Holy Land. It is truly a Holy Land, not only to Christians, but also to Jews, and to millions of other people.

Find the Jordan River. Notice how it makes a valley in the midst of low mountains and barren hills. Many small streams run into the Jordan. Each one of these

brooks has its own little valley. The valleys are fertile, but not large enough for many people to have farms. This is the land of Canaan.

Hebrew shepherds and farmers. Abraham found the valleys green, because some rain falls here, though not very much. During most of the year the hills were brown and dusty. But there was enough grass on them, even though it was scanty and dry, for his flocks. The new-comers could make little farms in the fertile valleys and grow grain and a few vegetables. As long as there were not too many people, the land would give them a fairly good living. It was a better life than that of the wandering shepherds who had to keep on the move along the edges of the desert.

Other people were there when Abraham and his family, with their friends and relatives, came. Abraham called these people Canaanites. Probably they, too, had come from lands near the valley of the Tigris or Euphrates, or perhaps from Arabia. The Canaanites called the new-comers "Hebrews." The word meant "to cross over." Very likely when the Canaanites asked Abraham who he was and where he came from, Abraham replied that he had "crossed over" the Euphrates River.

The story of Joseph. One of Abraham's great-grandsons was named Joseph. Joseph's brothers were jealous of him and sold him as a slave to some men who were passing through Canaan. These men went to Egypt and sold Joseph to the Pharaoh. The story in the Bible says that Joseph impressed the Pharaoh with his wisdom and became a "ruler." Probably the Pharaoh made him manager of a large farm.

The Bible tells us how and why Joseph filled the storehouses in Egypt with food. He had come from a land where food was not easy to get, because in some years the crops were poor. The Egyptians were not used to crop-failures and no doubt laughed at him for saving food. But there came a time when the Nile floods were late for several years. There was not enough water, and the crops in Egypt were poor. Then Joseph's stored food fed the people.

Hebrews in Egypt. Back in Canaan, Joseph's people were also having a hard time. Little rain had fallen there, and their crops were poor, too. The Hebrews were obliged to go to Egypt, the "land of plenty," to get food. Joseph made sure that his relatives received plenty of grain. He forgave his brothers for selling him as a slave. The brothers with their families and friends decided to settle in Egypt.

The Hebrews stayed in Egypt a long time. At first they were treated kindly, but later on their descendants were made slaves. One of the Pharaohs was a great builder and needed as many workmen as he could get. The Hebrews were put to work making clay bricks and building cities for the Pharaoh. They were treated cruelly.

Photo by William Thompson

These desert dwellers are making butter by shaking a goatskin filled with milk. Probably the Hebrews in the time of Joseph made butter in the same way. They also lived in tents. Do you know why?

Photo by William Thompson

Flocks are everywhere in Palestine. They pasture under the olive trees and on the stony ground of the hills. For centuries the people have been shepherds. They also can raise fruit and a little grain.

Moses, the great Hebrew leader. Because of their sufferings the Hebrews needed a leader to help them. In the time of Rameses II, about whom you have read, a great leader arose. His name was Moses. He gathered the Hebrews together, and they marched out of Egypt, intending to go back to the land of Canaan. It took them many years to reach the homeland of their ancestors, for they had to pasture their flocks and raise food as they slowly moved along. But at last they reached Canaan, or the "Promised Land," as they called it.

This time the Canaanites did not want any new settlers, and the Hebrews had to fight for the land. Finally they captured the cities and towns of the Canaanites and took possession of the little valleys and the hills of Palestine. Jerusalem was their capital city. Now they had dreams of making a great empire here. But nothing of that sort ever happened. The map on page 54 will help you to see why.

Why the Hebrews never had an empire. Palestine is right on the road between the valley of the Nile and the valley of the Tigris-Euphrates. The Hebrews lived in the path of the fighting empires of Egypt and Mesopotamia. When the Egyptians wanted more land to the east and north, they passed right through Canaan. When the Babylonians expanded their empire westward, they also marched through Canaan. The little country of the Hebrews was constantly being overrun with foreign soldiers marching to war in other lands.

In one of the wars between Assyria and Egypt, the Assyrians captured all the Hebrews who lived in the northern part of Canaan. They were carried away as captives. Their farms were given to Assyrian soldiers, who settled down to a peaceful life. Later, in another war, the Babylonians came and conquered the Hebrews who lived in the southern part of the country. They were taken to Babylon as slaves. Very few of the Hebrews were left in Palestine.

Later on, a people living farther east, called Persians, captured Babylon. Their great king, Cyrus, allowed the Hebrews, or Jews as they are now to be called, to go

Photo by William Thompson

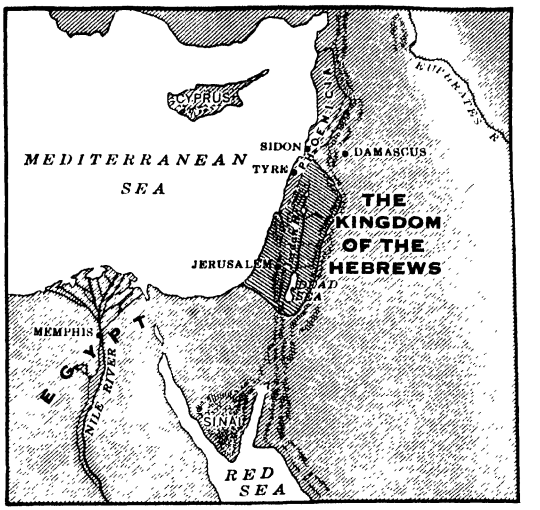
People who keep flocks know how to use wool. This old man is spinning yarn from the wool wrapped about his hand. His ancestors spun yarn in the same way.

back to Palestine, rebuild their cities, and again occupy their little farms.

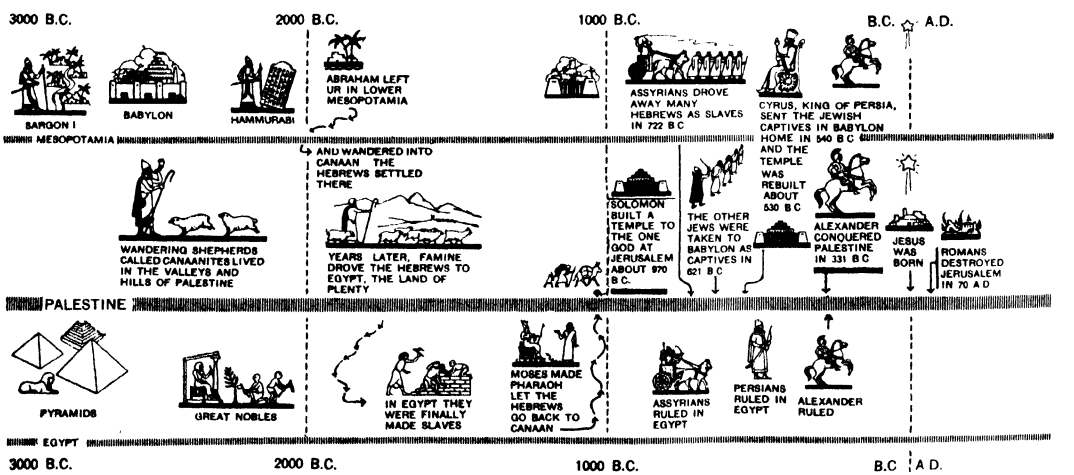
An idea that captured the world. All through these troubles the Jews held fast to one idea. It is an idea that has made them famous, an idea that is very important to all of us. They believed in one God, and in only one.

The Hebrews were the first people to worship one god. The ancient peoples of Egypt and Mesopotamia had many gods—a god of the sun, of the moon, of water, of war, of the harvest, and many others. But the Hebrews believed in just one God, whom they called Yah-weh, or Jehovah. And their idea of a One and Only God has spread to all parts of the world.

This is the important thing to remember about the Hebrews. They did not accomplish much in art, or in building, or in making things. They did not build a great empire. But they did teach religion to the world. They wrote the stories of the Old Testament. Included with the stories of their heroes and their history are their songs, their laws, and the sermons of their leaders. Although the Hebrews failed to grow into a rich and powerful people, they did leave us something very great indeed.



The little kingdom of the Hebrews did not reach to the shores of the Mediterranean. Find the country of the Phoenicians on this map. Just south of them lived another people who are called Philistines in the Bible. East of the Hebrews stretched a wide desert.



PICTURE HISTORY

As the little pictures show, the story of the Hebrews takes them into several lands. Some of the pictures are to remind you of what was going on in other countries at the same time as the story of the Hebrews.

Phoenician ships carried shrewd traders and their merchandise into almost every corner of the Mediterranean Sea. The Phoenician merchants bartered with the people for the products of their land. In exchange the people received wares that had been procured in distant lands by the seafaring traders.

Photo by William Thompson

The first Phoenicians fished for a living, just as these modern people are doing on the same shores. But the Phoenicians found a better way of using the sea. They built boats and traded with other peoples.

V. THE PHOENICIANS

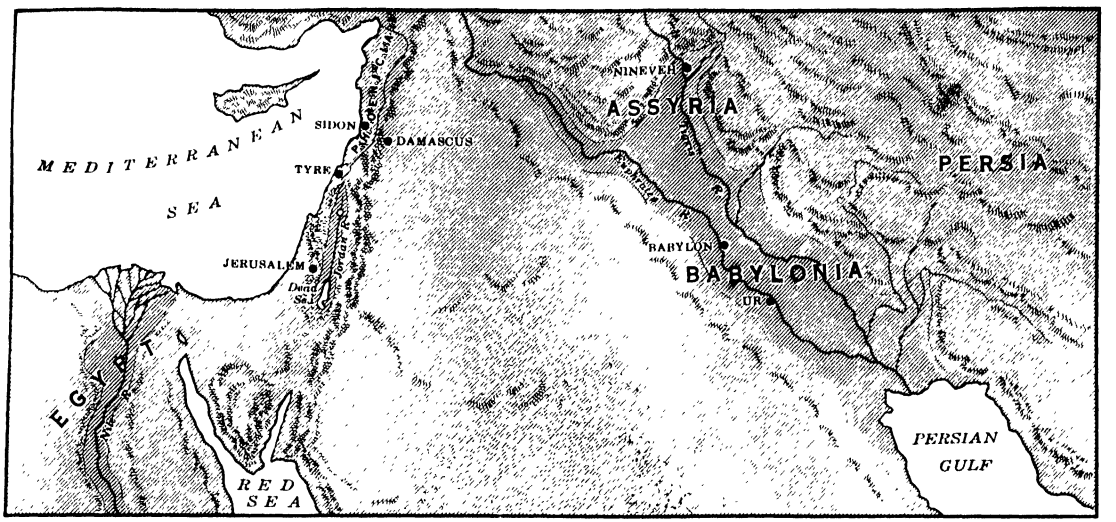
Chain-Store Merchants of Old

THE next people we shall read about also lived outside the fertile valleys. North of the land of the Hebrews, along the eastern shore of the Mediterranean, is a little strip of rocky land. It is about fifteen miles wide and two hundred miles long. It used to be called Phoenicia, and it was the home of a shrewd and daring people.

Why the Phoenicians went to sea. None of the land of the Phoenicians was much good for farming. But the sea was in its front yard, and there were a few harbors. And on the mountains were fine forests of cedar trees. Perhaps the Egyptians made the first big ships, but they lacked lumber, and so the Phoenicians became the greatest ship-builders of ancient times. And after building their ships they sailed over the Mediterranean, looking for places to trade.

The Phoenicians bartered for wool from the Hebrews and the people of Mesopotamia. They got linen and cotton from the Egyptians. They made fine shirts and robes and tunics, for they learned to be excellent weavers. They even discovered how to dye cloth different colors. One dye they made from the blood of a little shell-fish, found near Tyre, the chief city of the Phoenicians. It was called Tyrian purple, although we would say it was crimson. It was the most expensive dye in the world, and for years only kings and emperors could afford it.

Where the Phoenicians traded and settled. Turn to the map on page 55 and you will see where the Phoenicians went to establish trading-posts or settlements. We might call these settlements "stores." In Africa these traders settled a strip of land larger than the home country. The chief city there was called Carthage. In time this "store" town became much larger than Tyre or the city of Sidon



The Phoenicians had three other large cities besides Tyre and Sidon. Traders not only sailed the Mediterranean from these cities, but also traveled overland. They followed the valley of the Jordan into the land of the Hebrews. They cut across the desert near Damascus to the Euphrates River and followed that stream and the Tigris to the cities of Mesopotamia. Trace the route you think Abraham took from Ur to the land of Canaan.

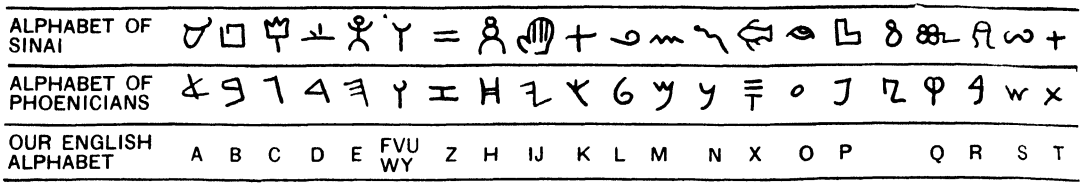
in the home country. You will read more about Carthage later.

The Phoenicians built ships and were powerful on the sea, just as other countries raised armies and were powerful on the land. Soon the Phoenicians felt that they alone had the right to sail the Mediterranean and to carry on trade. Most of their people were merchants. Others made goods by hand for the merchants to sell. It was perfectly natural for the merchants to have agents in other countries, just as our business men have salesmen.

Today salesmen sometimes go about finding new places to sell their goods. Buyers travel to get things that are not made at home. That is just what the Phoenicians did. Boldly they sailed out of the Mediterranean. They went to islands near Britain to get tin for making bronze. Some of them even went on exploring expeditions for other nations. One of the earliest of all explorers was a Phoenician captain who sailed around Africa. From the Red Sea southward he sailed around the cape into the Atlantic Ocean, then north to the strait we call Gibraltar, and finally east to the Nile River. An Egyptian Pharaoh hired him to go on that expedition.

How the Phoenicians helped nations to "get acquainted." If you had visited one of those Phoenician trading cities, you would have found the storehouses full of articles from almost all the countries around the Mediterranean. You would have seen gold from Arabia, silver and lead from Spain, tin from Britain, and copper from Cyprus. There would have been casks of olive-oil from Syria and palm-nut oil from Egypt. There would have been pottery and glassware, jewelry and hardware, clothes, perfumes, and spices. The shrewd Phoenician storekeeper would have known something about all the countries, too, for he had probably visited every one of them in one of the Phoenician trading ships.

Some of these things the Phoenicians made in their cities at home. Other goods they bought in one country and took to other countries where they could be sold at high prices. All this time, you see, they were really helping the peoples around the Medi-

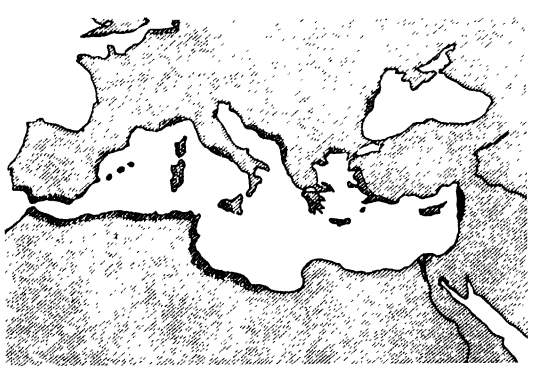


The top row shows some of the letters which the people of Sinai used to make the first alphabet. The second row shows the same letters as they were changed by the Phoenicians. The bottom row shows how we write the same letters today. Of course, there were other changes made after the Phoenicians made their alphabet and before we had an English alphabet. Those changes are not shown here, but you will see them later.

terranean to become more civilized and to get acquainted with each other.

Discovering a great aid to civilization. When the Phoenicians traded with so many different peoples, and so far from home, they had to keep accounts and to write letters. They knew some of the picture writing of the Egyptians, and they had been using the cuneiform writing of the Babylonians. But both ways were too much trouble. They wanted a shorter, quicker way of marking bundles and bales, of writing letters, and keeping accounts. Finally they found it!

Look at the map on page 51. Near the northern end of the Red Sea you will find the Sinai Peninsula. The people living here were related to the Hebrews and to the Phoenicians. Perhaps the ancestors of all of them came from the same country. These people were miners and quarrymen, for their rocky land supplied copper, stone, and fine turquoise to Egypt. The foremen in charge of gangs of miners used to watch the Egyptian scribes keep their accounts. Probably the foremen became interested in learning to write. But the Egyptian way of writing was hard to learn. So these foremen worked out ways to make shorter, easier signs than the Egyptian pictures.



The shaded places are where the Phoenicians went to trade. Knowing what you do about some of these lands, what articles did the Phoenicians bring back?

Besides making shorter, easier signs, these people of Sinai did something else. Instead of having a sign stand for a whole word, as the Egyptian pictures did, they had each sign stand for a sound. For instance, they wanted to have a sign for the sound "a." Their word for "ox" began with an "a" sound. It was the word *alph*. And so they made a simple picture of the head of an ox, like this:

They wanted a sign for the sound "b." Their word for "house" began with a "b" sound. So they made a picture on the plan of a house, like this:

They called this *bet*.

These people of Sinai finally worked out simple signs for every sound in their language and so invented the alphabet. Archaeologists have found stones on which is carved writing in this first of all alphabets. On the entrance to one of the mines in the Sinai Peninsula there is an inscription. It reads: "I, miner Sahmilat, am foreman of mine shaft number four."

The beginning of our alphabet. The Phoenicians began to use the alphabet which the workmen at Sinai had invented. They changed it to suit their own needs, for they

needed only twenty-two letters for the sounds they made when they spoke Phoenician. By putting down the signs, or letters, they could then write out every word just as it sounded.

The Phoenicians used their twenty-two letters wherever they went, and other peoples were quick to see that this was a good way to write. The Greeks borrowed the letters and changed some of them a little, as you will read later. From the Greek names of the first two letters—*alpha* and *beta*—we got our word *alphabet*.

Talking Things Over

1. Abraham moved often with his goods, herds, and family. So did the later Hebrews. Packing up for moving must have been a big job. Probably the head of the tribe managed the work. It must have been something like moving a circus. Talk about the different jobs that would have to be done in order to move a tribe and how the work could be divided up among the people. Remember that the people were used to moving.

2. Make a list of industries that need a lot of land. Make another list of industries that can be carried on in a small space. On which list are the businesses in which most Phoenicians were engaged?

3. Explain why the Phoenicians had more use for a written language than other ancient peoples.

4. The Hebrews raised sheep and goats. Was this wiser than raising cattle? What uses could they make of sheep and goats?

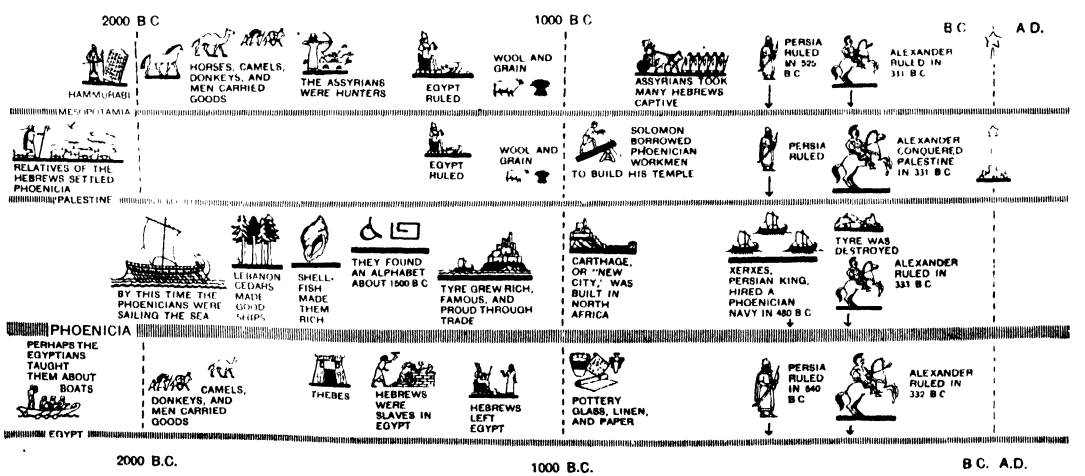
5. Phoenicians learned to be skilful workmen in the countries they visited. A list of materials they traded may suggest to you some of the things they learned to do. In the Bible, in the twenty-seventh chapter of Ezekiel, you will find a list of many things which the Phoenicians carried in their ships.

Doing Things Together

1. The religious ideas of the Hebrews were handed down from father to son in stories. The story of Joseph is one of the best known. It can be found in many collections of stories—in readers, histories, Bible stories, and picture books. If you could make a collection of all the copies of this story that you can find, it would make an interesting exhibit. The story will be almost the same in each book, but most of the pictures will be different.

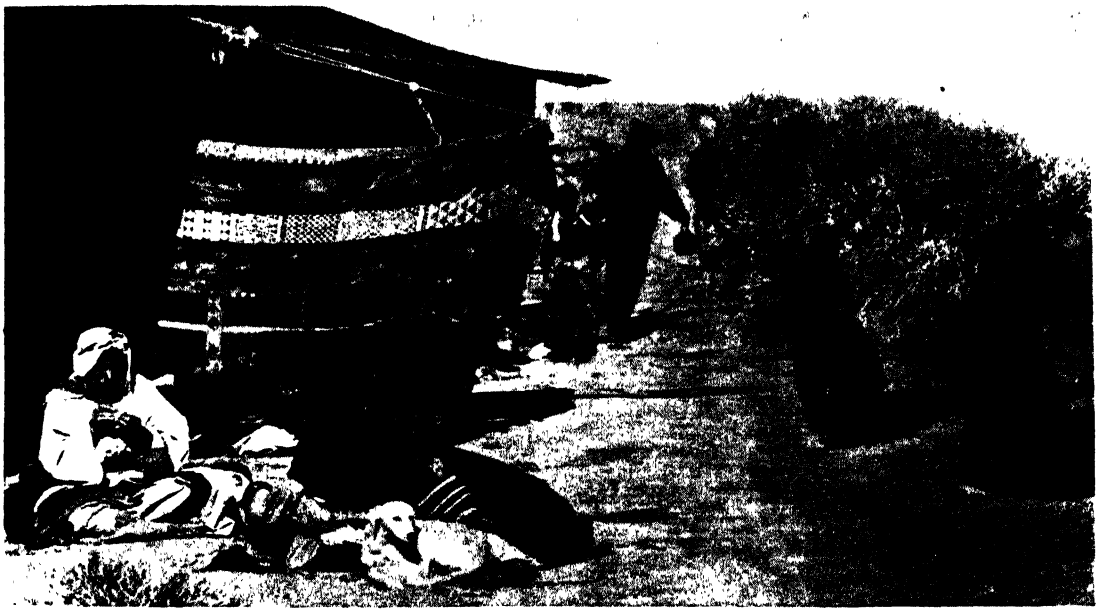
2. Some of you may have tried to write your name in Phoenician letters. Using their alphabet, write on the blackboard a word which tells one of the class to do something. If your classmate can do it without reading the word aloud, let him write a word.

3. Can anyone in your class build model boats? Can you think of a way in which several of you can work together in making a model of a Phoenician boat? What kind of pictures would you need?



PICTURE HISTORY

Follow the story of the Phoenicians and see what was happening in the other countries at the same time. Can you remember what some of the little pictures stand for without turning back to the other picture histories?



R. K. O. Studios, Courtesy Photographic History Service

Perhaps these modern nomads are not very different from those of ancient times. Centuries ago many tribes of nomads stopped living in tents and settled down to learn the ways of civilization.

VI. CIVILIZATION SPREADS

Ancestors of Europeans

OUR story is beyond the cradle stage. We may say that man is out of his baby clothes. What the valley dwellers had learned about better living had spread to the hills, plateaus, and even into the deserts around Egypt and Mesopotamia. You remember that the Assyrians were from the hills, and the Hebrews lived in the hills.

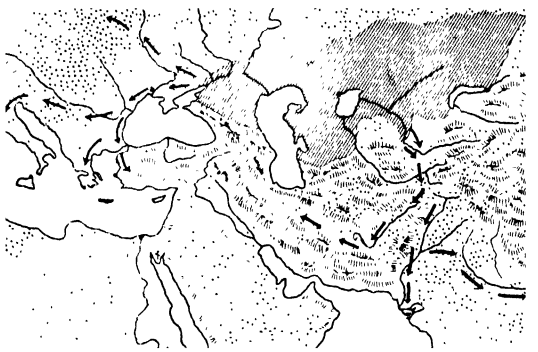
All along the borders of the civilized lands were many barbarian peoples, more than ever before. They also had been learning to live just a little better and to have better food.

The barbarians of the grasslands. Whenever a family becomes too large to be fed at home, some of them have to move. As the barbarian tribes grew in numbers, the pasture lands became crowded. And so many of these nomads moved. Then, too, the grassland country was gradually becoming drier. There were many years when not enough rain fell. That meant less and less pasture for the animals. It was another good reason for moving.

As these people from the grassland are far-away ancestors of most of the white people in the world today, we ought to know more about them.

First let us look at the map on page 58 and see where these people were herding their flocks. Do you see that great region around the Caspian and Aral seas? We think that it was once more fertile than it is now and that these barbarian nomads lived there. Do you see how the Tien Shan Mountains and the Himalayas would keep them from moving eastward and southward? Why wouldn't they go very far to the north?

Where the barbarians went. Some of these nomads moved southward and swung around into Persia. Some even went into



The shaded part of the map shows the great pasture lands where so many barbarian tribes kept their flocks. The arrows show where some of these tribes went. Notice how they must have followed the river valleys in order to get into India and Persia. Do you see how the mountains were like walls that kept them away from some places? Notice how the tribes that moved westward followed the rivers and shores.

India. We shall read about them later. Others moved south and then toward the west. They mixed with other peoples and became the Greeks and the Romans. Still others moved west and after many changes became the Germans, Danes, Swedes, and other peoples of Europe. People descended from these nomads not only filled up Persia and India, but also Europe. That is why they are called Indo-Europeans.

These barbarians did not leave the grasslands all at once. For many, many centuries, bands of them kept on the move, slowly getting away from their old homeland. They did not all belong to the same tribe, but were made up of different tribes of the same kind of people. Their descendants today are very different, but in that far-off time, thousands of years ago, the barbarian tribes were very much alike.

The descendants of the barbarians. We have found out that the different tribes spoke almost the same language. We call that language Aryan. They had almost the very same words for the common, simple things of life. Their descendants of today speak many different languages, but these plain old words still sound very much alike in all the languages. Say aloud the word for mother in these different languages:

Greek: meter	French: mère
Latin: mater	Swedish: moder
Spanish: madre	German: Mutter

How much alike they sound! There are other words in the languages that are almost alike, too.

From now on, our story is going to be about these ancestors of most of us, these people who spoke Aryan. Let us see what happened to some of those who moved south into the land we now call Persia. Find it on the map on page 25. What kind of country is the plateau of Iran?

The Persians

These new people in Persia were energetic. After they made their start in the new land, they began to do what all other strong tribes had been doing. They set out to conquer other tribes around them. When they had conquered all of the tribes on the high plateau and in the hills, they started down into the valley. What valley did they probably intend to conquer next?

The people in the valley of the Tigris-Euphrates were worn out from too much fighting. The farmers were no longer willing to become soldiers. They wanted to be left alone on their rich land.

Cyrus the Great. A strong king named Cyrus was ruling over the Persians about the year 600 B.C. He became so mighty that he is called Cyrus the Great. He conquered the Assyrians and went right on, nearly to the end of that "bridge-land" we call Asia Minor. Find it on the map on page 25. Do you see why it is called a "bridge-land"? Notice how the country stretches westward until it almost touches Europe. It is like a bridge of land between Europe and Asia.

The "bridge-land" and its people. The ancient people of this "bridge-land" were

The Hittites and then the Lydians lived in this land. Turn to the map on page 230 and see what people live here today. The map on page 25 tells you what kind of land it is. Is it mountainous or flat, high or low?

called Hittites. They had learned the ways of civilization in their little valleys. Some people say they were the first to learn to make things of iron. By the time of Cyrus the Hittites had been conquered by the Assyrians, and many of their cities had been destroyed.

A people called Lydians were living at the western end of this "bridge-land." They had found gold in the sands of one of their rivers and were wealthy. Their king, Croesus, was said to be the richest man in the world. Even today we hear people say "as rich as Croesus."

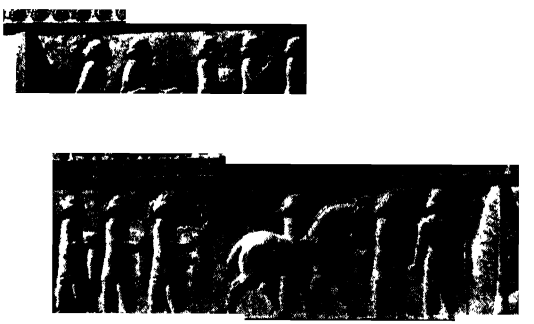
The invention of coins. We remember the Lydians for an invention they made. They were the first people to stamp coins out of pieces of gold. All these years, up to then, people had done business by barter. The Lydians traded gold for cattle. An ox was worth a lump of gold of a certain size. Finally they stamped the lump with the figure of an ox, and they had a coin. Anyone would know that he could buy as much with the coin as he could with an ox.

All of his gold could not save Croesus from Cyrus. A fortune-teller had told him that if he fought Cyrus, a great empire would be destroyed. One of his own men asked Croesus what good it would do to fight the Persians. The man said: "The Persians wear leather breeches, and the rest of their clothing is leather, too. They eat what they can get. They do not drink wine and do not even have figs for dessert. What do they own that we can take from them if we defeat them?" But Croesus answered: "We must fight them. If they come here and taste our good things, they will try to stay and rule us."

In the war that followed, Cyrus conquered Lydia and took Croesus prisoner. The rich king was tied to his throne and placed on a great pile of wood to be burned. At the last moment Cyrus had mercy on Croesus and spared his life, but took his kingdom. Then Croesus knew what the fortune-teller had meant. It was his own kingdom that was to be destroyed, not the kingdom of Cyrus.

Cyrus and the exiled Jews. Cyrus was now ready to attack Babylon. He went down into the southern valley and conquered its people with his strong cavalry and war chariots. You remember that the Jews were slaves there. Cyrus freed them and sent them back to Jerusalem to rebuild their city.

On the map on page 60 you will see how large the Persian empire became. Who had owned parts of this empire before the time



Oriental Institute, The University of Chicago

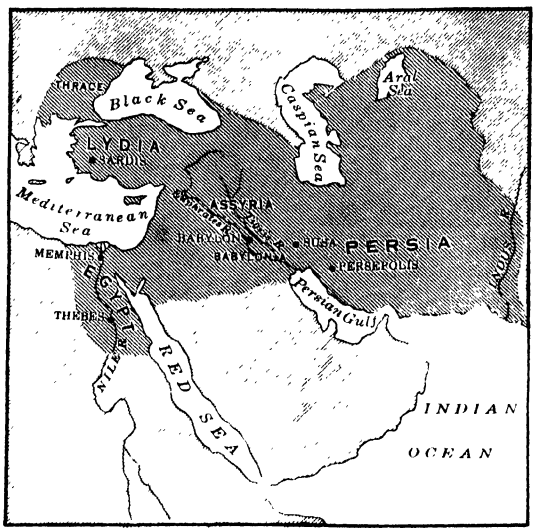
These carvings from the staircase of a Persian king's ancient palace at Persepolis show how rulers paid the expenses of governing their great empires. The artist carved people of different nations bringing gifts and tribute to their emperor. In the top row the conquered people are bringing a pair of rams and a number of gold vessels. Below are other people with clothing and a horse. Notice the carved trees. You can see trees like them on Persian rugs today. Do you think the artist carved the animals well?

of Cyrus? Do you remember what happened to all the empires we have read about up to this time? Haven't they been conquered by other peoples?

Darius and his good roads. Some years later, Darius, another Persian king, ruled an empire larger than that of Cyrus. He even conquered a part of India. Look at the map on this page and see how large he made his empire.

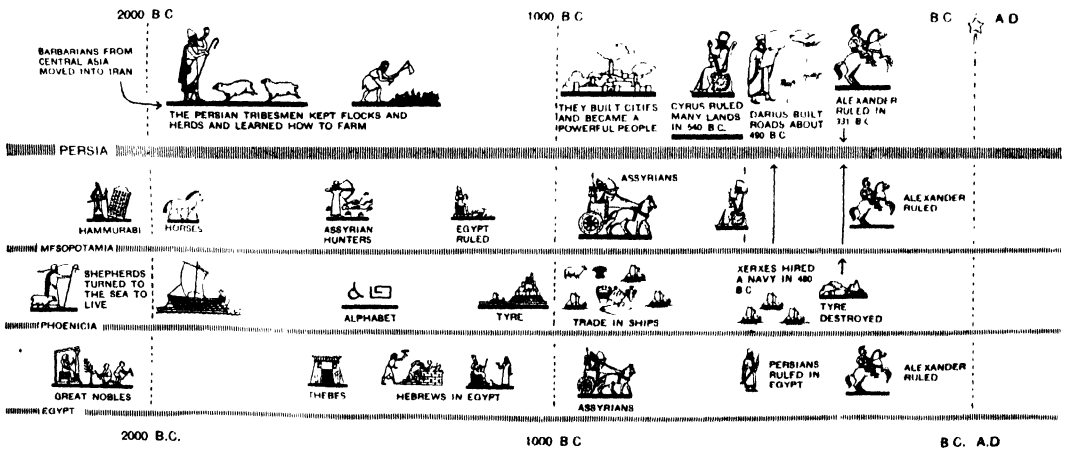
To hold this great empire together, Darius built roads. One of them reached from his capital, Susa, to the city of Sardis in Lydia. How long do you think it must have been? Are you wondering how the good roads of Darius helped to hold his empire together? There were no telegraphs or railways then, and messages were carried by men who traveled as fast as they could on foot or on horseback. On rough paths they made poor time, but on good roads they traveled swiftly. If trouble, such as a revolt, occurred anywhere, messengers quickly brought Darius word, no matter where he was. His army soon marched to the spot over the good roads and put an end to the trouble.

Because roads made travel easy, many traders went from one end of the empire to another. Not only goods were exchanged, but ideas, too, and thus the roads helped civilization.



Darius made the Persian Empire even larger than did Cyrus. What valleys did Darius reach? Turn to page 230 and name the nations that now have these lands.

We shall read more about the Persians later, about how they tried and failed to conquer a people in Europe. But before we take up that part of our story, let us see what life is like today in these lands.



PICTURE HISTORY

These pictures tell you what other peoples had done before the Persians settled down to become civilized. Do you remember what the little pictures stood for in the other picture histories?

Publishers' Photo Service

Would all of our farmers plow such a narrow field as this one? There will be no rain on this Egyptian farm; so where will the farmer get water? On the embankment are the wires and poles of an electric car line. But has the farmer anything so modern to help him with his work?

VII. THE DESERT LANDS TODAY

A Mixture of the Past and the Present

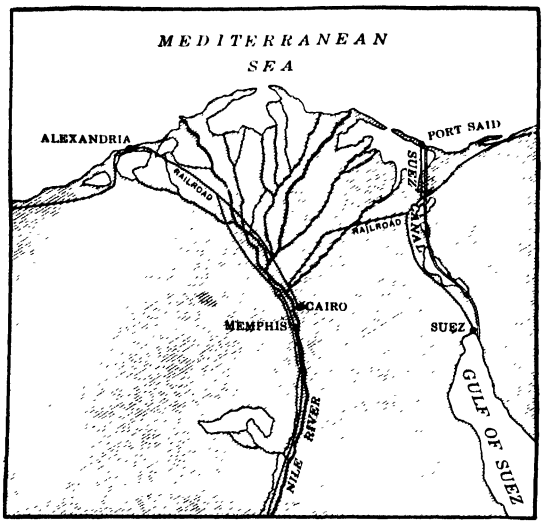
A MIXTURE of old and new. Suppose you take an imaginary journey to the lands where our story began. No matter where you travel in the countries of the desert region, you will find many people living as their ancestors did in the time of Rameses, Hammurabi, Croesus, and Darius. But you will also find tractors, radios, and airplanes. Caravans of slow, patient camels plod over the sand, while steam trains race along on steel tracks. Outside a mud hut you will see a woman using an American sewing-machine. An automobile will stop at a desert oasis for water for the radiator. An Egyptian farmer may irrigate his land just as farmers did in the days of the Pharaohs, but he will ride to the city in an electric trolley-car.

We will find few cities in the desert lands. But there will be many little villages and larger towns. In every country we will see people living together wherever there are good land and water.

Egypt and the Nile

The old and new Egypt. Egypt still depends on the Nile. You can see practically all of Egypt by taking a trip up the Nile. Of course, if you look at the map on page 533, you will see that the boundaries of Egypt include much more than the Nile Valley. But only a very few desert dwellers live away from the fertile green strip along the river. A trip up the Nile will show you that in many ways the people of Egypt are like their ever-so-many-great-grandfathers who lived thousands of years ago.

Alexandria, the port of Egypt. Alexandria is Egypt's seaport. It was built more than two thousand years ago, at one side of the Nile Delta. A delta is the land which a river has made at its mouth. The water



Alexandria was built at one side of the Nile Delta because there cannot be a good harbor on a delta. The soil brought down by the river would soon fill up a harbor and make it too shallow for large ships. Notice how the Nile divides into many streams below Cairo. Some of the streams are connected by canals.

brings down soil which settles to the bottom when the stream reaches the sea. If the sea is shallow and there are no strong tides or currents, this soil will gradually pile up until some land is made. Look at the map, and you will see that the Nile has more than one mouth. Rivers that have deltas usually have more than one mouth.

The ancient buildings of Alexandria are gone now. It is a modern city, but once in a while some old ruin is brought to light when the cellar of a new home is dug.

Cairo, capital of Egypt. If we take a train from Alexandria to Cairo, we cross the fertile delta land where so much rice and cotton and so many vegetables are grown. At Cairo we find ourselves at the beginning of the long, narrow valley of the Nile. Look at the map on this page and notice the railroad lines coming into Cairo. They bring the products from the rich delta farms to the market in Cairo. Because they bring so much trade, Cairo has become the most important city in Egypt. It is also the largest city in Africa.

Compared with the ancient capitals of Egypt, Cairo is a young city, for it is only about a thousand years old. Memphis, which was the first capital of ancient Egypt, and Thebes, which was the capital in the days of Rameses, are nothing but piles of ruins today.

Modern irrigation reservoirs. How far do you think you can go up the Nile by boat? Find Aswan on the map on page 25. Can you tell from the map how many miles up the Nile this city is? At Aswan there is a series of low falls in the river called the "First Cataract" of the Nile. You must go around these falls by land. Farther up the river are five more cataracts. In that part of the country the land is rough and not fertile.

At the first cataract a dam has been built across the Nile. It makes a great reservoir in which millions upon millions of gallons of water can be stored for use in the dry season. During the dry season this stored-up water is allowed to run downstream. Then the farmers can let it run into their canals and on to their fields. Nowadays, in the dry season, so much water is taken out of the Nile for the crops that there is hardly any water left in the river below Cairo. Old Father Nile gives all he has to the land.

Publishers' Photo Service

Nile boats like these carry tons of cotton to the port at Alexandria. The bales will be loaded on freight steamers bound for England and the United States. Other freighters carry tobacco, cigarettes, and many kinds of vegetables to foreign markets.

Oriental Institute, The University of Chicago

The Egyptians call this a "shadoof." The men dip buckets of water from a ditch leading to the river. The weights help to raise the buckets. Then the water is emptied into the upper ditch and runs to the fields. One of the men has his hand on the edge of the upper ditch. What does the picture tell you about the weather in Egypt?

The delta farms would get very little water if a long, low dam had not been built to hold back some of the flood waters. This water is saved for the dry season, just as it is saved at Aswan farther up the river.

Farming in Egypt today. Because of these wonderful reservoirs, the farmers of today can get water at any season. All through the rich delta land and other parts of the valley are canals to carry water to the fields. The farmer needs only to open a gate between the main canal and the small ditches leading to his fields. Then the water flows on the land around the roots of the plants.

In other places in the valley, when the water in the river is too low to flow into the ditches, the farmers dip and pump it out into the ditches. The pictures on this page show you how it is done.

During the winter, which is warm, the Egyptian farmer raises wheat, barley, beans, and vegetables. In February or March he cuts the ripe grain by hand. Probably he uses a steel sickle made in Germany or England instead of the home-made kind his ancestors used. Egypt needs all the grain she can raise for her own people, but she sells many of her vegetables to England. England can raise vegetables in summer, but the winters are too cold for growing. The English are glad to get "out-of-season" vegetables from Egypt.

In the dry spring and summer the delta farmer raises cotton, corn, rice, and sugarcane. These are planted early in the spring and harvested in September and October. The Nile floods do not come until fall for the delta farmer, although farm-lands farther up the river are flooded in summer, you remember. You can realize that the delta farmer could not grow rice or cotton if it were not for the big reservoirs.

Egyptian cotton is valued in other countries because it has long, silky fibers and makes especially strong thread. A great deal of it is used in making automobile tires. What country, then, buys a great deal of it?

A crowded valley. Look at the table in the back of this book. It shows how many people

Acme Newspictures, Inc.

The blindfolded camel travels in a circle all day, pumping water from the well. The little ditch carries the water to the fields. Do you see that some crops are growing while others are already harvested? Part of the land is freshly plowed. What do these things tell you about the growing season in Egypt? Do you think that the tree would make good lumber?

live in different parts of the Old World. Do you know that the Nile Valley is one of the most crowded regions of all? More than 1100 people live on each square mile of the valley. In our country only large cities are as crowded. On our Great Plains we have only a few people per square mile. We say, then, that the Nile Valley is densely populated. Most of the farmers along the Nile have tiny farms. Sometimes a whole family must get its living from less than half an acre of land. Find out in some way how large a piece of land that is.

The great highway of Egypt. As we go up the Nile, we can see pyramids and ruins of ancient temples and towns. We pass village after village, all near the river, where they can get water. With the river so close to the villages, no wonder hundreds of boats still travel the Nile. In ancient times, wind and sails moved the boats, or slaves rowed them. Some boats had both sails and oars. But the day of slave power is over, and the larger boats are now run by gasoline- or steam-engines.

The native freight boats, with their tall masts and white or colored sails, look like birds in a flock. At Cairo, where the river banks are low, the masts need not be tall. Farther upstream, where cliffs tower above the river, masts must be high for the sails

Ewing Galloway, N. Y.

Do you know why these boats, called "dhows," have such tall masts? There are thousands of boats on the Nile. The river is the center of Egyptian life for traders, farmers, and travelers, just as it has been for many, many centuries.

to catch the breeze. Coming downstream the boats are helped by the current. On the upstream voyage northerly winds blow part of the time. During calms, or when south winds blow, most of the smaller boats are rowed by men.

House-boats are common on the Nile. They are moved by engines, poles, oars, sails, or even by tow-ropes pulled by donkeys, oxen, or men. You see them in the midst of noisy excursion boats, sail-boats, and freight steamers.

The British in Egypt. Many products of Egypt are shipped to England. England needs them, she can pay for them, and she has ships to carry them. Once England controlled all this country, but Egypt is now an independent nation. England still has agreements with Egypt about trade, about soldiers to protect the boundaries, and about other things. England and Egypt together own a part of Africa called the Sudan. Find it on the map on page 533.

Cairo has a new and modern part, as well as a very old section. In this part of the city are fine hotels, hospitals, schools, homes, and business buildings.

The British have done much for Egypt. They built the great dam at Aswan and many irrigation canals and reservoirs. This helped the Egyptians to have a year-round water supply. These irrigation works make it possible for the farmers to grow two or three crops every year. Now the farmers are not so poor. They can buy better clothes, and their children can go to the schools, which the British have improved a great deal. The farmers are still too poor, though, to buy very much farm machinery. Most of them must continue to use the old ways of farming by hand labor.

The Suez Canal. In the old days, traders who wanted to go from the Mediterranean to the Red Sea had to carry their goods across by camel or donkey caravan. One of the Pharaohs built a canal from the Nile River to the Red Sea, but the winds filled it up with sand. If you will look at the map on page 62, you will find that the Suez Canal now connects the Red Sea with the Mediterranean. It was dug about sixty years ago. Ships of all nations may use it, but they must pay toll.

There are two ways to go from Alexandria, or any other Mediterranean port, to India and other eastern countries. One way is through this canal. The other way is around Africa. Trace these on the map on page 230. Which route would you use?

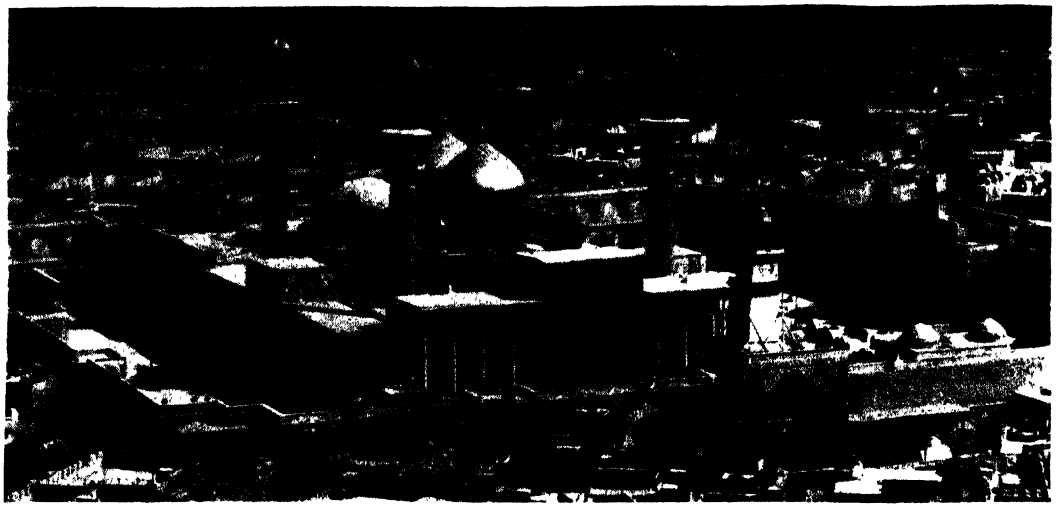
Publishers' Photo Service

Here is a barber at work on the pavement in the older part of Cairo. Street scenes like this are common through the older countries around the Mediterranean.

Changes in Mesopotamia

A changed land. What has become of the Tigris-Euphrates Valley? Does it still exist? Yes, and it is still called Mesopotamia. There is even more land in the valley than in ancient times, because the rivers have been bringing down soil from the mountains for all these

These Egyptian fishermen are ready to set their nets. This is one of the mouths of the Nile, and the water here is shallow. Beyond the strip of land you can see the Mediterranean. Is its water salt or fresh?



Publishers' Photo Service

Bagdad is one of the great cities of Iraq. Here you see a Mohammedan mosque, or church, and a part of the city. In the shaded archways of the mosque courtyard are teachers with their classes of boys and young men. Notice the balconies on the slender towers, called minarets. Five times a day men called "muezzins" step out on these balconies and call out that it is time for good Mohammedans to stop what they are doing and pray to Allah. What kind of houses do you see? Are there any wide streets?

thousands of years. This soil has made new land where the rivers join and flow into the Persian Gulf. But things are not as they were in the days when the land was watered by canals which Hammurabi kept in such good condition. After the old kingdoms broke up, the canals filled with sand, and now much of the low land has become swampy because of the river floods.

The name of the kingdom in Mesopotamia today is Iraq. Its people are mostly poor, and the splendor of the ancient empires is gone. Just a few years ago you couldn't have found the ancient city of Babylon. Only a few low hills near the Euphrates River marked the place where it had stood. Now archaeologists have dug out many of the palaces, not only where Babylon stood, but at Ur and other places. There are many other buried cities beside the choked canals. Sheep graze on the mound which covers the ruins of Nineveh, the old Assyrian capital.

Modern times in Iraq. England is helping the kingdom of Iraq. After the World War the valley land was taken away from Turkey, which ruled it for hundreds of years. As the people are Arabs, there is an Arab king. For a time Iraq was under British protection, but now it is independent. The British are furnishing money to build a pipe-line from the oil-wells near Mosul to Jafta. The British will buy the oil, and the Arabs will get money to build schools.

The British are also helping to restore the old irrigation ditches, to build a railroad, and to establish airports. Some day the Arab nomads will have a chance to settle down in homes and become farmers. That may take a long time, because some of these Arab tribes have wandered about over the desert for many centuries. It will be hard for them to change their ways and settle down. Some of them have already done so, but others want to keep on herding sheep and conducting camel caravans. A few of the nomads are robbers and brigands.

Where dates are grown. About one hundred miles from the sea the Tigris and Euphrates join and make one large river. It flows past the city of Basra. From Basra

come four-fifths of the dates sold in the markets of the world. Iraq produces enormous quantities of dates. Along both rivers are enormous groves of date palms. The streams furnish plenty of water, the soil is rich, and there is hot sunshine to ripen the huge bunches of dates that hang from the feather-duster tops of the tall palms. It is an old Arab saying that a date palm must have its feet in the water and its head in the fires of heaven.

Only the choice dates are shipped. The others are the principal food of many of the people. Sugar and vinegar are made from old dates. Seeds are ground up to make feed for cattle and sheep. The leaves are woven into mats for houses. The fiber of the bark is made into rope.

Bagdad is a cross-roads city for caravans coming up and down the country. But some day, perhaps, automobiles may drive out the camels. Already trucks run across the desert, and even airplanes fly regularly, carrying passengers, mail, and goods. You will read more about Bagdad later.

Orient and Occident

The date-gatherer loops a rope around himself and the date palm and climbs to the top. Then he pulls up a huge straw basket to hold the dates which grow in huge bunches at the top of the feathery palm.

Other Nations of the Desert Lands

The other lands around Egypt and Iraq are divided among several nations. Look at the map on page 25 and see what kind of country it is. Look at the other map on page 230 and see what nations are there. Much of the land is not the kind that will let people settle down and think out better ways of doing things. The people have a hard time just to live, to get enough for themselves and their beasts to eat. Suppose we look at some of the desert lands and see how the people live.

Century Photos

These desert Arabs seem to have set out almost everything they own but their animals. When it is time to move, they will not have much trouble. Can you find the woman grinding grain? The musician? A goatskin water-bottle? One of the men seems very proud of the sword which he rests on his knee.

Life in oasis towns. In the oasis towns of this region there are clusters of mud-brick houses, mostly without windows. Almost every house has its garden surrounded by a wall. In the garden the Arab raises vegetables and fruit. Some of the oases are surrounded by tiny farms on which grain and food for the animals are raised. The water is lifted from the wells by camels or donkeys patiently turning water-wheels, or even by man-power, which is cheap all

Ostrander, from Ewing Galloway, N. Y.

Oxen pull this sledge around on the hard clay threshing floor. The grain becomes separated from the straw and chaff. Notice the home-made pitchfork. The farmer will toss the straw into the air and let the wind blow away the chaff. The straw is saved and piled on the house roofs for animal fodder.

through these lands. There is very little machinery used anywhere.

Beneath the tall date palms of the oasis towns the farmer plants other fruit trees, such as the orange, lemon or lime, the pear, and the apricot. Nor is this all that the rich soil is made to grow. To get the most out of the land, beneath the fruit trees are planted vegetables of many different kinds. This way of planting is called "three-story agriculture."

The desert nomads. The oasis villages are only tiny spots in the midst of the great deserts. Beyond the shady fringe of the oases there is only the scantiest grazing ground and but few water-holes. Herds of sheep and goats are kept on the move in search of pasturage and water. In this region live the desert Arabs, or Bedouins, as they are called. They follow their flocks, just as did the earliest people who made their way down into the valleys and began the story of civilization. Some Bedouins act as traders for the oasis dwellers. Others form bands of robbers and raiders.

Frequently the desert wells dry up, and in continued droughts the wiry grass and the straggling shrubs are burned brown in the hot sun. Sometimes swarms of locusts devour every leaf and poison the water in the wells with their decaying bodies. Then many of these tribes suffer from starvation and thirst.

A hard land in which to live. The wandering tribes fight each other frequently, just as they have done from the earliest days. In a country that is mostly rocks and sand, where every well is precious, and every clump of grass is food for a hungry animal, fighting seems natural to the tribesman. Each wants the other's pasture and water.

A few trade routes zigzag from well to well across miles of shifting sand and over the bare rock hills. These trade routes connect the scattered oases. What do the people trade? The nomads may buy a few pots and pans from the town dwellers, and perhaps a little wheat or barley. They sell some of the wool from their sheep. Both may trade camels or horses which they raise. The Arabs have long been famous for raising beautiful horses.

"Araby the Blest." On the southwestern edge of the Arabian plateau is a little corner of more prosperous country. It is called

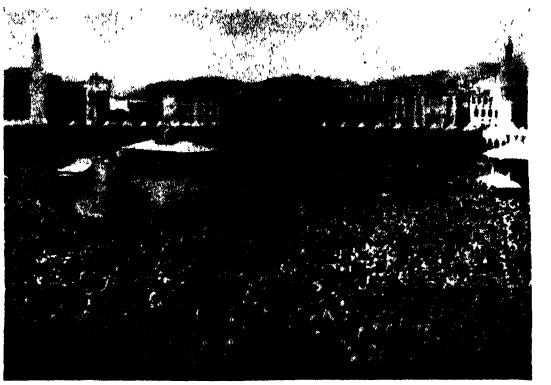
Oriental Institute, The University of Chicago

Would you like to get your drinking water from this peddler? He has just filled his goatskin bag in the river. The water carrier is a common sight in the desert-land countries, where few people have wells. Water is a precious thing in these lands.

Yemen. Find it on the map on page 25. Once this small section was called "Araby the Blest," because it seemed to be a heavenly sort of place in the desert. The hills and mountains are high enough so that clouds drop some rain. The valleys are green and beautiful. A very fine coffee called "Mocha" grows here. Some of this coffee was the first ever taken to Europe, about three centuries ago. Now coffee is grown in many southern lands, and almost every European and American has his morning cup.

Mecca, the Holy City. Mecca is the city where Mohammed, the great prophet of the desert peoples, was born. Nearly six hundred years after Christ, Mohammed started a new religion among the Arabs. Mohammedanism, as we call it, is now one of the great religions of the world. The followers of Mohammed are called Mohammedans, just as followers of Christ are called Christians. The Egyptians and most of the people of northern Africa, as well as the people of Arabia, are Mohammedans. There are many other Mohammedans in Asia, also.

Find Mecca on the map on page 25. Is it a seaport? Is it in the desert? You can see that it is located on a plateau near an oasis. It may surprise you to learn that date palms do not grow well in this oasis. The desert plateau is high here and has a much cooler temperature than low deserts. This oasis has a climate too cool for dates. However, the people raise many other fruits that grow in warm regions—apricots, grapes, peaches, and pomegranates.



Publishers' Photo Service

These thousands of pilgrims to Mecca are praying before that black-covered building called the "Kaaba." Inside is a stone which the Mohammedans say fell from heaven. Every Mohammedan wants to go to Mecca at least once in his lifetime and pray here. Mecca is a holy city to all Mohammedans. They turn toward Mecca when they pray, five times a day.

Talking Things Over

1. Under the map, page 62, is a sentence that tells you to notice something "below" Cairo. This is a good place to talk about what we mean when we say down east, out west, up north, down south, and other expressions like them. Can you think of others? Do we always mean what we say when we use them? What do "up the river" and "down the river" mean?

2. The Nile is Egypt's highway. This is a good time to talk about water transportation and land transportation. What must be built before you can use an automobile or a wagon? In addition to the train, what must be built before the train can run? Do men have to build anything for a boat to run on? Can you make a list of reasons why water transportation might be preferred to land transportation?

3. Rains do not fall at the same times every year, nor do they fall in like amounts. Some farmers depend upon rainfall for their crops. Others use water that has been stored, because they cannot depend upon the rains. Both ways have advantages and disadvantages. Discuss them, but do not try to decide that one way is better than the other.

4. Petroleum from oil-wells of Iraq is piped across the desert to a seaport. There it is sent to foreign countries. What changes would have to take place in Iraq before that country will need this oil for its own use?

Doing Things Together

1. In this chapter are names of many things which the United States imports from desert lands. You could bring from home samples of many of these for an exhibit of desert products. Do not forget cotton and oil, besides the many kinds of food. Could you bring enough dates to have them for refreshments in school some day? Get as many different brands as you can and read everything on the labels.

Ewing Galloway, N. Y.

This is Nazareth, in Palestine, where Jesus was a carpenter. The tall trees are cypresses, and the bushy ones are olive trees. You can see fields, gardens, and bare hills where only sheep and goats can pasture.

VIII. NATIONS OF THE HILLY LANDS

Life Today in Ancient Lands

ONE look at the map on page 230 will tell you that the land between Iraq and Egypt is divided among several nations. You already know that it is hilly land, and so cannot be very fertile. The people here also have a hard time making a living. European nations manage their affairs.

Old Phoenicia, you see, is now a part of modern Syria. A part of the old Hebrew country that lies beyond the Jordan River is called Trans-Jordan.

The Holy Land

Jerusalem, we know, is a holy city for both Christians and Jews. But did you know that it is also a holy city for Mohammedans? It is their second holiest city. And other parts of Palestine are holy to Jews, Christians, and Mohammedans. People of all three religions tell much the same stories about this land and about the great leaders who once lived here.

Palestine is such a little country that you can stand on one of the mountains on one side and see across the whole country. It is hard to believe that this is the country which the Bible called a land of "milk and honey." It looks a little barren to us. It was never a rich country, but a land of shepherds and small farmers. During the long years when the Arabs controlled it, the farmers became poorer and poorer. Palestine is still a land of shepherds and small farmers, but it is now being "built up."

Building a "new" country. For several years the Jews have been coming back to their old homeland and settling there. Jews from Russia, Germany, Poland, Spain, Austria, and other countries are planting trees and tilling the land. Groves of orange and lemon trees are beginning to bear fruit. New homes are being built, and streams have been dammed to furnish water for irrigating and to make electricity. If the Jews and Arabs can live peaceably together, Palestine may become prosperous and happy.

Thousands of tourists go to Palestine each year to visit places mentioned in the Bible. It is a profitable business just to take care of these travelers. They visit Jaffa, Jerusalem, Jericho, Bethlehem, Nazareth, and other cities. Locate these places on the map.

What Syria Is Like

North of the Holy Land is Syria. The southern part of Syria is really holy land, too, for Abraham and his people lived here for a time. The great Phoenician trade once carried on from these shores has gone, though Beyrouth and Damascus carry on some trade. Beyrouth is the seaport, and Damascus is the place to which the desert caravans bring their goods.

Syria has some farms and some fruit groves, but, like its neighbor to the south, it is mostly a land of shepherds. Shepherds know how to use wool, and for centuries these people have been weavers. They make cloth and rugs. Now they are learning about another kind of material for cloth. Raising silkworms and preparing raw silk are becoming important industries, because mulberry trees grow well in Syria. The raw silk is sent to the French factories.

The Old Land of Darius

The plateau of Iran. One of the great roads of Darius ran across the northern

American Colony, from Wm. Thompson

This street in Bethlehem is like many streets in this part of the world. Are the houses of stone or mud bricks? Notice the awning to keep off the hot sun.

American Colony, from Wm. Thompson

How is this city of Tel Aviv, in Palestine, different from other cities of hilly lands? What is there to show you that it is in a foreign land?

part of Syria. Suppose we trace this road back toward the old capital of Darius in Persia, or Iran, as the Persians now call their country. We will have to climb mountains to get into Persia. The country is a plateau, or table-land. The table is not smooth, for there are mountains on it. The flattest part of the land is toward the east, and it is a desert. In the mountainous regions most of the moisture falls in the wintertime as snow. In the spring the melted snow fills the rivers. Then the valleys get the water that is needed for crops.

How Persians irrigate. The Persians have a way of their own to save water and carry it to the fields. From dams in the hills they dig tunnels to carry the water. Then it cannot evaporate in the hot summer sun. Water is precious to the Persians, just as it is to all people who live along the great desert belt. Their most beautiful stories tell of the sounds of water in streams, falls, and fountains. They picture heaven as a well-watered garden with running brooks and many fountains.

For hundreds and hundreds of years the Persians have been raising wheat, barley, and millet. These grains grow in the valleys of the west and southwest. Along the shores of the Caspian Sea rice can be grown. The Persians grow some cotton, but it is coarse and not very good. They grow poppies for a drug called opium, and raise tea and tobacco,

American Colony, from Wm. Thompson

These Bedouin women are not going to make paper from these huge bundles of papyrus reeds. They have gathered the reeds along the Jordan River. Look at the pictures below and see how the reeds are used.

too. This land was the first home of the apple, plum, peach, and pear. Perhaps the first grapes came from Persia. Down near the Persian Gulf grow oranges and lemons.

A famous Persian product. Persia is noted for rugs. We call them Oriental rugs. These rugs are made from wool. The brown hills of Iran support many sheep, as well as goats, donkeys, and camels. Though cows would starve in many places, these other animals can find food. Do you know that a cow cannot eat short grass? These other animals can; and they can eat wiry, prickly grass, dry plants, and even leaves and twigs.

The sheep of Persia produce long, silky wool. This wool the Persians color with dyes made from roots and berries. The rugs made from this wool are carefully woven by hand, and the colors grow more beautiful with age. Rugs are named for the city where they are sold, and so Persian rugs go by a number of different names.

Persia is full of minerals, but there are very few mines. That is because there are almost no railroads to haul the ores to market. The good roads of Darius have disappeared. Rubies are mined in the north, and pearls are found in the Persian Gulf. Along the gulf are oil-wells. English business men have rented most of these wells and have built huge refineries to make petroleum products. Persia is now one of the great oil-producing countries of the world.

Nomads of modern times. In the mountains of Persia are people who are like the ancient nomads that we have been reading about. They live in tents, and their life is a

American Colony, from Wm Thompson

The women split up the reeds, and the men weave them into mats on rough, home-made looms. You can see rolls of finished matting. It is like straw matting. Probably some of the ancients wove mats this way.

American Colony, from Wm. Thompson

Here is the Bedouin family in its matting house. The framework is made of poles stuck in the ground. These Bedouins are not the only people who live in such houses. Can you name any others?

constant hunt for grass. In summer, when the lowland pastures dry up, a whole tribe with all its belongings moves up into the high pastures of the mountain plateau. When winter comes and it grows bitterly cold in the mountains, the nomads move back to the lowland. There they find that the rains have made some grass grow for their sheep and goats. And so they stay in the lowlands until the summer heat once more dries up the pasture. Then they must climb the mountains again. For centuries these wandering tribes have been doing this, year after year.

The king, or *Shah*, of Persia lives at Tehran, the capital. There is a fine palace, with an ancient throne made of solid gold. Probably the old kings, such as Cyrus and Darius, would think the present palace small compared with the enormous ones they had built at Susa and Persepolis. But the old palaces have long been in ruins.

Afghanistan

Afghanistan was a part of the old Persian Empire. It is much the same kind of country, only a little wilder and rougher. As you would expect, most of the people are shepherds and herdsmen. The small valleys are very fertile, and the fruits raised have a delicious flavor. The Afghans are fierce fighters. Like most people from hilly countries, they are very independent. Kabul is their capital. Find it on the map on page 25.

Photo by Kreider, Orient & Occident

This shepherd on the broad pasture lands of Anatolia, in Turkey, has an odd mantle. It is of goat's hair and makes a good sleeping-bag at night when it is chilly. For a few weeks in the spring this high plateau is covered with flowers, but the rest of the year it is parched and dry.

Ewing Galloway, N. Y.

This Persian rug-weaver is at work on a pattern rug. When it is done, other weavers will use it as a model for a large rug. The yarn is made from long, silky wool, and it is dyed by the weavers in ways they have been keeping secret for many generations.

Turkey—the Bridge Country

If we could go back over the old road of Darius, which long ago disappeared, we would descend the mountains into Mesopotamia, cross Syria, and enter the land we now call Turkey. Another name for part of this jutting piece of land is Asia Minor. Many different peoples have crossed over this bridge country on their way from Asia.

How the Turks came to be called Ottomans. About seven hundred years ago, a band of people was wandering over this country.

This Turkish scribe has his office in the street. A few years ago he would have worn a fez, and his customer would have worn a veil. But now the Turks are adopting European clothing. They are also beginning to use the Roman alphabet, which we use.

They were called the Turki, or Turks. They were fierce, cruel, fighting herdsmen from somewhere in central Asia. They found the king of one part of Asia Minor at war with another king near by.

The Turkish chief sided with one of the kings and helped him to win the war. As a reward the king gave the Turks a part of the country. This was a mistake, for soon the Turks took it all. The son of the Turkish chief was named Osman, or Othman, as some people say the name. From that we get the name Osmanli or Ottoman Turks for these people. Finally these Turks conquered the country as far south as Egypt and to the west, in Europe, almost to Vienna. Look at the map in Chapter XVIII and see how much land the Turks conquered before they were stopped by the nations of Europe.

The "new" Turkey. During the World War Turkey lost all her land in Europe except a small piece. She also lost a great deal of country to the south. But now, strangely enough, Turkey is better off than ever. The Turks got rid of their ruler, the Sultan, and made their country a republic. They chose a president, named Mustapha Kemal Ataturk. Then the new government began to change some of the Turkish ways that had been followed for many centuries.

The capital was moved from Constantinople (which is now called Istanbul), in Europe, across the strait to Angora (Ankara), in Asia. In place of the old way of writing, our alphabet was introduced, and the people were encouraged to learn to read and write Turkish in the new way. Turkish women had been kept in the homes and were not supposed to appear out-of-doors without veils to hide their faces. Now they were urged to come out as they pleased and to throw away their veils. They can now go to schools and colleges and into business.

The new Turkish government has made many other changes. The big farms have been divided up among small farmers. Modern farming machinery is being bought for many of the farmers. There are now agricultural schools where boys may learn to farm by modern methods.

If Turkey had plenty of water, it would be a rich land. But much of it is a high dry plateau. This plateau is called Anatolia, and it is mostly pasture land. A famous product comes from here. Did you ever hear of Angora goats? The cloth called mohair is made from their long silky hair. Turkish rugs are made of sheep's wool; so many rugs are made in Anatolia.

There are many minerals in the plateau of Anatolia, just as there are in the plateau of Iran. But the minerals cannot be mined until Turkey can afford to build roads and railways to get the minerals to market. The Turks do mine meerschaum, from which smoking pipes are made. This mineral is light, and a donkey can carry a big load of it.

Along the Mediterranean there is more rain than on the plateau, and the Turks can raise fruit and other crops. The best figs in the world are raised near Smyrna. We get

many raisins from this district, too, as well as certain kinds of cigarette tobacco. The people grow olives and such nuts as hazelnuts, almonds, and pistachios. They are beginning to raise enough cotton for their own use. We can tell, just by these products, that the climate along this shore must be mild.

Before we leave this part of the Mediterranean region, let us look once more at the map on page 46. The lands we have been reading about are close to the deserts. On the borders of the desert and near the edges of the valleys the people have a hard time. There is not enough water for plentiful crops. These people must live in much the same ways as did their ancestors of long ago. The only way of earning a living is to raise sheep and goats, which means that they must follow their flocks from place to place.

The people in the valleys, and in other places where there is water, can be much more comfortable. They can raise good crops of grain, vegetables, and fruits. Centuries ago these valley peoples had great empires and wonderful civilizations. Now we think they are "backward." Although their great cities are in ruins and the people no longer powerful, we shall learn how their ideas helped other peoples who lived in Europe.

Talking Things Over

1. Some ancient lands are being built up, not by accident, but because of a plan. If your community could plan what would be best for it, what changes might be made? Think about your climate, your transportation, homes, and the skills of the workers. Think of changes that would be desirable, even if they could not be made immediately.

2. Think about the occupations of people in the countries you have been studying. What kinds of business are important in those countries? If you sold food or hardware or clothing in one of those lands, what kinds of goods would you have in your store?

3. Look at the clothes of people in the pictures of the countries you have studied thus far. If you were to travel in that part of the world, probably you would not wear native clothing. Talk about what you would take with you if you were allowed to carry but one suitcase. Exchange ideas so that each person in the class would pack wisely.

4. Ask your mother to tell you ways in which customs, manners, and styles for girls have changed since she was young. Compare those changes with some of the changes in the life of Turkish women.

5. Perhaps some people would rather herd sheep than earn a living in other ways. They may prefer to follow their flocks than to settle down in a permanent home. What might they like about nomadic life? Do not try to decide that one way of living is best for everyone.

Doing Things Together

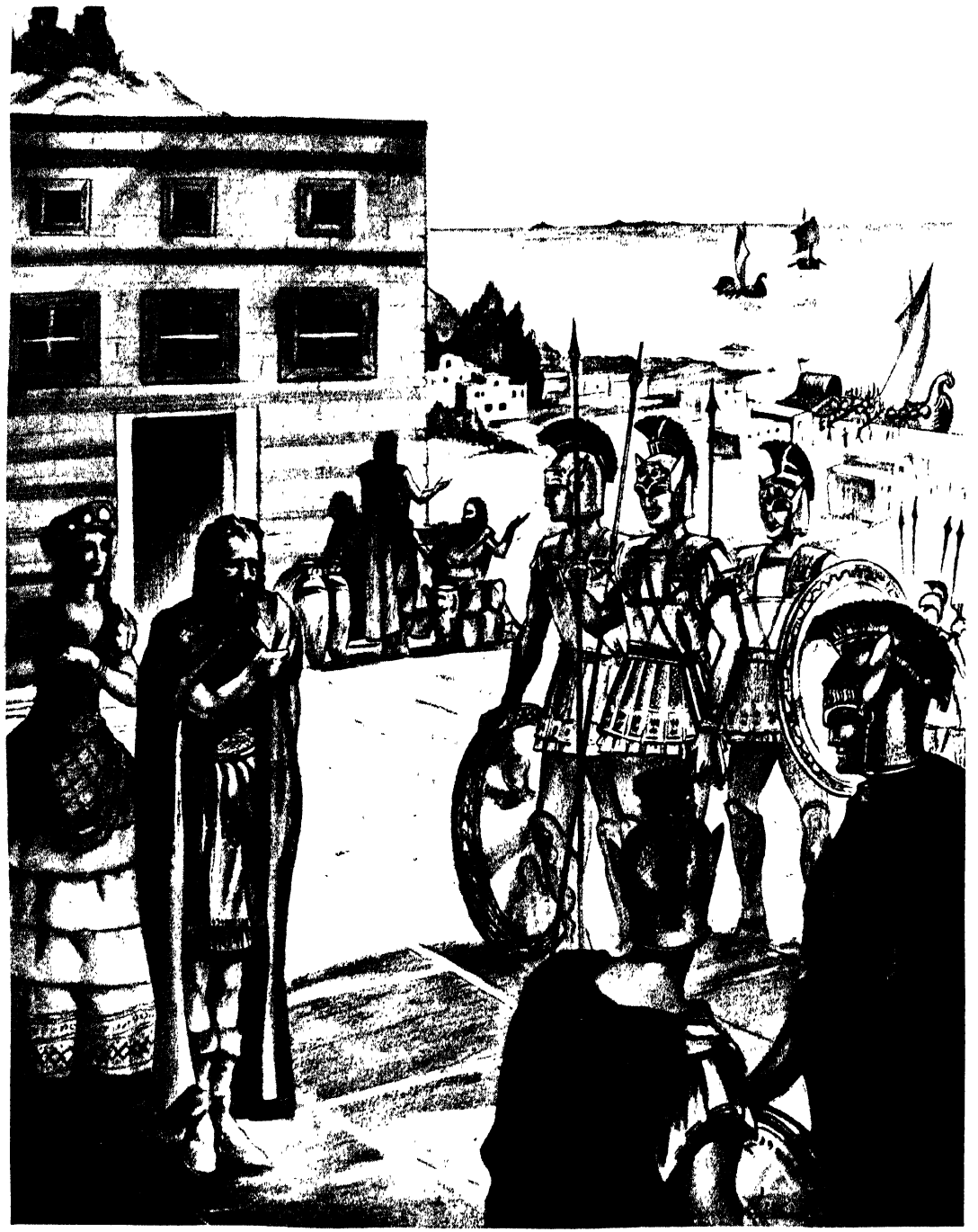
1. There are enough kinds of food raised in hilly lands along the Mediterranean to provide us with a complete meal. Do some of you bring your lunches to school? Perhaps all of you could have lunch at school some day. You could plan a Mediterranean menu.

2. This chapter has no picture history. Could you make something for your classroom to take its place? How would it be to show old and new ways of doing things? Or could you show how these small nations are different from each other?

3. Not all of you live in places where Persian rugs are sold in stores, but you may know of some home where there is a Persian or an Oriental rug. Perhaps the owner will let you see it. Turn a corner over and see how they are woven. Notice the colors. The owner may be able to tell you something about the design. You might make a copy of it.

4. Probably you do not live near a delta. But you are very likely to find a place within walking distance of school where you can see soil that has been deposited by water. If you can find such a place, even if only a small quantity of soil has been deposited, perhaps you can take the class to see it. The class can find out where the soil came from and how it was moved.

5. This chapter refers to farms of an acre or less. It will help you in reading this book and others to know the size of an acre. Is there a place on your school grounds where you could measure and mark off one acre? If not, perhaps you could mark off half an acre and see how large it is.



On the coast of Asia the Greeks met people who had been civilized for a long time. There were cities which had been built by the Aegeans. Phoenician traders visited these places in their swift ships. The picture shows some Greek soldiers, an Aegean man and woman, and two traders. What else can you see?

from The Pageant of Civilization, courtesy Robert M. McBride & Co.

One of the rooms in the great palace of Minos on the island of Crete looked like the one shown in this picture, according to Sir Arthur Evans, a great archaeologist. Notice the brazier used to heat the room, and the painted decorations on the walls. The Cretans liked brilliant colors, but they did not cover their walls with painted or carved figures, as did the Egyptians in their palaces, temples, and tombs.

IX. GREECE—FIRST CIVILIZATION IN EUROPE

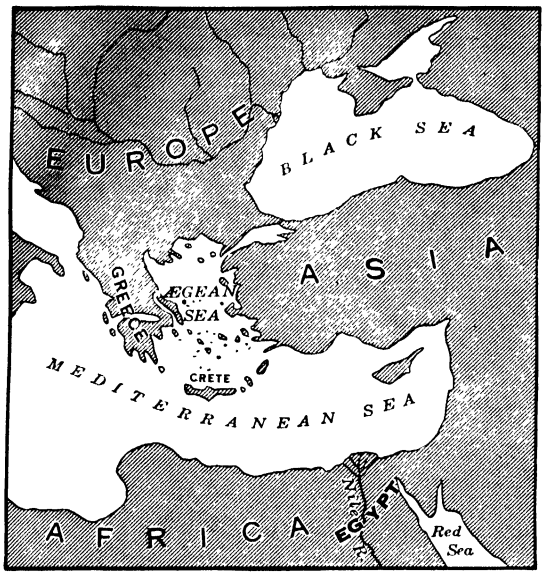
New People and New Ideas Reach Europe

A **MODERN** old palace. Not many years ago, an archaeologist—a man who studies ancient people—found some ruins on the island of Crete. Find this island on the map on page 78. His workmen dug until they had uncovered an enormous palace containing scores of rooms. They found things that showed much about how the Cretans lived hundreds of years ago.

This palace had plumbing that was almost modern, with water pipes and sewers. In the kitchens and store-rooms were metal pots and pans and huge pottery oil jars large enough to hold a man. In the bedrooms were found metal mirrors and toilet articles, fine jewelry and little ornaments. Bronze armor, swords, and spears told that the people were expert in war. On the walls pictures of bull fights, dances, and other amusements showed how the people spent their leisure time. Clay tablets, which we haven't yet been able to read, seem to show that the Cretans traded with other peoples.

The Cretans had been civilized almost as long as the Egyptians. The map on page 78 shows that Crete is close to Europe, and so we say that the Cretan civilization was the earliest in Europe. But Crete is not far from Egypt. It was only three days' sail in ancient boats, and we can be almost certain that the Cretans took many of their ideas and ways from the Egyptians.

As these island people did not stay at home, how do you suppose they traveled? Probably their first boats were merely crude rafts of wood. Later they made real boats, and still later, larger ones with sails and rows of oars. We call such boats galleys.



Find the island where the Cretans lived. Do you see how the little islands are like stepping-stones that connect Asia with Europe? If Crete was only three days' sail from Egypt, about how long did it take to sail from Crete to the nearest mainland?

The people called Aegeans. The Cretans gradually traveled from one island to another until there were many of them settled in this part of the Mediterranean. They may have met travelers from Mesopotamia and learned some of their ways, too. We know that they settled the islands and shores of the Aegean Sea. These Cretans are also called Aegeans. They built cities and houses and a few palaces. They brought civilized ways with them. By the time the Phoenicians began reaching out for business, these civilized people were living in what is now Greece, the islands in the sea, and along the near-by shore of Asia.

Just where did these people live? Look at the map on this page and locate the sea that was named for them. Notice how full of islands it is. See how it touches Europe on the west and Asia on the east. It is really an arm or part of the Mediterranean Sea.

A sea in the midst of land. Our story has moved into the region of the Mediterranean Sea, and we should now look over this part of the world. We shall hear about the "Mediterranean climate," "Mediterranean peoples," and "Mediterranean civilization." Mediterranean means "in the midst of land." Can you see why this sea is so called? Look at the map on page 230. What continents does this sea touch? What countries are now around its edges? History has always called this group of countries the "Mediterranean World."

Perhaps you wonder why such a small part of the earth is called a "world." But for many centuries it was "the world" to the people who lived along its shores. As we go on with the story, we shall learn why they thought it was the whole world.

Lands and Seas of the Mediterranean World

The coast of the Mediterranean. Turn to the map on page 128. With your finger follow the north coast of the Mediterranean Sea from Gibraltar to the island of Rhodes. Be careful not to cross any water except the mouths of rivers. What arms of the Mediterranean Sea did you find? Name them. What sea is connected with the Mediterranean by a long strait? The way around is long, and the coastline is a crooked one, isn't it? Are there many large rivers or few? Name the large rivers you find.

Now trace the coast on the south and east. How does it differ from the north coast? Do you notice that the eastern end is like a large bay touching Asia and Africa? Thus far our story has been only about the people who lived at this end.

Is there an opening between the Mediterranean and the Red Sea? What is the name of the link between the Mediterranean and the Black Sea? What strait opens into the Atlantic Ocean? It is shallow and only a few miles wide. It is like a gate that keeps out the deep, cold waters and the high waves and tides of the stormy Atlantic Ocean. That is one reason why this inland sea is usually calm and safe for ships. It was a long time

before even the daring Phoenicians of ancient days sailed through this gateway.

The Mediterranean climate. The Mediterranean region has a climate all its own. The warm water of the sea is like a hot-water bottle at the feet of Europe. In winter the Mediterranean region is comfortably warm.

On the map on page 128 find the mountains that act like a windbreak for the Mediterranean World—the Pyrenees, the Alps, and the Balkans. Farther east find the Taurus, the Caucasus, and the Lebanon Mountains. In winter these mountains keep out the cold winds that blow over most of Europe.

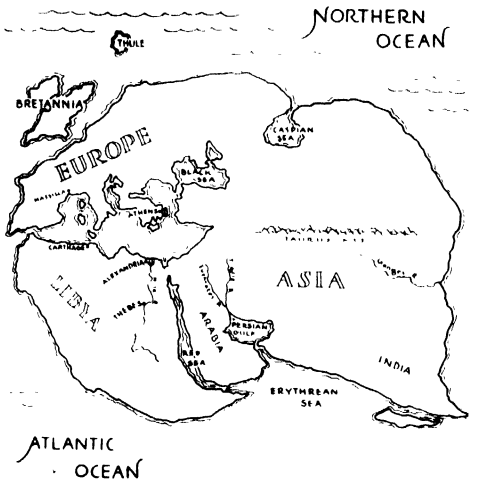
On the south, too, the warm winds of the Sahara Desert help to keep the region warm in winter. But in summer the *sirocco*, or hot wind, may blow across the sea to scorch the crops on the European side. The Atlas Mountains prevent some of these winds from reaching Spain.

The Mediterranean peoples. Where can people make a living in a region which is mild and rainy in winter, hot and dry in summer? Between the mountains and the sea, all along the shores of the Mediterranean, are narrow coastal plains and river valleys where most of the people live. And what can we tell about the people from knowing the land? There cannot be much good grass except in a few favored valleys. And so we know that these people cannot have many cows or horses. Goats must furnish the milk, and donkeys carry the burdens. These are hardy animals that can eat the scanty grass of the hilly pastures. The people will have to work the land carefully to get crops. They will have to grow fruits that need hot sun and little rain—olives, nuts, grapes.

For a long time the Mediterranean peoples did not know that there was any more to the world than the land around the sea which they called "our sea." Of course, they did find out that there were other peoples living beyond them. But these were just barbarians and did not count as a part of

Bettmann Collection

This painting on an old Greek wine jar tells part of the story of Pelops, a Greek hero. The southern part of Greece was called Pelops' Island. See the borders at the top and bottom of the picture. The upper one is called the "egg-and-dart" pattern, while the lower one is known as the "Greek key."



This map was drawn by a Greek nearly two hundred years before Jesus was born. He thought that the Mediterranean region made up almost all the world. It was many, many centuries before men found out how large the world really is.

the world, according to the people who lived near the Mediterranean. Do you see that the Mediterranean region was really like a world by itself?

The peoples around the Mediterranean lived not only beside the sea but on it. We know that the Egyptians sent out expeditions in boats, and you have read how the Phoenicians became expert sailors and traders. Trade started civilization moving westward across this inland sea. Other nations sent their people out, and civilization kept moving, always west and north.

A wise man of long ago said that people had settled around the Mediterranean "like frogs about a pond." On the map on page 128 locate the lands occupied by the ancient nations we have been studying. You can see that they were around the big bay at the eastern end.

Now we come to the story of Greece. Greece is in the same half of the Mediterranean as that big bay, but farther north and west. The Aegeans had lighted their candle of civilization in Egypt. They had carried the light across to the islands, to what is now Greece, and to the rough shores of Asia Minor. First we shall read the story of the Greeks, and later about the Romans. They both became more civilized than the Egyptians and the Babylonians. Their ways will not seem quite so strange to us.

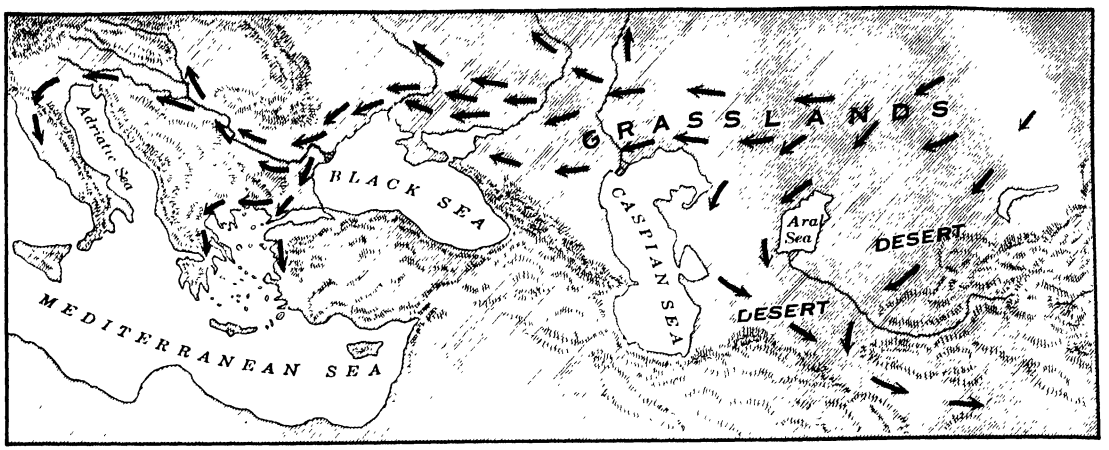
How the Greeks Lived and Learned

The ancestors of the Greeks. Look at the map on page 81 and find the pasture lands around the Caspian Sea. Do you remember reading, on page 57, of the wandering herdsmen who lived in this region? Some of them journeyed southward and some westward. You remember that some of them moved south into Persia and India. For many, many years, people from this pasture region had been slowly moving away. They were looking for better pastures. Bands, or tribes, of these people, speaking a language we call Aryan, kept on the move, seeking a more comfortable land and a better living for themselves.

Some of these tribes started toward the west. What good reason can you give why they did not wander to the north? What route would they have to take to get to Greece? Perhaps they stopped in one place long enough to plant some grain in the spring and harvest it. Slowly, year by year, more of them moved south and west. One reason they kept moving was that others were behind them, pushing them on. After many years they came to Greece, and they found the Aegeans already there.

The land the nomads found. The land of Greece is small, about the size of the state of New York. It is a rough country—a tangle of rugged mountains and narrow valleys. Look at the map on page 93. Notice how many little valleys there are. The valley plains and some places along the coast are the only fertile parts of Greece. Only a few plains are of good size.

Now look at the sea between the peninsula



The arrows show where our tribesmen-ancestors wandered after they left the plains of central Asia in search of a better place to live. Some of them followed river valleys southward and moved into Persia and India. Others moved westward. Trace their routes and see how some found their way to Greece.

and the mainland of Asia. It is full of islands. Most of them are rocky, too, but many also have tiny valleys. This was the kind of land which the wandering herdsmen invaded.

When the invaders met the Aegeans. The new-comers might have learned civilized ways from the Aegeans. They might have moved into the cities and fine homes of the Aegeans. But they did not, for they did not know how to live in houses or in cities. They were seeking only pastures for their flocks and herds and good places to pitch their tents. They drove the Aegeans from their homes, burned their cities, and destroyed their civilization. So complete was the destruction that we didn't know about the Aegeans until recent years.

Now the invaders had to start almost from the beginning to become civilized. It took them a long time to learn to build cities as good as those they had burned, and to make pottery, and to write.

How life changed for the nomads. At first the new-comers lived in small groups—a family, or two or three families, and finally a tribe in a little village. Their lives were simple. They depended mostly on their flocks, but they soon began to raise wheat and barley in the fertile parts of the little valleys. The women did the cultivating with wooden hoes. After a time plows were made from forked branches, and oxen did the heavier work.

Rude huts of mud, reeds, and skins took the place of tents. But wood was plentiful, and they soon began to use it for their homes. Phoenician traders came to their settlements. The herdsmen-farmers learned that the sailors came for business, not war, and began trading with them. So, you see, the new people were not out of touch with the world of the Mediterranean. Probably the traders showed them jewelry, fine clothing, new foods, and strange wares from other lands.

These were the ancestors of the people who were later to make some of the finest buildings and statues the world has ever seen. The descendants of these fighting barbarians were to be the first people to govern themselves as we do now. They were to write books which we read today. To do all these things, these rough barbarians must have changed a great deal during the centuries they lived in the land of Greece. Now let us look more closely at the land and see if we can find some of the reasons for the changes that took place in these people.

Acme Newspicture

The tribesmen who wandered into Greece found a land full of little valleys like the one in this picture. The small flat plains were good places to farm, and there was grass enough on the rough hillsides for their flocks. Why did they feel safer from enemies here than in a flat country?

The Land of the Greeks

The land itself. You remember that the land, the water, and the sky made the Egyptians what they were. So, too, the shape of Greece, its mountains, islands, sea, and even its air, all affected the Greek way of living. There were four parts to the Greece of ancient times. The first two parts form the peninsula. What separates them? The third part is made up of the islands. The fourth is a narrow strip of land along the coast of Asia Minor.

Mountain streams wash fresh soil from the heights to make the land fertile in the little valleys of the peninsula and islands. Even so, the valleys are not so fertile as the land along the Nile or along the Tigris and Euphrates rivers. The ancient Greeks found it harder to make a living than did the farmers of those older countries.

Hot summers and warm winters. In summer there is very little rain in Greece to keep the soil moist. Early in the season all is bare, brown, and dusty. On the higher slopes the sure-footed goats and sheep can find a little pasture. Most of the streams dry up, and there isn't water enough for the people to irrigate much of the land. But the winters are mild, and there is rain enough to raise grain, vegetables, fruits, and a few other crops.

Knee-deep in the Mediterranean. Every bit of this land is hemmed in by the sea. Someone has said that Greece is "knee-deep in the Mediterranean." It does look as if the country had waded into the sea. Notice the number of gulfs, bays, and inlets. The islands look like a flock of ducklings around an old mother duck.

The Greeks soon learned that they would have to find food for the summertime or else starve. A few people with the most fertile lands in the valleys might raise enough wheat and barley to last through the dry season. But many could not do that. What would you do, with the sea so near? Go fishing, of course!

How the Greeks spread out. The sea was full of fish—sardines, anchovies, and tuna fish. Perhaps the Greeks were sorry that they had driven out the Aegeans, for the Aegeans knew how to build and sail boats. But the shepherds and farmers were not afraid to learn. Soon they were venturing far out to sea, from point to point, and from island to island. After a time they had visited all the islands and shores in their part of the Mediterranean, looking for good fishing grounds and for places to farm.

Gradually the Greeks spread out over the sea to the east and the south. It could not have been so very many years until that part of the Mediterranean was filled with the descendants of the sturdy barbarians. As they spread out, the Greeks met other peoples and were quick to learn from them.

How Knowledge Came to Greece

A meeting-place for peoples. The Greeks along the eastern shore of the Aegean Sea met other peoples. Sometimes caravans from Mesopotamia came that far. Phoenician traders visited the shores and settlements regularly. It was the Greeks who lived on the mainland of Asia who taught the other Greeks to lead civilized lives.

Probably the Greeks found out how to make decorated pottery from the Aegeans. But the Greeks on the shore of Asia learned some very valuable things. They found out how to grow grapes, figs, and olives. That knowledge spread from island to island and reached the peninsula. Look again at the map on page 78 and see how the islands form a series of "stepping-stones" between Asia and the peninsula.

The farmers of Greece had raised only wool, mutton, and a little grain, but with these new trees and vines they could now produce fruit, wine, and oil. Grains, olives, and grapes grow especially well in all Mediterranean countries. Even today they are the most important things the farmers raise.

What the Phoenicians taught the Greeks. The Greeks on the coast of Asia traded reg-

Keystone View Company

If you were to visit Greece today, you would find, just as in olden times, every little harbor full of fishing vessels, for a large part of the people depend on the sea for a living. This picture was taken on the Gulf of Corinth. Find it on the map on page 128.

Bettmann Collection

The ancient Greek artist who painted this picture on a vase crowded many figures into it. A king is watching his servants weigh the cargo of a ship. The huge scales are tied to the ship's boom. On the boom are perched birds and a monkey. Down below, in the ship's hold, two men are stowing the cargo. The artist has put down names for all.

ularly with the Phoenicians. They probably marveled at the linens, the rich clothing, and the jeweled ornaments these traders brought in their ships. But perhaps they wondered most at the little black marks the Phoenicians made on papyrus in order to keep a record of their sales.

A paper with marks that could "remember" was certain to interest the Greeks, for they did not know how to write. They knew only what they could remember. In fact, one of the important members of each tribe was called the "rememberer." It was his duty to remember important events for the whole tribe.

The Greeks saw how useful writing could be. If they could write, they could send messages to their friends and need not trust to someone's memory. And so they learned the alphabet of the Phoenicians. From whom did the Phoenicians get it?

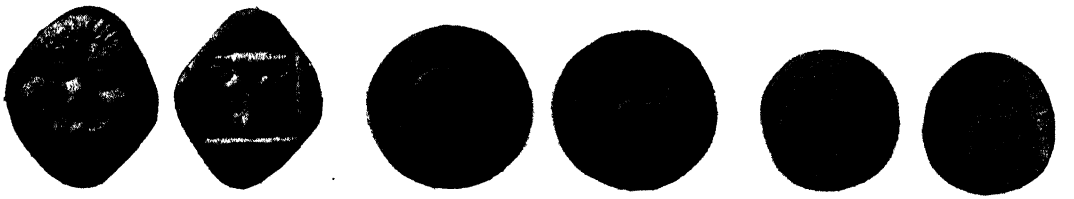
How the alphabet was improved. The Greeks liked to improve on ideas and to do things a better way. They changed the alphabet of the Phoenicians. They made many of the letters simpler and easier to write. The Phoenicians did not have any letters for the sounds we call *a*, *e*, *i*, *o*, and *u*. The Greeks added letters for these sounds, and the alphabet became more nearly like the one we use today, as you can see by the picture on this page.

Of course this writing soon passed from island to island and reached the peninsula. All the different tribes in Greece used it, not only for writing down records of trading and for messages, but later for poems and plays written in their language.

More food for the Greeks. With new foods to grow, such as the grape and the olive, and with ships to trade in, life became

ALPHABET OF SINAI WORKMEN			ALPHABET OF PHOENICIANS			ALPHABET OF THE GREEKS	
LETTER	NAME OF THE LETTER	WHAT THE NAME MEANS	LETTER	NAME OF THE LETTER	WHAT THE NAME MEANS	LETTER	NAME OF THE LETTER
	ALPH	OX		ALEPH	OX		ALPHA
	BET	HOUSE		BETH	HOUSE		BETA
	GIBOL	FLOWER		GIMEL	CAMEL		GAMMA
	DARDAR	THORNBUSH		DALETH	DOOR		DELTA

Here are the first four of the fifteen letters that the Greeks borrowed from the Phoenicians. The Greeks were interested only in the sound of the letters and did not think the letters were pictures of things.



Courtesy American Numismatic Soc.

Both sides of each coin are shown in the pictures. The earliest coin, at the left, has a Gorgon's head on one side and a bull's head on the other. The next coin came from one of the Greek settlements in Sicily. Fishes surround the head on one side of the coin. On the other side is shown a chariot pulled by two horses. The coin at the right was made in Greece before 330 B.C. On one side is a head of the goddess Demeter. On the other side is a figure of the god Apollo.

a little easier for the Greeks. But the country was not quite fertile enough to support all the people. Even all the fish they caught were not enough. The rocky little islands did not have much good land. And so the Greeks hunted for new land on which to raise food.

Some of the Greeks left their crowded little valleys and journeyed north to the rich lands around the Black Sea. There they could raise large crops of wheat. Other colonists went to Africa to raise grapes, olives, and wheat. So many Greeks settled in Sicily and southern Italy that this region was called "Greater Greece." Greeks built a town beside the mouth of the Rhone River. They called it Massilia, but we know it today as Marseilles, in France.

These colonists kept in touch with the home country by trade. The Black Sea farmers shipped grain to Greece and took back oil, wine, and pottery. The colonies in Africa and Italy traded with the home country in the same way. Soon they were trading with other countries also. The Greek ships took some of the business away from the Phoenicians, and Greece gradually became prosperous.

The first money. As they traded in the eastern countries, the Greeks saw the coins which the people of Lydia used. Coins were an improvement on bartering, and it was not long before the Greeks were making their own coins. Very soon they were using money in their trading. It was much easier than to argue about what two different things were worth. Do you know of any people today who do not use coins?

Why the Greeks became great. The Greeks were bright and quick to learn new and better ways. Do you remember how they began to use ships? That was something new for shepherds to learn. You have just read how they saw that writing would be a great help and how they borrowed the idea of using coins. On the coast of Asia Minor the Greeks had a chance to see the Babylonian, the Egyptian, and the Phoenician customs. The Greek did not feel that there was only one way to do things. All ways were new to him. He watched other people and decided for himself which way was best. Sometimes he even thought out a new and better way.

One year the crop of papyrus reeds in Egypt was very small, and the Egyptians would not sell any paper. The king of Pergamum, a Greek city in Asia Minor, wanted books written for his library. He did not like the clay tablets used in Nineveh or the leather on which the Hebrews wrote. He offered a prize to anyone who would find a better writing material. A Greek—no one knows who—found out how to make parchment by soaking and scraping the skins of sheep. Parchment, first called pergament from the name of the city, was much better material than either papyrus or common

leather. Both sides could be used. Even now diplomas for graduates of high school and college are sometimes written on parchment. That is why they are often called "sheepskins."

A little Greek world. If you will look at the map on this page, you will see that this Greek part of the Mediterranean Sea formed a little world in itself, with Greek colonies around the shores. Perhaps you think that the Greeks now had an empire like the empires of the Egyptians, Babylonians, and Persians. Greece had a very different sort of empire. It did not have a single powerful ruler over it, like the Pharaohs or kings of the older nations. The Greeks had no need for such a ruler because they built their empire by trading. The older nations had to hold their empires together with armies. The Greek empire was held together because the people traded with each other and spoke the same language. To understand this, we shall have to know something about the Greek cities and how they grew.

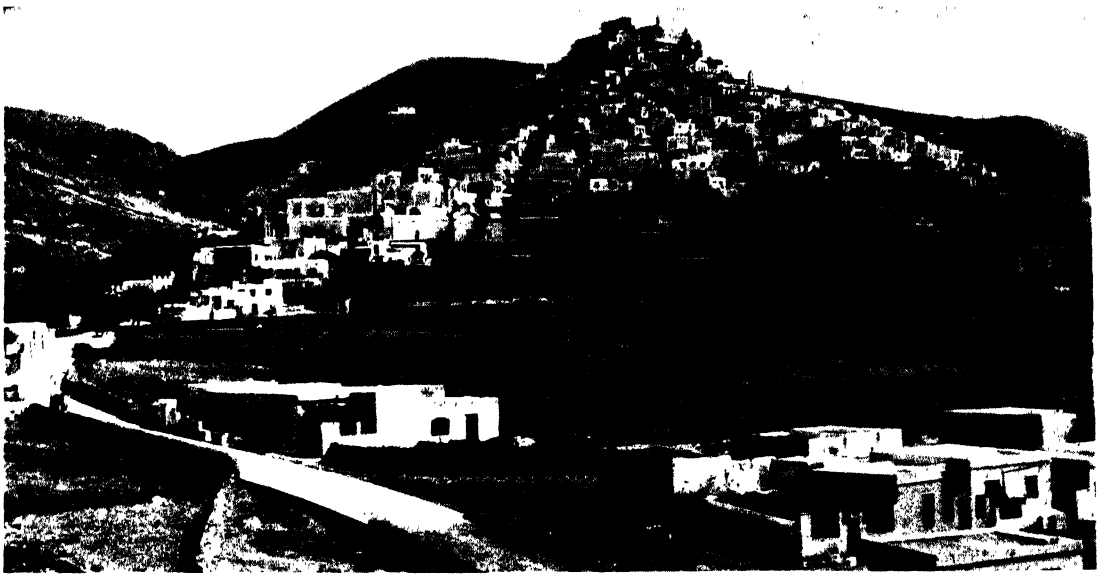
The Greek Cities

How the cities grew. We must now go back to the time when the ancestors of the Greeks invaded the land and destroyed the cities of the Aegeans. In each valley the Greeks lived in scattered little villages. When danger threatened them, they had to come together for protection. The easiest place to defend was a hill. If there was no hill where the people could take refuge, a camp was built with wooden palisades or earthen walls.

Sometimes the danger lasted a long time, and so people put up huts to live in, instead of just camping out. The houses were made better, and the fortified camp became a city. The hill was called an *acropolis*, which means "highest city." Gradually the people learned city ways, just as did the Egyptian and Babylonian farmers. Do you remember Nath and Kut?

There was a city in almost every valley—a city for each tribe of the Greek people.

Notice how the Greeks spread out along the shores of the Mediterranean. The white dots show where they built cities, and the black parts show where Greek farmers settled. These different Greek cities and colonies traded with each other, but they did not have a single ruler like the other empires of the ancient world. Yet wherever the Greeks went, they took with them Greek ways of living. You can see, then, how Greek civilization reached many other parts of the Mediterranean.



Acme Newspicture

This is a valley city of today. It is located on one of the Greek islands. This picture gives us a good idea of what an ancient acropolis was like. The houses we can see are not very different from the ancient kind of houses. They were clustered about the hilltop so that the people would have protection. Notice the walled fields. You can also see that the nearest houses have walled gardens beside them, almost like a part of the house.

The farmers of the valley did their trading in the city, and they fled to it in time of danger. They looked on the city in their valley as *their* city. Cities in other valleys belonged to other people, and the valley dweller was not interested in them as long as they let him alone. The people in one city did not visit the people of another city very much. It was not easy to travel over the mountains.

Each Greek city, then, kept mainly to itself. The cities were not parts of one nation, as ours are today. When you read in this book about Athens, Sparta, and other cities, you must not think of them as you would think about New York, Chicago, and other American cities. The Greek cities were more like separate, independent little nations. However, they did feel bound together because they used the same language and were alike in other ways which we shall read about later.

Were the Greeks united? Perhaps you wonder why some strong king, like King Menes of Egypt, did not unite all the Greek cities under his rule. There were two good reasons. In the first place, the land made it impossible. The king would have had to conquer one little valley after another. It would have been hard to march an army over the mountains. In the second place, the Greeks loved freedom. If a conqueror had come, the moment his army marched over the mountains into one valley, all the others would have rebelled. More than a thousand years went by before one man was able to conquer Greece.

A new idea in government. Because they loved freedom, the Greeks thought they should have something to say about how they would be ruled. Each tribe had a chief, and there were nobles to help him rule. But when anything important was to be decided, the men of the tribe held a meeting and talked over the matter.

As the city of a valley grew larger, the chief was given the title of King. After a time every little valley had its king. Greece was full of such little kingdoms, some large,

some small. The most important cities were Athens, Sparta, Thebes, Argos, Delphi, and Corinth.

How Sparta was ruled. Sparta was not built on a hill, and there were no walls around the city. The Spartans said their soldiers were their walls. We shall see what they meant.

There was only one school in Sparta. Every boy went to the military school to be trained as a soldier. When a boy was seven years old, he went to live in barracks, like a regular soldier. He learned to throw a spear, to box, to wrestle, to use the sword, to run, and to ride. Sometimes he was whipped just to train him to bear pain without whimpering. Often he was not given enough food, so that he would learn to endure hunger. He bathed in the river winter and summer and had but one garment to wear. Only things that would be useful in war were taught the boys. They had to be "hard as nails."

One great leader of Sparta was named Lycurgus. He had traveled in other countries to learn their laws and customs. He said that men were better off when they worked hard, ate plain food, and had little money. To explain why he made iron money for the Spartans, Lycurgus said, "Even a little iron money will weigh so much that the people cannot carry it around. It will be too much trouble to save money." Lycurgus thought rich people became soft and did not make good soldiers.

But if all the men were soldiers, who raised the crops and caught the fish? The Spartans were such good soldiers that they won their wars and made slaves of their prisoners. These slaves and other poor workers were not permitted to live in the city. They did the heavy work and led hard, bitter lives.

There were two kings at a time in Sparta. Probably the Spartans thought that each king would watch the other, and so neither one could become too powerful. The real rulers, though, were the old soldiers who made up the council. You can see, then, that Sparta really had a soldier government. A few other Greek cities followed the Spartan way.

How Athens was ruled. For many years Athens had kings to rule the people. Then

Ewing Galloway

This is the kind of land the Greek farmers have always had to cultivate. You can see a few fields, a few orchards, and a lot of stony land that cannot be much good for raising crops. The farmers in this picture are threshing wheat. One of them is driving oxen over the wheat stalks which the other is spreading on the hard ground. Afterwards they will pitch away the straw and pick up the grain.

a few of the landowners became very rich and powerful enough to rule. But many times these nobles quarreled among themselves. Sometimes one of them tried to rule alone, like a king. The Greeks called such a man a *tyrant*.

The only way a tyrant could rule was to get a large number of people on his side. The tyrant did this by promising the people what they wanted. Perhaps he told the farmers that they would not have to pay so much rent for their farms. Or perhaps he promised the laborers higher wages, or the fishermen better prices for their fish.

Many of the tyrants forgot their promises as soon as they were in power. But the people did not forget, and they began to do some thinking for themselves. They met and talked in the market-place of the city. Sometimes they demanded new laws or asked to have some of the old laws changed. Often the tyrant decided that he had to give the people what they demanded. In this way these people discovered a very important thing about their government. They found out that they could have good laws if they insisted that the tyrant make good laws.

The people in Athens not only met and asked for new laws, but after a time they began to make laws for themselves. The city was not large, and the citizens could crowd together in the market-place to talk over their affairs. If a new law was wanted, men made speeches about it. The people listened and then voted to decide whether to have the law or not. This was the first time the people made laws.

The first people's government. Sometimes the people rebelled and drove out a harsh tyrant, or made some noble leave the country. After this had happened a number of times, the people began to see that they could really select their ruler if they wanted to take the trouble. Then, instead of having a tyrant or a number of nobles rule them, the people selected their own leaders. This was done by the citizens voting in the market-place, just as they did when the laws were made.

Courtesy Alfred J. Hyslop

This painting, by an American artist, shows a group of Spartan youths, with a company of soldiers in the distance. The artist has put into his picture the military spirit of the Spartans. You can almost hear the officer giving his orders.

The Athenians called such a government a *demos*, which means a "people's government." We call it a democracy, which means the same thing. We have that kind of government in our own country. We select our leaders by voting for them, in just the same way as did the Athenians. But we cannot make our laws as the Athenians made theirs. Citizens of our country cannot meet together, as the Greeks did in their cities, because there

Courtesy Alfred J. Hyslop

The American artist who painted this picture of ancient Athens intends you to see how the Athenians met daily in their market-place and talked over their affairs. Everyone took part.

are too many of us. Instead of meeting to discuss new laws, we select a few men to make the laws for us.

Other Greek cities besides Athens followed the same plan. Many of them made their own laws and selected their own leaders. If a leader did not govern well, the people sent him away and chose another.

Sending a leader away was called "ostracizing" him. That word comes from the Greek word for oyster. Each Greek citizen wrote his vote on an oyster shell or a piece of broken pottery. Sometimes the greatest men were ostracized for foolish reasons. Do you know the story of Aristides? He was nicknamed "Aristides the Just" because he was fair in everything. He did many good things for Athens, but another man wanted to take his place as leader. The Athenian voters met to send one of these men away and let the other be leader.

Aristides watched the citizens voting. A farmer came up and asked him to write down the name of Aristides. "Has Aristides ever done you any harm?" asked Aristides, when he saw that the man did not know him. "Why should you want to ostracize him?" "I'm tired of hearing people call him Aristides the Just," answered the farmer. Aristides smiled and wrote his own name on the man's shell.

What held the Greeks together. Perhaps you are wondering how the Greek cities ever got along together if each one was free and independent. You might think that Greece would always be a country full of tiny nations, fighting among themselves and never accomplishing anything.

There were several reasons why the Greeks helped each other when danger came from the outside. All of them spoke and

Archaeological Institute of America

Many hundreds of years ago some Athenian citizen scratched the name of Aristides on this broken piece of pottery. Other votes like it were collected and counted, and Aristides was exiled.

wrote the same language. Of course, it was not spoken in quite the same way in every part of Greece, any more than our language is spoken in exactly the same way in Boston, Chicago, Houston, and Atlanta. But the people could understand each other, even if they came from different cities.

The Greek bards. All the Greeks enjoyed the same stories and poems. Long before they could read and write, they told stories about their great heroes. As there were no books, the tales were told by story-singers we call bards. They made the stories into poems and sang them. When an old bard died, another took his place, and so the stories lived on year after year.

The greatest of the Greek bards was Homer, who is said to have been blind. He made his living by going from valley to valley, singing his stories of the great Greek heroes. One of his greatest story-poems told how the Greeks sailed away and conquered a city on the shore of Asia Minor. You can see that the story was partly true, for you know that the early Greeks did sail across the Aegean Sea and conquer cities along that shore.

The story of Troy. Homer's story is about King Menelaus, who lived in Sparta with his wife Helen. One day Helen was kidnaped by Paris, son of King Priam of Troy. Paris took Helen to Troy, across the sea on the shore of Asia Minor. Menelaus was very angry and sent messengers to the kings of other Greek valleys, asking their help. Soon a thousand ships were ready, and a great army of Greeks sailed for Troy. The people of Troy were called Trojans, and so the war was called the Trojan War.

Like all cities of that day, Troy had high walls. The Trojans closed the gates and stayed inside the walls, while the Greeks camped outside and tried to starve the Trojans by cutting off their supply of food. Sometimes the Greeks tried to climb the walls or break through them. Sometimes the Trojans

Boston Museum of Fine Arts

This old Greek painting shows a young man singing a story-poem as he plays on his lyre. The bards probably looked much like this as they sang to entertain the people in the villages. Old legends told that the first lyre was made of a turtle's shell.

came out and fought and then went back inside their city. Occasionally two great warriors, one from each side, would have a duel while the others looked on.

Each year the Greeks raised their food in the near-by valleys. But after ten years they became discouraged because they could not conquer Troy. Finally they thought of a plan. Just outside the gates of Troy they built a great wooden horse. Then they left it there and sailed away in their ships. The Trojans were overjoyed, for they thought the war was ended. They put rollers under the horse and dragged it into the city.

That night, after the rejoicing was over and the Trojans had gone to sleep, a secret door in the horse was opened, and out stepped fifty Greek soldiers. They killed the guards

Courtesy Corcoran Gallery of Art, Washington, D. C.

A Trojan priest wanted the people to burn the wooden horse left by the Greeks, as he feared it was a trick. A Greek spy among the Trojans persuaded the people to take the horse into the city and keep it as a war relic.

at the city gates and let in the Greek army. The Greeks had sailed back as soon as it was dark. Now that the gates were open and the Greek army inside, the Trojans had no chance. The Greeks killed many and took thousands of prisoners. Then they set the city on fire, and soon it was in ruins. Menelaus took his wife back home with him.

For many years people thought that this story was just a tale the Greeks had made up about their heroes. But nearly fifty years ago an archaeologist found the ruins of the old city of Troy. Perhaps the story of the Trojan War is partly true, after all.

The stories of Jason and Ulysses. Some of the other story-poems of the bards were partly true, too. One of them is about the adventures of Jason and the crew of his ship, the *Argo*. We think it tells the story of how the Greeks explored and settled the shores of the Black Sea.

Another story is about Ulysses, a Greek hero of the Trojan War. He was the last to sail away from Troy. For ten years the winds blew his ship about the Mediterranean. He sailed as far west as Italy and had many wonderful adventures. You can read about Ulysses in Homer's story called the *Odyssey*. That word comes from the Greek name of Ulysses, which was *Odysseus*. Homer's story about Troy is called the *Iliad* because the Greek name for Troy was *Ilion*.

The Greek gods and goddesses. Like the Babylonians, the Egyptians, and all other ancient peoples except the Hebrews, the Greeks worshiped many gods and goddesses. The same gods and goddesses were worshiped in the different cities. That helped the Greeks to understand each other, just as having the same language helped, too.

The Greeks had gods and goddesses for many things they could not understand. For instance, they could not understand why seeds grow into plants. So they said it was the work of a goddess. In the same way they explained many other things, such as thunder, volcanoes, sunrise, and wind.

The Greeks thought the home of the gods

POLAND
CZECHOSLOVAKIA
CARPATHIANS
UKRAINE
GERMANY
Danube R.
Vienna
Budapest
HUNGARY
Dniester R.
Drava R.
Tisza R.
Danube R.
ROMANIA
Sava R.
Beograd
TRANSYLVANIAN ALPS
YUGOSLAVIA
Bucuresti
Danube R.
Constanta
BLACK SEA
DINARIC ALPS
Sarajevo
ADRIATIC SEA
BALKANS
Sofiya
BULGARIA
Vardar R.
RHODOPE MTS.
Tirana
ALBANIA
Istanbul
Bosporus
Sea of Marmora
ITALY
Brindisi
Thessaloniki
Mt. Olympus
AEGEAN SEA
Dardanelles
PINDUS MTS.
Smyrna
Patrai
Athens
Piraeus
Olympia
RHODES
CRETE
MEDITERRANEAN SEA
Land Heights in Feet
Over 10,000
5000 to 10,000
1500 to 5000
500 to 1500
Sea level to 500
0 100 200 300 400 500
Scale of Miles
R. H. FORESTER

was on Mount Olympus. That mountain is so high that clouds gather about its top. There are many thunder showers on Mount Olympus, but very few in other parts of Greece. The Greeks said that thunder was the voice of the gods. They believed their gods and goddesses were like men and women, only larger, stronger, or more beautiful.

The Greeks pictured the gods in their home on Mount Olympus like a family. Zeus was the father of the gods, and a mighty, deep-voiced god he was. Hera was the mother of the gods. In that mysterious home lived Athena, goddess of wisdom; Artemis, goddess of the hunt; Demeter, goddess of growing things. There were Ares, god of war; Dionysus, god of rejoicing; Apollo, god of the sun and of music; and many others.

Courtesy Alfred J. Hyslop

In this picture you see a group of men outside the temple of the oracle. The old priest is chanting to the sound of the flutes. The others are preparing to sacrifice the ram which has been brought as a present.

The Athenians told a story about a contest between Poseidon, god of the sea, and Athena, to see which one would be the special god of the city. The winner was to be the one who brought the better gift. Poseidon gave men the first horse, and Athena gave the first olive tree. The city was named Athens because Athena's gift was so valuable.

The Greek religion was a happy one, with festivals that were celebrated with games. The Greeks liked to dance and have track meets, and they thought their gods liked such things, too. To get a certain god to help them, the Greeks sacrificed to that god. The farmer who wanted a good crop of wheat burned a few grains of wheat on Demeter's altar. After a good harvest he burned more grain to show his thankfulness.

The oracles. The Greeks believed that they had a way of finding out what the gods wanted them to do. There were sacred places in different parts of Greece where the gods were supposed to give advice. These places were called *oracles*, and people went to consult them, just as some people, even today, go to fortune-tellers.

The most famous oracle was at Delphi, where there was a temple. It was there that King Croesus of Lydia asked advice about fighting the Persians. People left presents in the temple and then asked a priestess for advice. The priestess seemed to go to sleep and muttered strange words. Priests standing by wrote down the words, which were supposed to be the advice of the gods. Croesus found out, you remember, that the advice might be understood in two ways.

The famous Olympic Games. There was another reason why the Greeks of different cities felt that they were part of one people. Every four years all the Greeks held a great series of games in honor of Zeus. Since the

games were held at Olympia, in southern Greece, they were called the Olympic Games. Locate Olympia on the map on page 93. It is not the same as Mount Olympus, where the gods were supposed to live.

The Olympic Games were great events in the lives of the Greeks. The first date we have in Greek history is the record of a winner in a foot race held in the year we call 776 B.C. The Greeks used that particular year as their year 1, just as we begin our year 1 at the birth of Christ.

Men from all over Greece attended the Olympic Games. If cities were at war with each other, a truce was called until the games were over. The chief contests were in racing, throwing the discus, hurling the javelin, wrestling, boxing, and jumping. There were also contests for poets, orators, and musicians.

The winners in the contests did not receive silver cups and medals, but were given crowns of laurel or wild-olive leaves. At the games there was wild cheering, just as at our own meets. But the biggest celebration came when a winner returned to his home city. He was then a hero, for he had brought his city great honor. Poems and songs were written about him; sometimes statues of him were made by famous sculptors. If his family was in debt, often the city would pay what they owed.

Every Greek boy looked forward to the Olympic Games. Since athletics were a regular part of a young man's education, all youths were well trained Only good citizens were allowed to take part in the contests. Those who entered had to be free men who had never broken a law. The games were for men only. Girls were not allowed to attend.

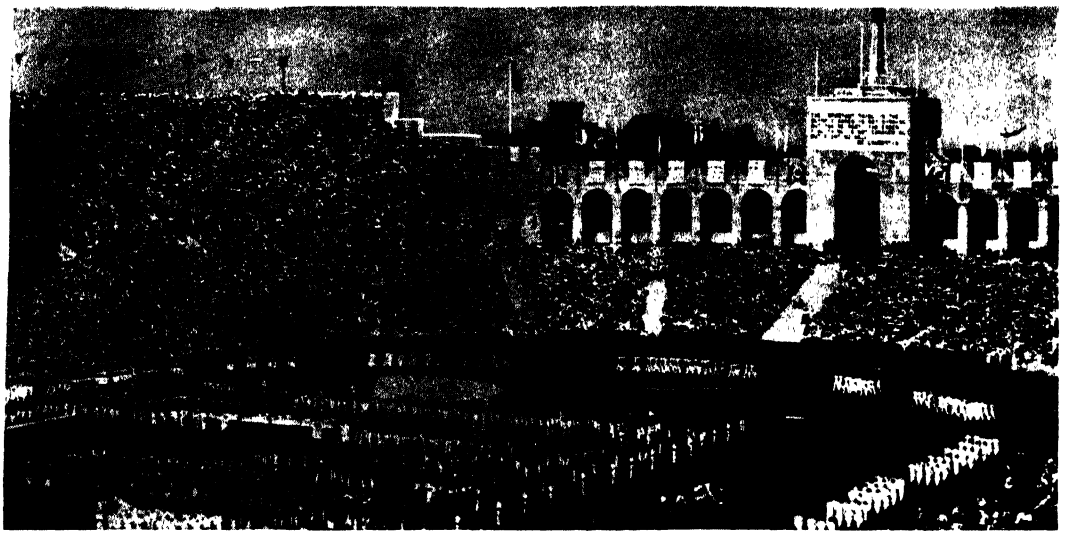
The Greeks unite for defense. Even though the Greeks did not have one king ruling over all the cities, you can see that they were united in some ways. Usually, when danger threatened, they were ready to help each other.

Courtesy Alfred J. Hyslop

The athlete resting on the ground has received a crown of laurel for winning the discus-throwing contest. The judge at the goal has just waved a palm branch to show the winner of the foot race. Why are the racers running with helmets and shields?

For about a thousand years after the first Greeks came to the peninsula, there was no real danger. The Egyptians, Babylonians, and Assyrians were busy conquering lands that were richer than the stony islands and the mainland of Greece. But then came Darius, the Persian, who conquered a great empire. You remember that Darius built a long road from his capital city, Susa, to Sardis. Sardis was near the Greek cities on the coast of Asia Minor.

When these Greek cities along the coast dared to disobey Darius, he decided to add



Keystone Underwood

About forty years ago the Olympic Games were started again for athletes of the modern world. All the nations may take part. The games are held in different countries—Greece, America, Germany, or other lands. The picture shows the parade of the athletes at the opening of the Olympic Games held in Los Angeles in 1932. Several new sports, which the Greeks knew nothing about, have been added to the modern Olympic Games. Can you name them? The ancient Greeks knew and understood each other better because of the Olympic Games. Do you think the modern games will help the nations of today to understand each other better?

Greece to his empire. He knew the country was divided into many small cities and valleys. The Greeks had several small armies, while Darius had a single large army.

Darius captured the Greek cities in Asia Minor, one by one. Then he captured many of the islands. Finally he sent messengers to the Greeks on the peninsula and demanded that they send him earth and water as a sign that he was the owner of their lands and seas.

The Greeks' defiance. The Greeks loved liberty too much to surrender without a fight. They threw the messengers of Darius into a well, saying, "There is earth and water. Help yourselves!" That meant war.

Darius landed his army in Greece and marched toward Athens. The Greeks had only a small army, mostly men from Athens under their general, Miltiades. They met the Persian army at Marathon. Find it on the map on page 97. It is a narrow plain, shut in by mountains on one side and by the sea on the other.

Miltiades ordered the Greeks to charge. It looked hopeless. But, you remember, every Greek was a trained athlete, and every man was fighting for his home. Many of the Persian soldiers were slaves or men who had been forced to go to war. Persian officers frequently had to lash their men with whips to make them fight. The Persian general did not expect the little army of Greeks to begin the battle, and the charge came as a surprise. There were so many Persians crowded together in the narrow plain that they did not have room enough to fight well. In a short time the beaten Persians ran for their ships.

The first Marathon. A Greek runner, Pheidippides, was sent to Athens with the news of the victory. It was twenty-six miles. The people were waiting for the news. They were anxious to know whether they would remain free citizens or become slaves of the Persians. On housetops and hills they watched. Late in the afternoon they saw

a small cloud of dust on the road to Marathon. Nearer and nearer came the runner through the dust and heat. Men, women, and children ran to meet him. Breathlessly they asked, "Is it victory?" Pheidippides was exhausted. He was just able to gasp "Victory!" before he dropped dead.

That was the first marathon race in history. In later years the Greeks included a race of twenty-six miles in their Olympic Games. Even today a long race is called a marathon.

It was a good thing that the Greeks won the battle of Marathon. If they had been beaten, the Persians would have conquered all of Greece. Then Greek civilization would have ended. The whole history of Europe might have been different. But best of all, winning that battle gave the Greeks courage to fight anyone who tried to conquer them.

The Persians come again. Darius had to go back to Persia, for his army was needed to put down revolts at home. Ten years later his son Xerxes came back to conquer Greece. This time the Persians hired ships from the Phoenicians and sent a fleet against the Greeks. On land and sea Xerxes had ten times as many men as the Greeks. Once more the Greeks united to fight invaders.

Leonidas and his Spartans. King Leonidas of Sparta was given the task of delaying

The numbered places on this map are: 1—Sparta, 2—Athens, 3—Salamis, 4—Marathon, 5—Delphi, 6—Thebes, 7—Olympia, 8—Mount Olympus, 9—Thermopylae, 10—Ephesus, 11—Troy, 12—Miletus. Do you know for what each was famous?

Raffius from Acme Newspictures

Invaders had to march over land like this in order to enter Greece. There were very few roads then, probably none of them as good as this one. Notice that the goatherd in front is wearing a dress with short skirts. Some of the Greek men sometimes wear such a costume. They borrowed the idea from their neighbors in Albania, but now it is called the national Greek costume. Some of their soldiers wear it.

the Persian army while the other Greeks got ready. He hurried along the road by which the Persians were coming. At Thermopylae there was a very narrow place in the road, between the mountains and the sea. It was an easy place to defend with a few men. Xerxes sent his soldiers to get Leonidas out of the way, but only a few came back. Next day the same thing happened. Leonidas had given the Greeks two extra days in which to prepare for war.

Then Xerxes found another narrow path through the mountains. A few men could take the path and get around behind Leonidas. Then the Persians fought Leonidas and his men from both sides. When Leonidas saw that he was trapped, he told his soldiers that they could leave if they wished. Three hundred of his men said, "A Spartan obeys orders. We have been ordered to hold this pass. We shall never give up."

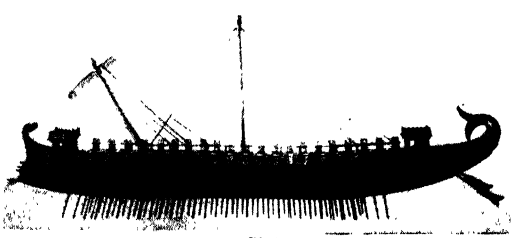
All day the army of Xerxes came, from both sides, now. All day the Spartans fought without rest. Just as the sun was setting, Leonidas and the last of his brave Spartans were killed. But they had delayed the Persians another day. Some time later the

Greeks put up a marble lion at Thermopylae. You see, Leonidas means "lion." The monument was in honor of Leonidas and his men. On it were carved the words:

"Go, stranger, to the Spartans tell
That here, obeying their commands, we fell."

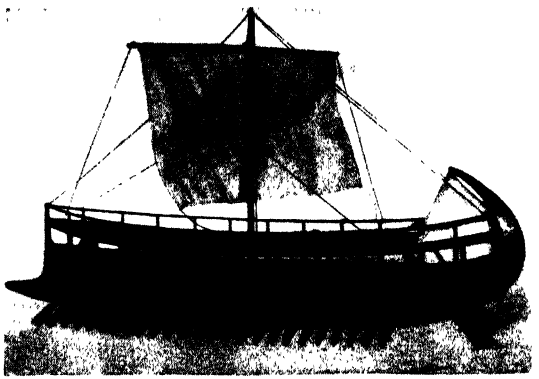
Xerxes now marched his army down to Athens and burned the city. But no one was there. The Greeks had asked the oracle at Delphi what to do. The oracle replied, "You will be safe behind wooden walls." Some people thought that meant to hide in the forests. Others wanted to build a palisade. Themistocles, the Athenian leader, said that wooden walls meant wooden ships. You see that, as usual, this oracle could be understood in more than one way. The Greeks followed the advice of Themistocles and made their ships ready to fight the Persians.

The battle of Salamis. Xerxes had his men build him a high throne on the seashore, so that he could watch his fleet destroy the Greek ships. The Persian fleet almost filled the gulf near Xerxes' throne. The Greek ships were hiding behind the island of Salamis. Suddenly the Greeks sailed out to attack the enemy. They sailed so close that they broke the oars of the Persian ships. Some sailed straight at the enemy and rammed holes in the Persian galleys. While Xerxes watched from his throne, the Greeks sank some of his vessels and set fire to others. By sunset there were few Persians left.



Philadelphia Commercial Museum

This model shows a Greek ship of the kind used about the time of the battle of Salamis. There were three rows of oars, and the ship was called a "trireme." Compare it with the Phoenician ship.



Philadelphia Commercial Museum

This model of a Phoenician galley shows the kind of ship the Persians used when they fought the Greeks at Salamis. Notice that the curved end is the stern and that there is a big steering oar on each side. The pointed prow, extending under water, made a good weapon with which to ram enemy ships. The rowers sat in benches below, while soldiers were crowded on the deck above them.

After the battle of Salamis, Xerxes was not so sure he could conquer the Greeks. He started slowly toward home and finally left Greece. Little Greece had defeated great Persia. But the Persians had destroyed the crops of the Greeks, cut down their olive orchards and vineyards, driven off their flocks, and even burned many of their cities. In spite of all these troubles, the Greeks rejoiced because they had saved their land from the enemy.

The Greeks rebuilt their cities and replanted their orchards and vineyards. With Athens as leader, they drove the Persians out of the islands and the colonies. Trade began again, and soon Greece grew rich and powerful.

The Golden Age of Athens

How Athens became great. Athens became the head of a league of Greek cities and islands. She offered to build ships and protect the people from the Persians if the others would furnish money or goods. And so Athens became the center of trade. The treasury of the league was there. There were some great men in Athens at that time,

too. And so, with the men and the money, Athens became a wonderful city. We call this time the "Golden Age."

A visit to old Athens. Suppose we imagine that we are paying a visit to an Athenian boy, Dion, and his sister, Clio, back in the year 432 B.C. Dion will show us the city.

Dion meets us at the city gate, and we walk to his home. The streets are narrow and littered with all kinds of dirt, even garbage. Most of the houses are made of sun-dried brick. They are one story high and stand very close together.

The Greek houses. At the door of Dion's home we step over the threshold with the right foot first—for good luck, Dion explains. Two slaves are waiting to take off our sandals and bathe our feet. Then we go to the open court in the center of the house. It has no roof. All the light for the house comes from this court, as the house has few outside windows. Here we meet Dion's father and mother and his sister Clio. You see, the court is really the family living-room. Around it are the other rooms—kitchen, dining-room, store-room, work-rooms, bedrooms, and rooms for the slaves.

Supper is served on a table in the dining-room. We lounge on couches at the sides, for there are no chairs. Dion's father throws a few bits of food on a small fire at the altar as a sacrifice to the gods of the household. The meal consists of bread, fish, a vegetable, olive-oil, honey, and wine. There are no knives, forks, or spoons, and so we must eat with our fingers. When our fingers become greasy, we wonder what to do until we see Clio wipe hers on a piece of bread.

Rodney Gallop

The houses in this little town in Greece are built in much the same way as houses in ancient times. Of course the people then did not have glass in their windows, and so used shutters like those you see on some of the windows. Notice that the stairs leading to the second story are outside the house, not inside as we build them. Each tiny front yard has a wall around it.

When the meal is over, slaves bring water in pitchers, and we rinse our hands. It is getting chilly, and so another slave brings a bronze pan of burning charcoal. A second slave lights a lamp filled with olive-oil.

The bed in our room is shaped like a wooden couch, with leather straps to take the place of springs. The mattress is of soft leather stuffed with rushes. There are heavy linen sheets and a thick blanket of soft wool.

In the morning it is very little trouble to dress. The boys and men wear what looks to us like a short linen dress reaching to the knees. It is held in around the waist with a belt of leather or metal. At the shoulders it is fastened with bone buttons or fancy metal pins. It has short, close-fitting sleeves. We put on sandals of thin goatskin and are ready for breakfast.

Dion warns us to eat a good meal, reminding us that the Athenians eat only two meals a day. On the table we find goats' milk, figs, grapes, a mush made of barley, and cheese. Dion's mother and sister wear clothing much like that of the men and boys. Their dresses are longer, the cloth is finer, and their belts and clasps are more elaborate.

Now we shall put on our mantles, or cloaks. Dion's outer garment is simply a large square of soft white woolen cloth, with a wide band of blue around its edge. He pulls one corner of it over his left shoulder from the back and tucks the end into his belt. Then he reaches around in back for the longer end, which he wraps around his body, just under the arms. Sometimes it is pinned, but most men just hold the end against the body with the left arm. That leaves the right arm and shoulder free. When it is chilly, the mantle can be worn like a cape, pulled up around the neck, the rest of it hanging in folds about the legs.

The women wear mantles like those of the men, but most of them are of finer wool

Ewing Galloway

This woman in a little farming village in Greece is baking bread just as her ancestors did many hundreds of years ago. Of course, in the cities of Greece today people use modern ways of baking, but many clay ovens like this one can be found in the country. You can see another near the wall. Not all the people have ovens of their own, but usually there are several in each village for the people to share.

Underwood & Underwood

The Greeks still meet in their market-places, just as these farmers of southern Greece are doing. Look closely and you can see the piles of vegetables for sale. In another part of the market-place men will be trading horses and donkeys, while others will be selling jars, clothing, and other manufactured goods. You will see many market scenes like this in the different lands you are going to visit.

and dyed in brilliant colors. Jewelry is common, and Dion's mother has a large assortment of gold and silver girdles, pins, buttons, and brooches. She also has many different fillets to wear about her head. These are narrow bands of colored cloth or metal which are wound about her hair and fastened in a knot at the back. She keeps her hair in place with thin metal hair-pins, much like those we have today.

We are now ready for sight-seeing. Dion's father is going to his farm in the country. Greek men and boys almost never stay at home, perhaps because the home isn't very comfortable. Clio and her mother remain in the house to watch the slaves spin yarn and weave cloth.

Dion tells us about the slaves. All of them were captured in the war with the Persians. One is an educated man, and he takes Dion and the other boys to school. Another slave looks after the spinning and weaving. Others work in the kitchen and dining-room. On the farms and in the quarries and mines, Dion says, slaves have a hard time, but household slaves are generally well treated. Some masters even let their slaves earn money. If they save enough, they can buy their freedom.

The streets and market-place. At the first corner down the street we see a statue of Theseus, one of the kings of long ago. Across the way is a temple to Zeus, the father of the gods. Although it is just daylight, the whole city is astir. Dion says that in the middle of the day the sun will be so hot that everyone will quit work. People will stay inside until late afternoon.

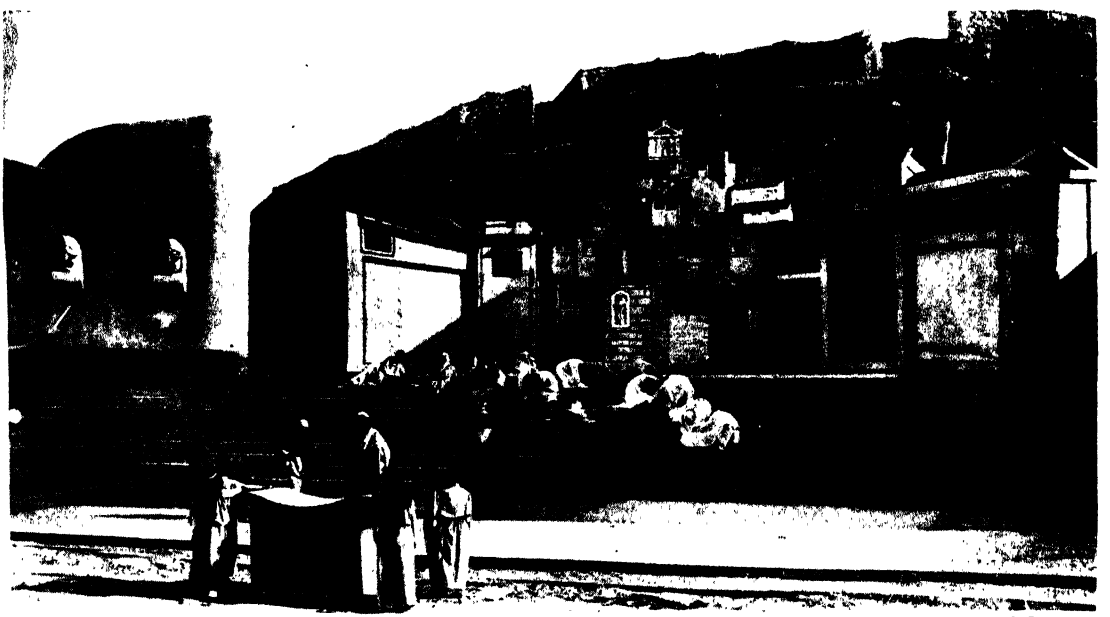
We are just in time to see the soldiers open the city gates. Farmers are waiting to come in. Some have brought cages of ducks,

some are driving pigs, others are carrying baskets of fruit or vegetables. The people who live in the big city need a great deal of food. All during the night boatloads of fruit and vegetables have been rowed across the bay from the island of Salamis. Here comes a farmer, riding in a clumsy cart with solid wooden wheels, drawn by a lazy old donkey. And here is a shepherd clad in sheepskins. A big, wolf-like dog is helping him drive the little flock.

The streets are jammed with people going to market. The market-place is busy and noisy. Men are walking about, calling out their bargains. One shouts that he has a fine horse to sell; another announces that he wants to buy a slave cook. Some of the people are seated on the ground with little piles of goods in front of them; others have booths. There are foreigners buying here, too, for Athens is a trade center in Greece. We see Lydians, Phoenicians, Jews, and even some Egyptians. There is much arguing about most of the prices, but on a big stone are carved the prices to be charged for certain foods.

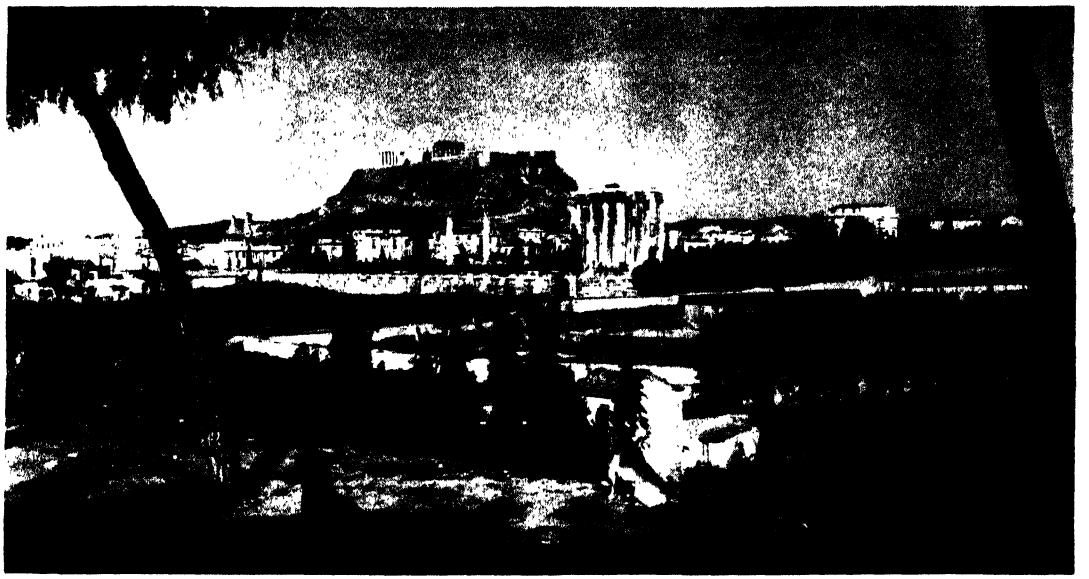
The center of city life. In about two hours almost everything has been sold, and the market-place is cleared of buyers and sellers. We can see now that there are large public buildings all around the *agora*, which is what Dion calls the market-place. Now that business is over, it seems to be visiting time, and we hear "Hail, Dion," "Hail, cousin," as Dion meets people he knows. Between the large buildings are porches and platforms from which people can make speeches. This is the place where the citizens of Athens meet to vote and to make their laws.

The sun is hot, and we start for home. On the way we see what a busy city Athens is. We have to step into a doorway to let a load of marble pass. It is for a new temple to Aphrodite. Stone-masons are shaping the



J. Jay Hir/

This Greek play is being given on the stage of an ancient Greek theater in Syracuse, on the island of Sicily, just as plays were given in the time of the great Greek dramatists. The background of the stage is new, of course, and the steps have been repaired. Only the chief actors used the upper part of the stage. The singers and dancers used the steps and the lower platform. The audience sat on stone benches in a huge half-circle around the stage. There were hundreds of rows of benches on the hillside.



Publishers' Photo Service

The hill in the distance is the famous Acropolis of Athens. On top you can see the ruins of two of the temples built there during the famous Golden Age. In very ancient times the top of the Acropolis was a fort. You can realize how hard it would have been to attack it. The city spread out in the plain around the fortress as more and more people came there to live. In the distance you can see the mountains that hem in the valley where Athens stands.

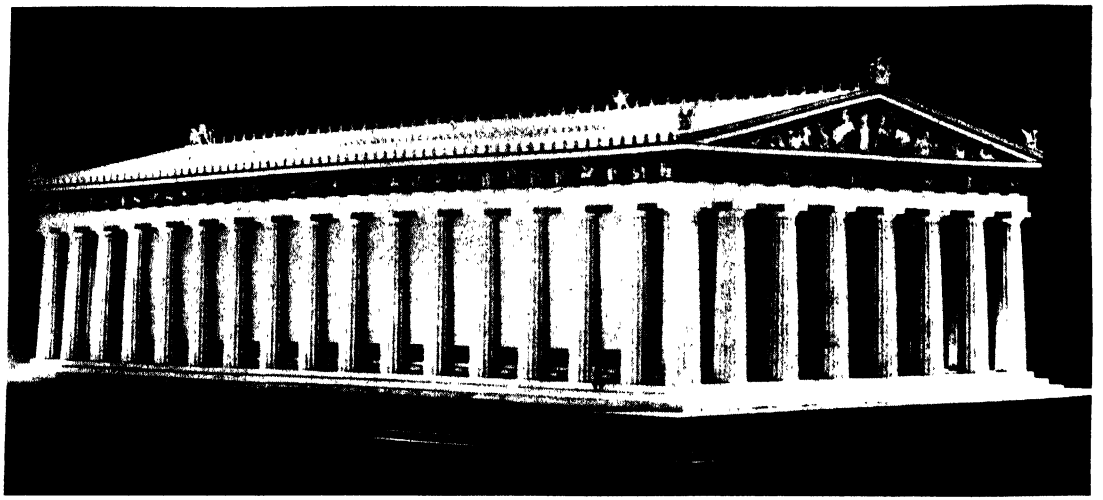
stones for the walls, and sculptors are carving a statue of the goddess to stand inside. We pass a street of interesting little shops. Here is a tailor shop, there a pottery store, next the place of a worker in gold and silver. One man works in leather, and another carves figures in wood. Then there are streets of traders who buy the goods and sell them to outsiders or ship them to many other lands. Freemen and slaves work side by side. The Greeks say that all honest work is honorable.

The Greek plays. We have loitered so long that we are hot and dusty. Back at Dion's home, we bathe our faces and our feet and lie down in the cool rooms of the house for a nap. Two hours later, when we waken, Clio tells us that the play-writer Sophocles is going to give one of his plays in the theater today. Her father says that Sophocles' plays are almost as good as those by Aeschylus, who taught Sophocles. Euripides, another pupil, is helping Sophocles with the play.

The theater is at the foot of the Acropolis. The stage is built on level ground, and the seats are on the hillside. There is no roof, and the stage has no curtains. Someone tells us that Pericles plans to rebuild the theater in marble and to name it for Dionysus, the joyous god.

The Greeks go to the theater, Dion says, just as the Hebrews go to their temple and listen to their prophets and preachers. He says that the Greeks do not have a "ten commandments," like the Hebrews, to teach them to lead good lives. The priests in the Greek temples only go through certain ceremonies and make sacrifices. There are no sacred books like the Bible of the Hebrews. The plays take the place of these. The plays teach how good people are rewarded by the gods. The play for today is sad, for it shows how the gods punish the people who do evil things. The Greek theater is like a school where people learn the right way to live.

Dion's father tells us how the theater



Metropolitan Museum of Art

This is the way the Parthenon looked before it was partly destroyed by an explosion. Find the little figure of a man beside one of the pillars. The maker of this model put him there to show you how large the building was. The sculpture, as well as some parts of the building, was brightly colored.

started. At first men danced in processions held in honor of the gods. Then someone thought of singing while the dancing went on. The words were about the gods and what they wanted men to do. Then, later, two men told the story and acted out a part of it. Gradually others took part until the story became a real play.

The Acropolis. The play is over, and now we want to climb the Acropolis to see the new temples and statues there. Wide marble steps zigzag up the steep hill. At the top is a beautiful gateway with tall marble columns. We turn to look at the city and realize how large it is. It looks almost like one solid roof, with cracks where the streets are. Dion says that half a million people live in Athens. We can see the high wall running around the city. At the southwest there are walls making a wide lane right down to the sea, four miles away. There is a town there, called Piraeus, which is the seaport for Athens.

In the east we can see Mount Hymettus, noted for honey. Beyond is Mount Pentelicus, where white marble is quarried for the buildings of Athens. In the valley below is the road to Marathon. Dion points to the west toward Eleusis and the temple of Demeter. To the north and northeast are the dry plains of Attica, with farms and flocks and orchards. The rock of the Acropolis seems to stand guard over the city and its country.

The top of the Acropolis is not large. It is about one thousand feet long and three hundred feet wide. The statues of the gods and heroes seem to be almost alive and ready to talk. Dion says the statues are lifelike and beautiful because the Greeks enjoy life and love beauty. Athena seems to lift her head and actually smile. Perhaps she is looking toward Persia and remembering that captured Persian swords and shields were used to make her mantle.

All about are temples, some of them beautifully colored. The homes in the city may be of mud brick, but the temples must be of marble. The most beautiful of all is the Parthenon. It is not only a temple but also a storehouse of treasure. It was planned by the great artist Phidias and is fresh and

new when we see it. Inside is a great statue of Athena, carved from gold and ivory by Phidias. On the walls are pictures and carvings telling the story of Athens. With the memory of all these things in our minds, we shall leave Dion and come away from this Athens of the year 432 B.C.

The Greek "Why-Men." There is a good reason why Greece had so many great men at this time. The people had money enough to pay for beautiful things and had leisure enough to enjoy them. The government could collect taxes to build fine buildings and hire artists to decorate them. People did not have to work every minute of the day, but could spend some time in enjoying life.

Many men studied the things around them and asked questions. They tried to find out why certain things were so. They wanted to know why the sun seemed to rise in the east and to set in the west, and many other things. The Greeks called these men philosophers, which means "lovers of wisdom."

Metropolitan Museum of Art

Even though the tail and parts of three legs are missing, you can see that the Greek sculptor who made this bronze horse was a skilful artist. The animal is very lifelike and spirited.

Metropolitan Museum of Art

This model shows what the inside of the Parthenon looked like in the Golden Age. The sculptor Phidias carved the huge statue of Athena out of gold and ivory. Her clothing was made of metal captured from the Persians. Behind this hall were rooms where the Athenians kept treasure collected in case the Persians should again attack them.

The philosophers kept asking, "Why? Why? Why?" And they found the answers to many of their own questions.

One man worked out the idea that the earth is round, not flat. Another wrote a book to answer questions about the stars. Another wrote a geometry. One of these doctors was curious about the body. He studied it so carefully that we call him the Father of Medicine. His name was Hippocrates. A famous Greek, Herodotus, traveled in Greek ships to many strange places and heard many strange stories. These he put in a book—the first history ever written—and so we call him the Father of History.

The great teachers. The greatest of the "Why-Men" were the teachers. They wanted to know why we act the way we do, how we should live, and what life is like. One of the wisest of these teachers, or philosophers, was Socrates. Like all wise men, he had many followers or pupils. One of the greatest of these was Plato. And Plato him-

Metropolitan Museum of Art

Greek paintings were not always about solemn things or famous people. Some artists painted pictures like this one of a boy on his way to school. This picture was done on the inside of a bowl. What do you think this boy is carrying?

self had a wonderful pupil, Aristotle, who became one of the most famous teachers of all time. For more than two thousand years people have studied the writings of these Greek philosophers.

How the pupils learned. If there were teachers in Greece, there must have been schools. But these were for boys only; girls did not go to school in any of the Greek cities. They stayed at home and learned to spin, weave, cook, care for a house, and manage slaves.

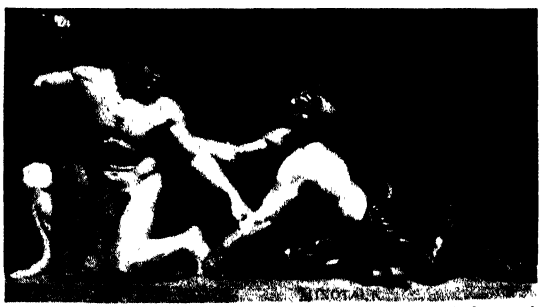
Usually the schools were held out-of-doors, under the trees. All of them were private schools, not public ones like ours. Parents paid the teachers for each lesson. The boys went to school when they were six or seven years old. Most of them went to several schools. At one school the boy learned to [illegible] and write. At another he learned music [illegible] poetry. Every boy was supposed to be able to recite poems and accompany himself on the lyre, a kind of harp. He took pride in being able to make up verses.

At other schools the boys learned boxing, running, and other forms of athletics. At these schools they also learned to dance and how to behave. These were important schools, for there the boys learned what we call "good sportsmanship," and they learned how to move gracefully and act at ease before people.

Perhaps you are wondering if this was something new in the world. It was. There had been schools in some of the other countries. Perhaps the very first schools of all were those started by the priests in Egypt. But in those earlier nations the idea was to teach boys to be useful to the king and to obey him. In Greece, for the first time in the history of the world, boys were sent to school to learn how to be good citizens and to enjoy life. If a Greek boy had a special talent for painting, writing verses, speaking in public, dancing, carving, or any such thing, he was encouraged and helped. The Greek school wanted to produce leaders. When a Greek boy was twenty years old, he took an oath to be a good citizen.

The Peloponnesian War

Trouble between the cities. The Golden Age of Greece lasted only about fifty years. It was a time of great artists and writers, of beautiful buildings and prosperous times. Athens had a big trade with other countries



Underwood & Underwood

An American sculptor made this "Theseus and the Minotaur" and colored it. When we see the white marble figures in museums, we often do not realize that the Greeks preferred painted statues. The story of how Theseus slew the Minotaur is told in Hawthorne's "Tanglewood Tales."

around the Mediterranean. She became the greatest city of Greece.

Sparta was jealous of Athens, partly because Athens had a large fleet and partly because more of the Greek cities followed the Athenian customs than the Spartan ways. Finally Sparta and her followers quarreled with Athens and her followers, and a war began.

This war had a long name. It was called the Peloponnesian War. You see, the southern half of the Greek Peninsula was called the Peloponnesus. The word means "Pelops' Island," although it isn't really an island. This war lasted a long time and ruined the Greek people. Athens and Sparta never should have fought each other. It was like two brothers fighting. Athens lost the war; she lost her ships; her walls were torn down. But Sparta did not know how to rule wisely. She had trained her men to fight, but had forgotten to train them to think and to manage well. The other cities loved liberty too much to let Sparta govern with soldiers, and there was constant trouble.

The Conquerors of Greece

The Macedonian Empire. In the north a new enemy was waiting for the Greeks to wear themselves out in war among themselves. Look at the map on page 97 and find Macedonia, to the north of Greece. It is a small but fertile land.

The Macedonians might be called cousins of the Greeks. Their ancestors were some of the same wandering tribesmen who came to Greece. They were not quite so civilized as the Greeks, but they were not barbarians. Their king, Philip, had been educated in Greece.

Philip had plans for conquering the world. Of course, he did not know how large the world really was. He thought of it as being the land around the Mediterranean and to the east. He began by conquering the little kingdoms around him. Then he brought his soldiers into Greece and conquered that country, too. He was just ready to send his army across into Asia and make war on Persia when he died.

Alexander, the great leader. Philip's son, Alexander, became king. He was only twenty years old, and some of the Greek cities thought it would be safe to rebel. But Alexander proved that he was a good leader and put down the rebellion at once. When he marched into Greece, he did not destroy the cities that he captured. He burned only one city and was sorry he had to do that. He had learned to love the wonderful art of the Greeks because his teacher was the famous Aristotle. In many ways Alexander was very much like a Greek.

Alexander was soon ready to start out on his father's plan to conquer the world. At that time Persia had fifty times as much land and twenty times as many people as Greece. But Alexander conquered Persia with his well-trained cavalry and infantry. In eleven years of smashing warfare he not only conquered Babylonia and Persia, but also Phoenicia, Egypt, and parts of India. His empire was called the Macedonian Empire.

What good did Alexander do? The best thing that Alexander did was to carry the good things of the Greeks to other countries. We call it spreading Greek civilization. He took Greek ideas and Greek ways of doing things with him wherever he went. He sent for Greek sculptors and painters, teachers and philosophers, workers and traders. He planned great things for his mighty empire, but he died before he could begin to carry them out. Then his empire was split up into many small countries.

More than seventy new cities were begun by Alexander. One of these was Alexandria, in Egypt. It is still a flourishing and important city. Ptolemy, one of Alexander's generals, was ruler of Egypt and lived in that city. He invited scholars and wise men from Greece and other countries to come there.

After a time Alexandria was like Athens in the Golden Age. For many years it was the home of the wisest men and the greatest scholars in the world. It was like a great college or university, for young men went there to study.

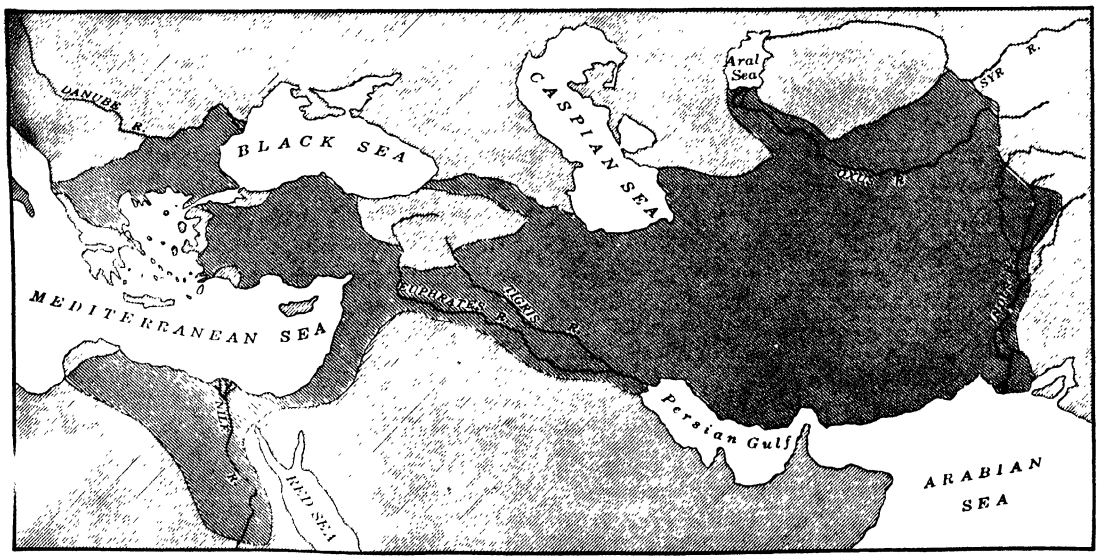
What became of Greece? When Alexander died, his generals divided up the empire. But they, and the leaders who came later, kept quarreling. At last the Romans invaded and conquered most of the old empire for themselves. We shall read about that in the next part of this book.

Do you remember the Turks, who came into Asia Minor and conquered it? Well, many centuries after the Romans had conquered Greece and other parts of Alexander's empire, the Turks crossed over from Asia Minor and took the peninsula. For nearly four hundred years the Turks ruled Greece. The Greek people had lost some of the spirit that they had shown at Marathon and Salamis. They were not like the old Spartans and Athenians. Sparta had become a little country village, and Athens had shrunk to a small city.

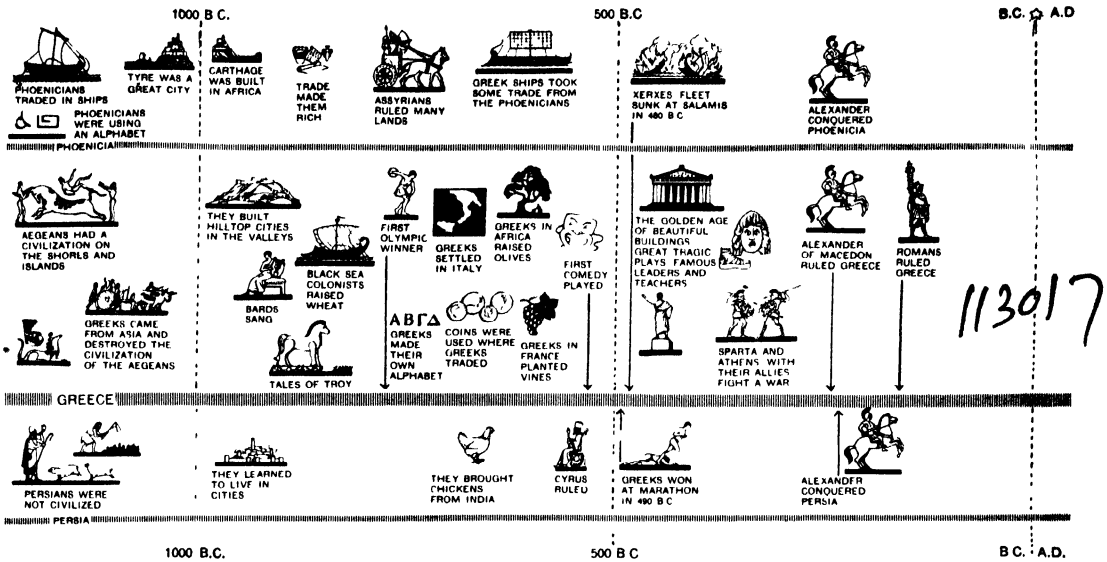
Modern Greece. But some of the old fire was left in the Greeks. About one hundred years ago they rebelled against the Turks. For six years they carried on a war. If they were beaten, they hid in the mountains, but always came back to fight when the Turks were not expecting them. Finally other countries came in to help Greece, and the Turks were driven out. Then the Greeks set up a kingdom of their own. This time they had one ruler for the whole country. For a while the Greeks tried having a president, as we have. Then they decided they would rather have a king. But the people still insist on making their own laws, just as they did so many centuries ago.

Talking Things Over

1. This chapter told about one civilization that was destroyed and another one that was scattered. In what ways were they alike? You may have to reread the chapter and then talk it over together.



The dark part of this map shows Alexander's great empire. Notice that he was not able to keep some of the countries, such as Greece, in his empire, even after they had been conquered. Compare this with some of the older empires. Look at the maps on pages 25 and 465 and find out what kinds of land were in Alexander's empire. What reasons can you find to explain why communication was difficult?



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PICTURE HISTORY

This chapter has told you why the story of the Greeks is connected with the stories of the Phoenicians and the Persians. This Picture History reminds you of many of the reasons. Can you think of others?

2. Over and over again we read that civilization advanced when different peoples met and mingled with each other. In this chapter you learned how trade brought different peoples together. Work together to make a list of the peoples who met and the places where trade brought them together. Make another list of the peoples who were brought together because of wars. The names of some peoples will appear several times.

3. Again and again, in reading this book or talking about it, you have used the words, "They learned how to—." Make a list of the things the Greeks learned to do. The length of your list will probably surprise you. Put a check mark in front of each thing that is done today in the state where you live.

4. We use written language for two important things: to keep records, and to send messages. Talk about these two uses of language in our time. Do not forget big things such as books and magazines, nor neglect little things such as road signs.

5. You are probably using a number of words, such as acropolis, oracle, or tyrant, that you did not know a year ago. What are some of them? Have you found a chance to use these words in conversation?

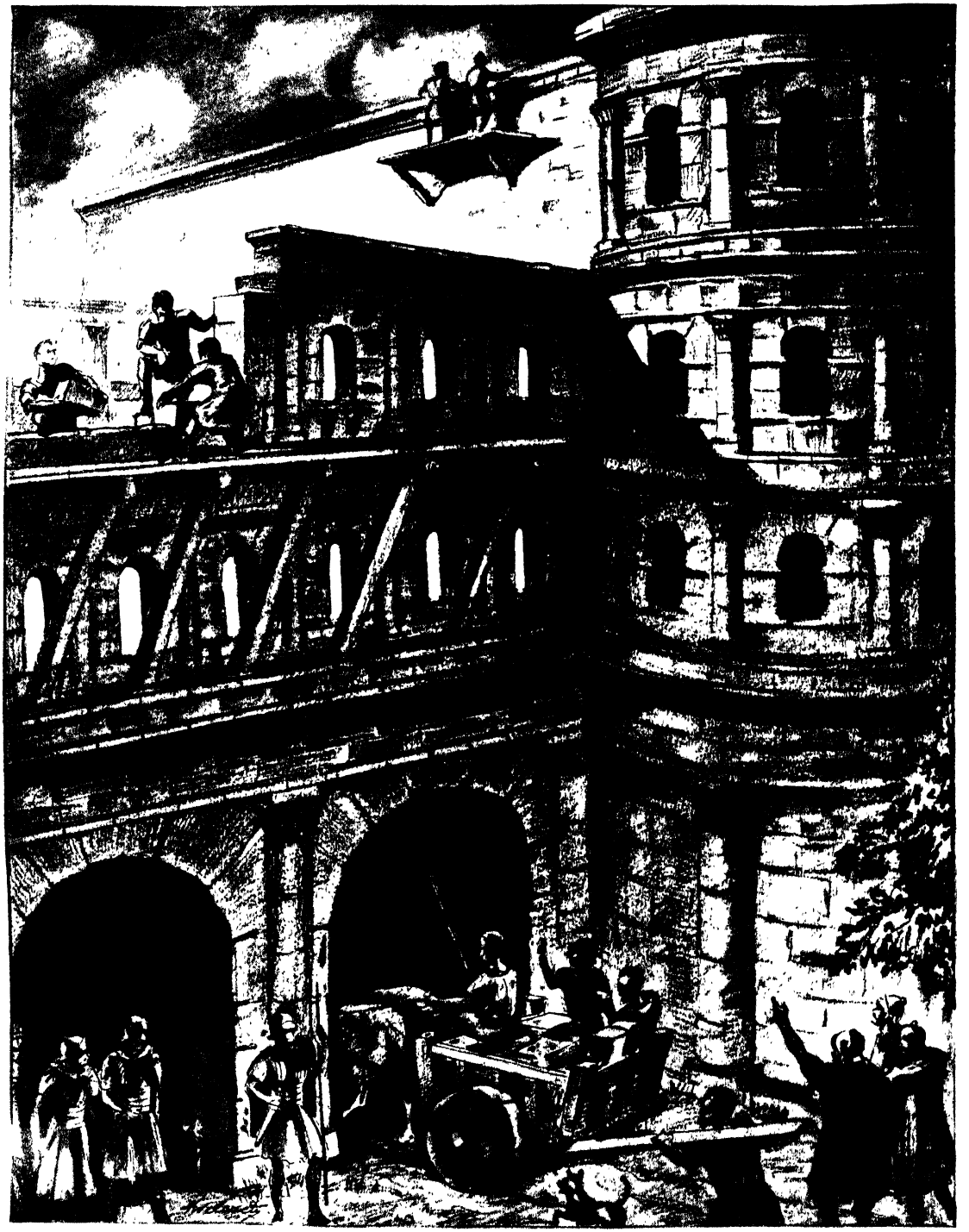
6. The Athenians developed a democracy in which people governed themselves. Do you talk things over in your school and make decisions about such matters as where the children may play or when it is all right to be noisy? If you decide wisely, you are learning to live in a democracy. Can you think of a decision you could make that would improve your school?

Doing Things Together

1. Pretend that you are living in the Golden Age of Athens. Practice talking over such things as the school, voting, marketing, cooking, eating, going to the theater, and visiting relatives, until you think you are talking as Athenians might have done. Remember that you cannot talk about things that did not exist then. Could you mention automobiles?

2. In pictures such as those on pages 90, 95, and 104, you will notice that many Greek buildings had columns. The triangular space above them, called the pediment, was usually decorated. Is there a space in your school-room where you could make an outline of a pediment and decorate it as the Greeks would have done?

3. The stories of Homer have been rewritten many times for boys and girls to read. Can you make a collection of these stories for an exhibit? The illustrations by different artists will be interesting.



To protect their cities and farms against raids by barbarian peoples, the Romans built forts along the borders of their lands. This is the fort at Trier, in Germany. The Roman soldiers who are shown building this stone fort also built a long, high wall to keep out the warlike tribes.

This picture of a wealthy Roman's house shows how civilized these people became, though their beginnings were simple, as the story below will show. In this picture you can see how the people dressed, the kind of furniture they used, and how the rooms were decorated. In the distance you see an open courtyard. Around the central room and the courtyard were many smaller rooms.

X. ROME—MIGHTIEST OF MEDITERRANEAN EMPIRES

A Nation of Soldiers and Business Men

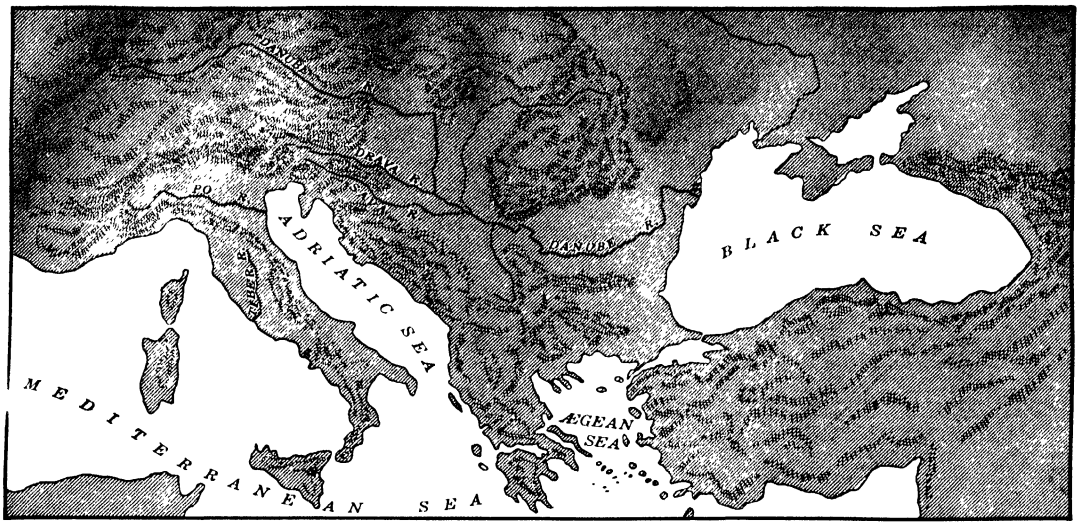
THE Romans' own story. The Romans liked the Greek stories about Troy and the wooden horse, Ulysses, and the other heroes. And so a Roman poet retold the tale of the fall of Troy. But he took for his hero a Trojan, not a Greek. Here is part of the story.

One of the great Trojan heroes was Aeneas. When the Greeks burned Troy, Aeneas escaped. Leading his young son by the hand and carrying his old father, the Trojan warrior hurried to the seashore. He found a ship and with a few companions sailed away. For seven years this little band of men roamed the Mediterranean. They visited the Greek islands but did not find a place to settle.

A great storm, which the poem says was sent by a goddess, wrecked Aeneas' ship at Carthage. You remember that Carthage was one of the trading cities built by the Phoenicians. Aeneas and his men stayed at Carthage for a time, but at last set sail again.

Finally the winds blew them to the shores of the land we now call Italy. There Aeneas settled and married the daughter of Latinus, king of a tribe living by the river Tiber. Aeneas fought in the wars until one day, in the midst of a battle, he disappeared.

Now that is the story the poet Vergil told to explain how the ancestors of the Romans came to Italy. Like many other stories, it was only partly true. Most of it was just imag-



On this map find the easiest way for the barbarian tribes to travel from their old home east of the Black Sea into Italy. Find the Danube River Valley. Follow it westward and see how the valleys of two other rivers made an easy path toward Italy. Low mountain passes let the tribesmen cross the mountains into Italy.

ination. The true part is that a wandering band of people came to Italy and found other people there.

More nomads from the central plains. You remember reading about the nomads who kept flocks and herds and wandered about the plains of central Asia. Some of these tribesmen, you know, wandered down into the country of the Aegeans and became the first Greeks. Other tribes were finding their way into Italy, probably about the same time. Look at the picture history on page 147 and see when this happened.

We call these tribesmen who wandered into Italy the Italic tribes. They must have been related in some way to the tribes who wandered into Greece, because we know that both groups spoke languages very much alike —languages which we call Aryan.

The Italic tribes drove their flocks and herds up the valley of the Danube River. Study the map on this page so that you will be able to follow their route. There was better grass in the valleys, and the men could raise a little grain in the spring and summer. But the winters killed the grass, and the people had to go on or else let their animals starve. They followed the inviting green valleys of the Drava and Sava rivers. Find them on the map on this page and see how these valleys led the tribesmen far into the Alps. They could not stay there, for the winters were much colder than in the valleys.

The Alps are like a great wall guarding Italy on the north. But there are passes through the mountains, and the tribesmen found these and crossed into Italy. They followed the streams on the southern side of the Alps down into the wide valley of the Po, the largest river of Italy. Find it on the map.

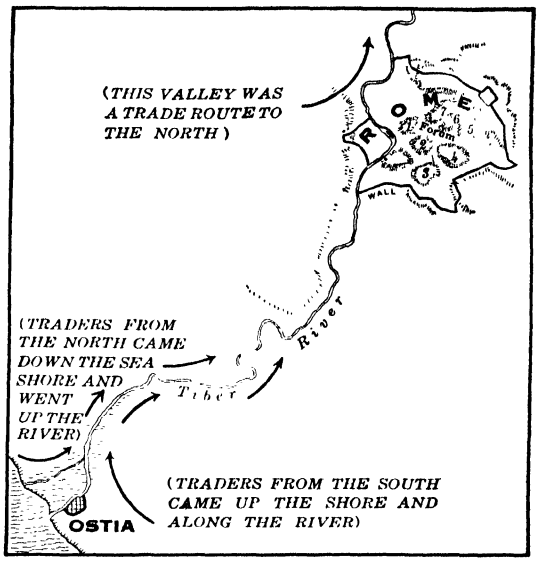
From this pleasant valley the Italic tribes gradually spread out over Italy. Many of them went still farther south and settled in the central part of the peninsula. Some of these people became the first Romans.

What the tribesmen found in Italy. The map on page 161 shows you that the peninsula of Italy is not a tangle of broken mountain ridges and little valleys like Greece. Extending through Italy, like a shin-bone, are the Apennine Mountains. The mountains slope down to plains along the seacoast. On

which side do you find the widest plain? Notice that spurs of mountains jut into the plains.

For ages the mountain streams had been bringing down soil to make rich valleys and fertile plains. The Po made a large and very rich plain, but most of the other valleys were small and not quite so fertile. Volcanoes had scattered lava and minerals in some of the valleys, which made them still more productive.

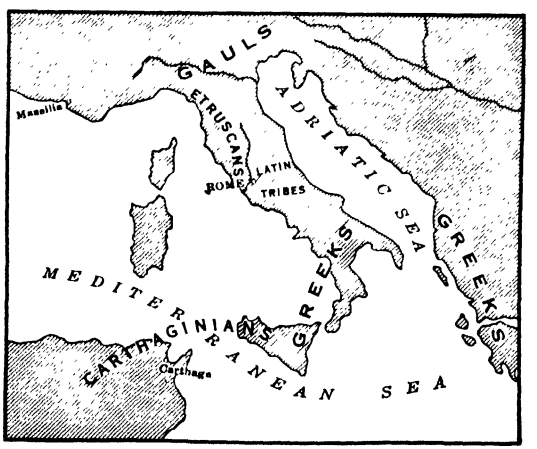
These Italian farm-lands are not so fertile as the rich lands along the Nile, nor is water so plentiful as in Egypt, but they are better than the farm-lands of Greece. In the central part of the peninsula is the valley where our story of Rome begins. On the map on page 161 find the place where the Tiber runs into the sea. The plain along the Tiber was called Latium in early days.



The first settlement at Rome was on a hill. Gradually the city grew until it occupied seven hills and the lower ground between them. As you can see, Rome was not on the seashore. Foreign traders coming by boat had to land at Ostia, on the Tiber River.

Early Rome

When the wanderers decided to settle down in Italy, they found and conquered the short, dark people who had been living there for many years. But the victors, who settled down in Latium, discovered they had still other neighbors. Near by lived the Etruscans, north of the river Tiber. They were not very good neighbors, as you will discover later.



Find the neighbors of the Romans. When Rome was only a town, and the Romans were just one of the many Latin tribes, these neighbors were much more powerful and more civilized than the Romans.

How the tribesmen settled down. The new-comers settled down in small villages, usually near some good spring or clear stream of water. In Latium there were many hills dotting the plain, and the tribes built their villages on the hills. A hill, you know, is easy to defend. Each of the settlements was made up of huts clustered about a fort on top of the hill. The Greek cities began in the same way, you remember.

The tribes which lived on the hills of Latium were called Latins, for they spoke the Latin language. The Latins played the biggest part in the story of Italy. Like other early tribes of which you have read, these people lived in separate villages.

The village of Rome. One of the Latin villages was located in an important place. It was on the Palatine Hill, about seventeen miles from the mouth of the Tiber River. The stream was shallow here, and there was a large island in the river. It was a good

place to cross if anyone wished to travel up or down the west coast of the peninsula. If anyone wanted to visit the Tiber Valley farther upstream, he had to pass this place also or else climb the mountains. You can see, then, that it was like a cross-roads. Many traders passed this way.

We do not know exactly when the village was first built on the Palatine Hill. Years afterwards the Romans gave a date for the founding of their city and called it their year 1, just as the Greeks started their dates from the year of the first Olympic Games.

If you could have visited Rome when it was a little village, you would not have guessed that the Romans would ever become a great people. They were hard-working farmers who lived very simply. They had flocks and herds and grew grain and vegetables. Their neighbors to the north and south were much farther along the road of civilization.

Metropolitan Museum of Art

The Etruscans made bronze chariots like this one in the days when Rome was still a small village. Notice the fighting warriors on the side. This kind of chariot was used by soldiers in many of the countries at the eastern end of the Mediterranean. The Romans did not use many chariots because they fought most of their battles in hilly country. They used foot-soldiers.

Other peoples in Italy. The neighbors on the south were Greek colonists. You have already learned how they settled the southern part of Italy and called it Great Greece. They had good buildings and large cities, and they carried on trade with their relatives in Greece and with other peoples.

The neighbors to the north of the Romans were the Etruscans. No one knows much about them. They lived in the part of Italy which is now called Tuscany. You can find it on the map on page 161. Probably the Etruscans came to Italy from Asia Minor. Perhaps they were driven out by the tribesmen who settled down in Greece, the Aegean Islands, and the mainland of Asia. We know that they were civilized people and lived in hill-cities, just as the Latins did.

The Etruscan traders secured copper and iron from the Greek and Phoenician traders. From these metals they made weapons, ornaments, and vases. These wares they traded for gold, silver, and ivory. This trade made them rich and powerful. They knew how to write, but we have not yet learned how to read their inscriptions as we can read the writings of the Egyptians, Babylonians, and other ancient peoples.

How traders helped Rome to grow. Etruscan traders and merchants from the Greek cities in the south of Italy passed through Rome. The little village was a good place to stop. It was far enough away from the sea so that pirates could not attack and plunder it. Naturally, the Romans and the other Latins traded, too. The Romans raised enough food for their own use and also to exchange for other things. They were in just the right place to sell food to the traders and fodder for the traders' pack-animals.

Gradually the town grew from a farming

The first Roman senate was made up of seventy old men belonging to the families who first settled Rome. Later there were three hundred senators. The artist has shown the blind senator Claudius being led into the senate to make a speech. This speech was the first to be written down and later studied by young orators. If you study Latin in high school, you will probably read some of the speeches of Cicero, a Roman senator.

village into a little city. Small ships came up the Tiber loaded with goods, and pack-trains stopped on their way to other settlements. Foreign traders stayed for business. The city became so prosperous and important that the rich and powerful Etruscans wanted to capture it.

The Etruscan kings. Since the Etruscans were stronger than the Romans, they did capture Rome and ruled it for more than a hundred years. One of the Etruscan kings built a great temple on one of the hills. Another king drained some of the swamps around the city and built a huge sewer, part of which can be seen even today. The city grew crowded and spread out over six other hills near by. Now Rome was called the "City of the Seven Hills." One of the Etruscan kings cleared a part of the city of its buildings and made a public square which the Romans called the "Forum."

Finally the Etruscan kings became cruel and ruled the Romans harshly. Then the Romans rebelled and drove out their rulers. This happened about the year 500 B.C. Look at the picture history on page 147 and see what was happening in the rest of the Mediterranean World about this time.

The Roman Republic

The beginning of the Roman Republic. Because the Etruscan kings had oppressed them, the Romans vowed that they would never again have a king. In place of a king, the Romans every year elected two officials called *consuls*. The people met in an assembly in the Forum, very much as the Athenians met in their agora, and voted to decide who would be the two consuls for the coming year.

The Roman consuls had almost as much power as a king. They commanded the army, handled the government money, acted as judges, and asked the senate to pass laws. Perhaps the Romans took the idea of having two consuls from the Spartans. You remember that the Spartans had two kings, so that one could not seize all the power.

To pass the laws and to help the consuls,

Even soldiers or government officials did not dare to interfere with a tribune. They could not even arrest a man who ran to the tribune for protection. The duty of the tribune was to see that the common people were not treated unjustly by anyone.

the Romans had a *senate*. The word means "council of old men." These men were thought to be old enough and experienced enough to know what was best. We have a senate in our country today, and the idea came from the Romans.

The Roman senate was a very important part of their government. The senators were nobles, and so were the consuls and all the other officers. You can see, then, that the common people did not have a great deal to say about their government. Part of the story of Rome is the story of how the common people gained more and more rights.

Nobles, common people, and slaves. Just as in Greece, and in almost all other parts of the Mediterranean World, there were three classes of people among the Romans. There were the rich nobles who owned land; there were free common people who farmed and did other work for a living; and there were slaves. The slaves were not allowed to have any part in the government.

In Rome the rich nobles were the "old residents." Their ancestors had belonged to the first tribes who banded together to build the city. As they owned most of the land, they were the wealthiest people. They were called *patricians*.

The common people were called *plebeians*. They were people who came to Rome after the city had been founded. Some of them owned a little land and were farmers; others worked at trades. At first, the "old residents," or patricians, did not let the new-comers, or plebeians, have anything to say about the government. After many years had passed, the plebeians could not see why they should not have a voice in the government.

All the people, both the patricians and the plebeians, met together to elect the consuls and to pass the laws. But that did not mean that the plebeians had much to say. Their votes did not count so much as the votes of the patricians. And they could not pass any laws unless the senate of nobles agreed. They had to elect patricians to all the offices.

The common people had another grievance. As the Romans became powerful and captured more and more of the country, the patricians divided up the conquered land. You can be sure that the plebeians received a very small share. As the years passed, the patricians became more wealthy and powerful. Many of the plebeians became poorer and poorer. Some of them went deeply into debt and lost what little property they had.

The common people on strike. In the year 494 B.C. the plebeians felt that they could not bear their poverty any longer. They went on strike—one of the first strikes in history. The common people marched out of Rome to a near-by hill and sent word to the patricians that they were going to build another city. There they would manage their own affairs.

The patricians were frightened by this threat. The plebeians were necessary. Someone had to do the work on the lands of the patricians. There had to be workers and craftsmen in the city and soldiers for the

army. After much argument, the plebeians agreed to return to Rome. In return, the patricians canceled the debts of the plebeians. And, most important of all, they let the plebeians select two government officials who were called *tribunes*.

It was the duty of a tribune to see that plebeians were not unjustly treated. A tribune could protect a plebeian at any time. Laws were passed making it a serious crime to interfere with a tribune in any way. A plebeian could take refuge in a tribune's house, and no one dared enter.

The first representatives of the people. This election of tribunes was an important step for the common people to take, because for the first time the people had chosen someone to take their part. We call such a person a *representative*. The tribunes were representatives of the common people. It was their duty to see that the government was a just one. Today we elect representatives to manage our government for us.

You remember that we called the Greeks' way of ruling themselves a *democracy*. The Greek cities were small, and most of the people could meet together and talk things over. The people themselves made their own laws in these meetings. But the Romans, instead of meeting together, selected men who made the laws for them. We call that way of government a *republic*. It is a kind of democracy.

The Growth of Rome's Power

Now we will follow the story that tells how the city of Rome grew and how the Roman people changed. As you read on, you will see how the Romans borrowed ideas and ways of doing things from the Greeks and Egyptians and other peoples. You will see how they changed these ideas and ways to suit themselves.

The little town of Rome grew into a city, the city grew into a nation, and the nation grew into an empire. Of course all these changes took several hundred years. And the Romans themselves changed, too. You know that Americans today are not just like the Americans who lived at the time of the Revolutionary War. And you can be sure

The common people had nothing to say about the government of early Rome. Once, when the senators refused to listen to their complaints, all the workers went on a strike. They marched out of Rome and said they intended to build a city of their own. Then the senate agreed to listen to them and right some of their wrongs.

A few Roman soldiers were left in every village and town to act as policemen. No one dared to harm them, as all knew that the army would come back to punish any wrong-doer. In that way the Romans kept order.

that the Romans who lived when Rome was a great empire were not like the Romans who lived when Rome was a little country village.

Italy conquered by Rome. When Rome was small, the Romans often had to defend their city against attacks by other tribes and peoples. If danger came, the farmers left their fields, picked up swords, spears, and shields, and went to war. When the war was over, the farmers went back to work. The Romans conquered the neighboring tribes, one by one, until they ruled all of Latium.

As the city of Rome grew larger, more and more food was needed for the workers who did not have farms. Think how a great city of today depends on farms far away for its food. It was the same then as now. All through the story of Rome, you should remember that the Romans always had to think about getting enough grain and other food for the people.

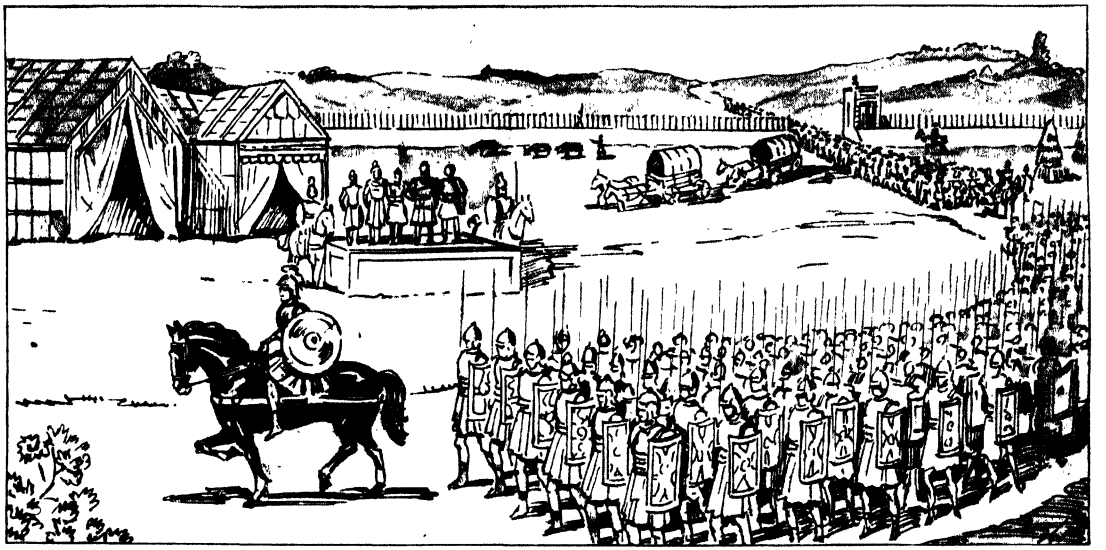
The plains of Italy provided grain fields for many farmers. The land was fertile enough to raise olives and grapes. The hills provided pasture for many sheep and goats. As the landowners became prosperous, trade increased. When the Romans heard about other fertile lands from the traders, they did just what the Greeks had done. They sent out colonists.

The part the Roman soldiers played. Every colonist was a soldier, for every Roman able to fight had to be ready to serve in the army if needed. Young men expected to join the army and have some military service. It was easy, then, for the Romans to have a large, well-trained army. And as the soldiers were often given land, the army fought hard to conquer the various tribes in Italy. Some of the soldiers always stayed as colonists.

Soon Italy was dotted with farms owned by Romans. The Roman farmer was not afraid to settle anywhere. He knew that the Roman army would protect him and fight for his land if necessary. The farmer knew this because he was always willing to lay down his tools and join the army at any time. He knew the other farmers felt the same way.

The Roman army became so powerful that with it the Romans gained all the land in Italy except the part in the south held by the Greeks. As the land was taken, it was divided up among Roman citizens. Romans could use conquered land from the government for a low rental. Rich senators who lived in Rome owned land in the colonies and rented it to farmers. The army was ready to protect this land at any time. Romans were glad to have the army conquer more land because it made them richer.

Perhaps the Romans might not have been able to take the land if they had not thought a great deal about military affairs. The army was important to the Romans, and they improved it in many ways. Instead of having large bodies of men fight together in a mass, the Romans trained their soldiers to be good fighters in both large groups and small ones. Roman soldiers would not surrender. They always made one more effort to win—and usually did win.



The Roman army became expert at making war, and soldiering became a regular business. Camps were carefully built with places for baggage wagons, animals, and men. Wooden stockades were built around the camps and watch-towers put up so that the men could rest comfortably and be safe from surprise attacks. Officers inspected the men to make sure that everyone had his weapons and armor in the best condition.

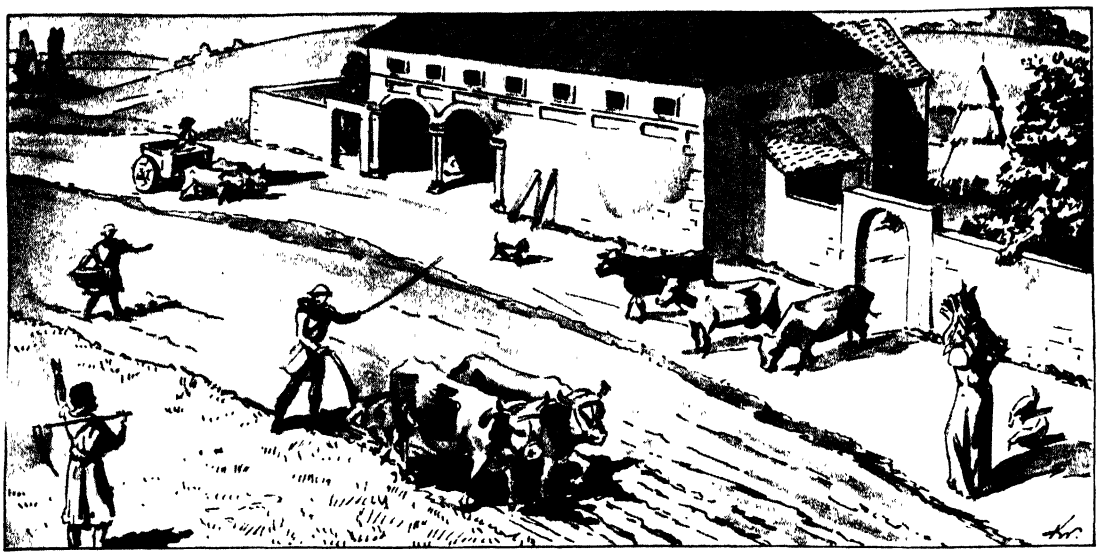
Roman boys were brought up to admire soldiers. From his youngest days, the Roman boy was taught to obey orders. But he also learned how to give orders and be a leader. He lived a simple life, ate plain food, and worked hard. Every Roman knew one thing: If he helped to protect his country, his country would always protect him.

How Rome treated conquered peoples. In Italy the Romans did not have much trouble with the people whose lands they conquered. The Romans allowed many of the conquered peoples to govern themselves. Of course they were not allowed to do anything that would harm Rome or any Roman citizen. The conquered people soon saw that it was worth while to be Roman citizens. For all Romans had the protection of the army and of the just and fair Roman laws. And so the people were eager to become Roman citizens.

Perhaps you remember reading in the Bible about Paul, who was seized by Roman soldiers. They were about to lash him, when Paul said: "Is it lawful to scourge (whip) a Roman citizen?" The officer ordered his men to release Paul at once. You see, Roman citizens had rights that were respected everywhere.

When his term of service was over, every Roman soldier was given land. As this land was usually in a colony, it was not so very many years before there were settlements of Roman veterans all over Italy and the surrounding lands. In our own country, after the Revolutionary War, and after some other wars, too, our government gave our veteran soldiers land in the western part of the United States. This plan helped us to settle our land and unite it, just as the same plan had helped the Romans to settle Italy and make it their land. In fact, our pioneers were like the Romans in many ways. They were good soldiers, they were good farmers, and they knew how to govern themselves.

If you will look again at the picture history on page 147, you will see that Rome was busy conquering the Italian Peninsula about the same time that Alexander of Macedon was trying to conquer all the lands at the eastern end of the Mediterranean Sea.



Many Roman farmers had fine homes that were carefully built and much more comfortable than the homes of the city people. In places like Gaul, the Roman soldiers taught the people how to farm in the Roman way and how to live like Romans. The Gauls also taught the Romans certain things, such as using butter on bread. Do you know why the Romans were not acquainted with butter and why they did not have many cows?

What were the Roman people like? We know that the Roman people were hard-working, hard-fighting farmers and workers. They lived in cities, in smaller towns, and on scattered farms. Life was not the same in these different kinds of places then, any more than it is today. The farmers lived simply, raising grain, olives, and grapes, or herding cattle and sheep. The rich patricians owned farms and lived in the cities most of the time. But they took pride in living in the country a part of the time and actually managing their farms. It was considered a disgrace to be "soft."

Life in the cities was different from farm life, of course. In Rome there was a great deal of trade, besides the business of government. There had to be shops to sell many things, and men to make all kinds of goods.

If you had entered one of the Roman houses, whether it belonged to a rich man or a poor man, you would have noticed at once that it was very much like an Athenian home. Most of the houses were made of mud bricks. Some were plain, others were plastered over. There was one difference, though. The Romans made their homes more comfortable, for they stayed in them more than the Athenians did. Their furniture was better, and they had a knack for making things that saved labor.

The Roman loved his home. He thought a great deal of his wife and children. The Roman woman had many more rights than the Greek woman. She could own property and could run a business if she wished. She could go visiting, attend the public festivals, and do very much as she liked. She helped to teach the children, and, of course, she managed the home.

The Roman gods. The religion of the Romans showed how much they thought of the home. Every family had its own gods. The Romans said that their family gods protected all the members of the family. In every home was a small altar to the family gods. No Roman ever forgot to worship at it for a few moments every day.

There were other gods of the Romans. One was Vesta, goddess of the hearth around

which every family gathered. In one Roman temple a fire was always kept burning in honor of Vesta. Jupiter was the father of the gods. Mars was the god of war; Venus was the goddess of love and beauty. Many of the gods were the same as the Greek gods, but with different names. The Roman Minerva was the goddess of wisdom, just as Athena was the Greek goddess of wisdom. The goddess of the hunt was called Diana by the Romans and Artemis by the Greeks. The Greek god of the sea was Poseidon; the Romans called him Neptune. There were many others, and there are stories about all of them.

Rome Reaches Beyond Italy

A rival city. While the city of Rome had been growing in Italy, another city had been growing in Africa. This was Carthage. You will remember that it was one of the Phoenician trading cities. Find it on the map on page 123.

At this time—when Rome was busy conquering Italy, and Alexander was conquering Persia—Carthage was busy trading. Perhaps a million people lived in and around the city. There were thousands of trading ships and hundreds of fighting ships to protect them. The Carthaginians brought tin from England, fine wood from the west coast of Africa, silver from Spain, and hundreds of other things from different parts of the Mediterranean World. These they traded with Rome, Egypt, Greece, and other nations.

The proud Carthaginians declared that the Mediterranean Sea was "their lake." They said that anyone who wished even to wash his hands in it had better ask their permission first. That was their way of saying that they were rulers of the Mediterranean.

The Carthaginians protected their people just as the Romans protected their citizens. The shrewd Carthaginian traders kept many of their trading places a secret, because they did not wish other nations to know where they obtained some of their valuable cargoes. A Carthaginian ship was once followed by a Roman trader who wanted to find out where the Carthaginians got their tin. The Roman ship pursued the Carthaginian ship out into the Atlantic Ocean. When the Carthaginian leader saw that he could not shake off the Roman ship, he wrecked his own ship. Months later he returned by land to Carthage, and the city gave him money and a new ship because he had kept the secret.

Look at the map on page 123 and see how much land the Carthaginians controlled. Notice how the Carthaginian colonies almost form a ring around the western end of the Mediterranean. This was a trading empire, and a very rich one. From these colonies came oil, wine, grain, wool, and other farm products—all for Carthage to use or sell. Mines in Spain sent out copper and silver. Ivory and slaves came from the interior of Africa.

A war for land and for business. The Romans did not like this prosperity of Car-

In almost every Roman home there was a place for the family altar. If it was a separate room like this one, there was a place for a small statue of the household god, an altar, and sometimes niches in the wall for marble busts of noted members of the family.

No one thought that Hannibal could bring an army over the Alps and enter Italy by land. But the famous Carthaginian general led his troops through one of the mountain passes and took the Roman army by surprise. Hannibal's elephant cavalry surprised the Romans, too, for many of them had never seen these huge beasts.

thage. They were becoming traders as well as farmers and wanted to trade wherever they wished. They wanted more grain and cloth for their growing cities. They wanted more slaves for their farms and for city work.

Most of all, the Romans wanted the rich grain lands of Africa. Rome had to have more food for her army and for the great city. And so the Romans went to war against the Carthaginians. There were three of these wars, and together they lasted a long time. It took over a hundred years for the Romans to defeat the Carthaginians.

It was during one of these long wars that the Carthaginian hero Hannibal brought his army across the sea. He landed in Spain and then marched his men over the Alps into Italy. No one thought he could do it, and so the Romans were unprepared. Hannibal's army marched the whole length of Italy. Sometimes he defeated the Romans in a bat- and sometimes they defeated him. But at he had to sail away from Italy.

Later, Carthage had to surrender to the Romans. Then Rome ruled all the lands around the western end of the Mediterranean Sea—the coasts of northern Africa and of Spain, the islands of Corsica and Sardinia, and most of Sicily.

You may wonder how such a rich nation as Carthage could have been defeated. One reason was the difference between citizens of the two countries. The Roman felt that he was helping to make Rome a great city. He knew that if Rome was great his own fortunes would be better. The Carthaginian colonist knew that his work only made some trader at home a rich man. Most of the Carthaginians were business men, not soldiers. They hired soldiers from other countries to fight for them. All of us know that hired soldiers do not fight so well as those who are fighting for their own country.

War-ships become merchant ships. During the wars with Carthage, the Romans had to build many ships. Does it seem strange that Rome had only a few ships up to this time? The early Romans were not sailors. Italy does not have so many harbors as Greece. The people did not have to depend so much on fish as did the Greeks. They raised more of their food on farms.

There was a port at the mouth of the Tiber, a city called Ostia. Find it on the map on page 113. Ships had to stop here. They could not go up the river to Rome because the river was often choked with mud and sand that were brought down by the stream.

The ships that used the port at Ostia were chiefly Greek and Carthaginian. They brought goods to Rome from all over the world. But after the wars with Carthage, the Romans used their large war-fleet for trading. You see, ships had been needed to fight the navies and armies of Carthage. When the ships were no longer needed in war, the Romans used them for trade.

Rome becomes rich. After the war Rome had control of the rich farms and mines of the Carthaginian colonies. These made Rome a rich nation. Like other nations—Egypt, Babylonia, Persia, Macedonia—Rome now wanted to rule the world. These other nations had gone out and conquered all the lands they could. Rome began doing the same thing. Her ships and her armies went everywhere around the Mediterranean.

It had been very profitable to take the lands and business of Carthage. The soldiers brought back riches. Captives were sent to Rome and sold as slaves. The defeated countries had to pay taxes and send their products to Rome—grain, metal, cloth, pottery, everything that could be traded.

One by one, Rome conquered the parts of Alexander's old empire, which had been split up when Alexander died. None of these parts was strong enough to keep out the Roman armies. Greece, Asia Minor, Syria, and Egypt became Roman provinces.

How Rome kept peace. Rome kept all these people at peace. The whole Mediterranean World belonged to Rome, as you can see by the map on page 132. The different peoples paid taxes to Rome—enormous sums of money to support the government and pay the armies. But the people felt that they were being treated fairly. In return for what they paid, Rome gave them something they had not had before—safety.

Under the strong Roman rule, both lives and property were safe. Rome wanted a quiet

The dark places on this map show the colonies and trading-posts of the Carthaginians. Carthage was a powerful city long before Rome was founded. Her merchants sailed all over the western end of the Mediterranean looking for supplies of raw material which they could use. While Rome was busy conquering Italy, Carthage was founding trading cities along the coasts of Spain and Africa. Carthage owned many islands, too. The land marked with the broken lines belonged to Rome. Compare its extent with the Carthaginian Empire.

M. G. M. Motion-Picture, "Ben Hur"

Roman war vessels were like these, which were made for a motion-picture. The decks were crowded with soldiers waiting for the ship to get near enough to the enemy so that spears and bows could be used. Or gang-planks were run out so that the soldiers could rush to the deck of the enemy ship. Below decks were the slave rowers.

and a prosperous world, because prosperous people buy goods of all kinds and so make trade profitable. After conquering a country the Romans kept an army there in order to maintain peace. It was not nearly so large an army as you might think. France has a larger army today, just for one country, than Rome had for all the Mediterranean World.

People in the Mediterranean lands did not often rebel against Roman rule. Roman laws were just and fair, and everyone had an equal opportunity to trade. You can see, then, that the Roman kind of civilization was spreading around the shores of the Mediterranean.

The Roman Civilization

How Greece helped Rome. For a time let us leave the story of Rome's conquests and see what kind of civilization Rome had. It may not surprise you to learn that it was like the Greek civilization in many ways. If we go back in our story a little, we shall see why this is true.

When Rome was only a small city, Greek and Phoenician traders came to the city on business. Up to this time the Romans had used oxen and grain in place of money. The Greeks paid their bills with copper and silver coins. The Romans were quick to see the advantage of money. Soon they began to use bars of copper, each stamped with the figure of an ox. The figure of the ox meant that the piece of metal had the same value as an ox. That was the beginning of Roman money. Later they made regular coins. The Romans also used the Greek measures for weight and size because they made trading easier.

The Roman alphabet. During this early time the Greek merchants brought lists of their goods written in Greek characters. Soon the Roman traders began to use the same letters. They changed the shape of a few letters and left out some of the others because they had no use for them. In this way the alphabet which the Greeks had borrowed from the Phoenicians came to be used with the Latin language.

The Romans, as you have already found out, were a very practical and businesslike people. Whenever they came across an idea that they liked, they took it. Sometimes they changed it to suit themselves, making it better for their own use. Through meeting and trading with the Greeks, particularly those from Great Greece in southern Italy, the Romans borrowed many Greek ideas.

Some customs that the Romans borrowed. After the wars of conquest, there were many thousands of Roman soldiers who had become acquainted with Greek customs and ideas. The soldiers liked many of these better than their own simple ways. It was not long before the Romans began to study and copy Greek temples, statues, and other works of art. Romans sent their young men to Athens, to the island of Rhodes, and even to the Greek city of Massilia at the mouth of the Rhone River to study Greek plays, poetry, and art.

This explains how the Roman civilization

Α	Β	Γ	Δ	Ε	F		Η	Ι		Κ	Λ	Μ	Ν	Ο	Γ	Ϙ	Ρ	Σ	Τ	Υ			Χ		Ζ
A	B	C	D	E	F		H	I		K	L	M	N	O	P	Q	R	S	T	V			X	Y	Z
AH	BAY	KAY	DAY	EH	EFF		HAH	EE		KAH	ELL	EM	EN	OH	PAY	KOO	AIR	ESS	TAY	OO			EEX		

The top row shows the Greek letters which the Romans borrowed in order to make an alphabet of their own. Not all the Greek letters are there, and two of those you see, the ones that look like F and Q, were not very common. Notice that the Romans did not have some of the letters we use in our alphabet. The Greeks had a name for each letter, like "alpha" and "beta," but the Romans called each letter by its sound. The last row shows the approximate sound the Romans gave each of the letters.

grew, but you must not think that the Romans did not have any ideas of their own. They did, and some of the ideas are interesting and important. Let us see what they are.

Roman ideas about law. One thing the Romans worked out very carefully was a system of laws. Very early in the story of Rome the plebeians insisted that the laws be written down so that everyone might know them. Hammurabi had written down the laws for Babylonia more than fifteen hundred years before this. But Hammurabi's people could not make their rulers keep the law as the Roman people did. The common people in Babylonia had nothing to say about either their government or the law.

For a long time life in Rome and in all the Roman lands was regulated carefully by the rules or laws made by the Roman people. Many of the laws came to be famous and have been copied in some of the laws of today.

The Romans worked out general rules about law. We call them principles. One of them was that if you gave your word about some business matter, you had to keep it. The law court would see that you did. Another principle was that if you could not pay all your debts, the payments you were able to make should be divided fairly. None of the different people you owed money to should receive more than his fair share. Another principle had to do with families. The Roman law set down very carefully what duties a person owed to his relatives.

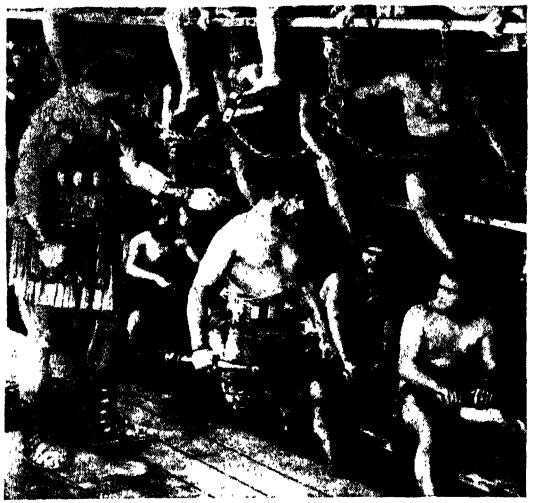
Many Roman laws had to do with business. There were laws to make butchers and bakers give honest measure. We have such laws today. Then there were laws which prevented unfair treatment of people who were accused of breaking the law. Men could not be punished just because they were suspected of crime. They had to be proved guilty first. We have such laws also.

The Romans had the same laws all over their empire. No other government of the ancient world had tried to make the people into one nation in that way.

How slavery grew. In some ways it was probably a good thing for the people around the Mediterranean that the Romans conquered them and gave them a wise government. But in one way it was not good for the conquered people or for Rome either. Soon there were too many slaves.

So many prisoners of war were brought to Rome to be sold that slaves became very cheap. Almost every Roman citizen could afford to own three or four. Wealthy men often had hundreds of slaves. A rich master would sometimes have a dozen slaves just to wait on him. He would have a slave barber, a slave to look after his clothes, several to help him in the bath, a slave messenger, and many others. Some men who held public office would have slaves with good memories. These slaves would whisper the names of the people who spoke to their masters.

In wealthy families the mistress of the house had many slaves to wait on her. Some slaves worked in the kitchen; others attended to the dining-room or the sleeping rooms or the garden. Sometimes a slave was chained



Photographic History Service, Hollywood

Slaves in the galleys led the hardest life of all, harder even than the slaves in the mines or on the farms. Several hundred of them were chained to the narrow rowing benches of each ship. To keep the oar strokes together, an officer beat time on a block of wood. If the rowers missed a stroke or refused to pull the heavy oars, they were beaten terribly. In battles no one bothered to unchain them if the ship was sunk.

to the entrance of a house simply to open and close the door for visitors. Other slaves waited to do the bidding of guests.

Men had body-guards of slaves, and slaves did the entertaining at banquets, singing, dancing, and telling stories. Other slaves acted as secretaries, bookkeepers, and doctors, for many of the slaves were better educated than their masters. Children had slaves to attend them, to walk to school with them, and sometimes to teach them.

More and more of the farm work was done by slaves. Little by little the rich men gave up living in a simple way on their farms and moved to town. Instead of managing their own property, they had men to do it for them. Once in a while the master visited his estate and looked over the accounts. Some of the estates contained parks, fish ponds, and game preserves—all cared for by slaves.

You must remember that people had no machinery such as we have to help with their work. All tasks had to be done by the strength of either man or beast. Men had not learned, as we have, to make nature help, except in one way. Men knew how to make use of the wind in sailing a boat. But windmills had not been invented. If water had to be pumped, either men or animals had to work the pumps.

How slavery harmed Rome. One thing was certain to happen when so many slaves were used. Rich landowners with many slaves could sell their grain and oil and wool much cheaper than other farmers who had to hire their help. Many farmers who owned small farms could not make enough to live on. Great numbers of these farmers moved to the cities to try to earn a living there.

Conditions were just as bad in the cities. The farmers who came there could not get work. Slaves were doing the work of carpenters, blacksmiths, masons, tailors, and other craftsmen. Rome became full of discontented, idle men. Since they could not find work enough to keep from starving, the government had to feed them.

Frontiers of the Roman Empire

What was happening outside the empire? We must not forget that there were other peoples in the world besides those in the Roman Empire. As time went on, some of them began to make trouble for Rome. Let us see who they were.

Look at the map on page 128 and notice how a broad band of mountains separates the Roman world from the land to the north. For a long time that wall of the Alps kept the barbarians out of the civilized Mediterranean World.

How the barbarians moved into Europe. You remember that the ancestors of the Romans and the Greeks were once tribesmen who lived on the plains of central Asia. The barbarians who lived in northern Europe had come from the same region. We think that all these tribes were related in some distant way, because all of them spoke the kind

Photographic History Service, Hollywood

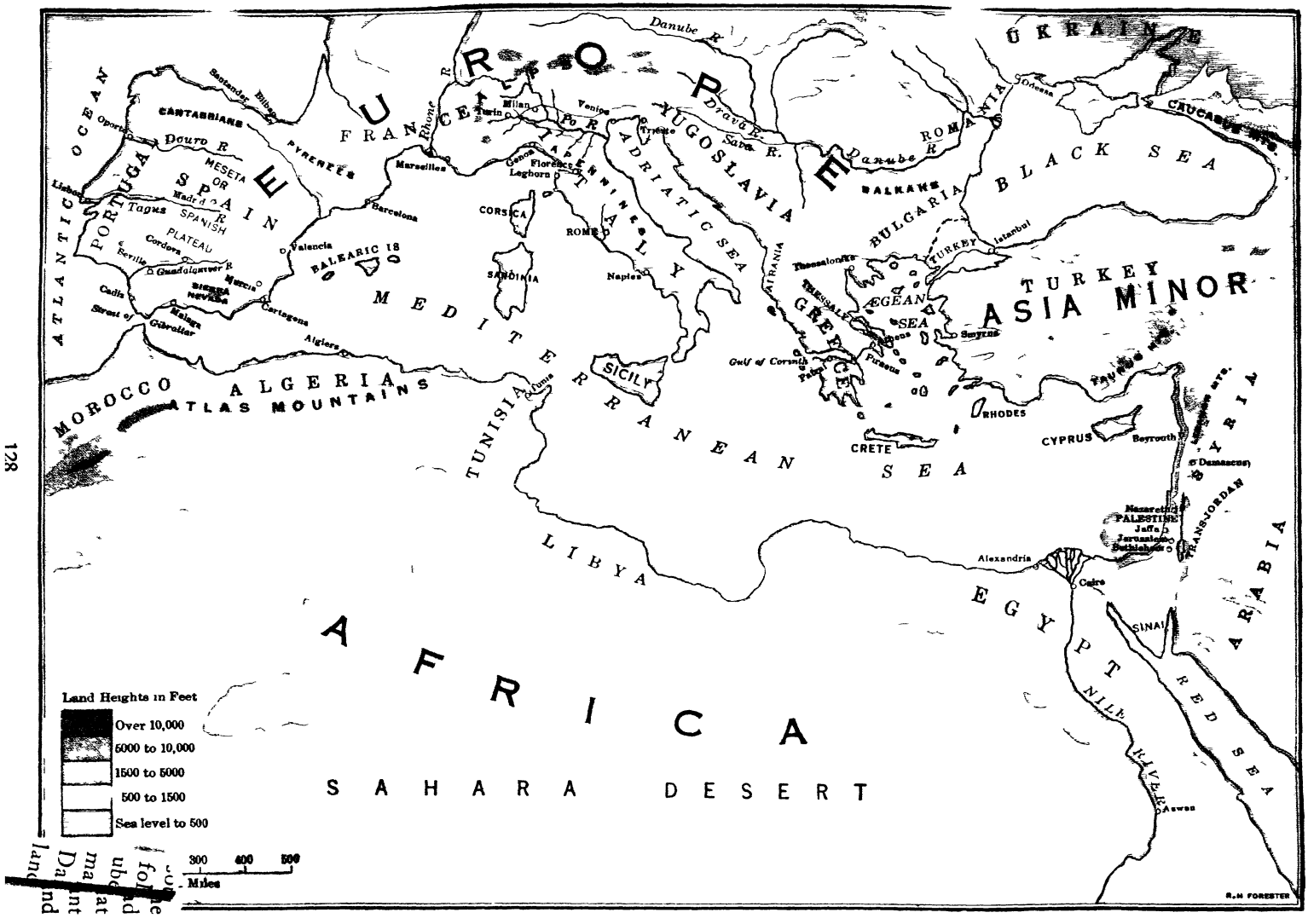
Roman shops were like open rooms beside the narrow, winding streets of the cities. Usually each shop carried only one kind of goods. This picture represents a bakery shop. The baker ground his own grain in a large stone mill, turned by slaves or horses. The flat, round loaves which you can see piled up were baked in clay ovens. Above the head of the old vegetable woman is a Roman lamp. This picture is from the motion-picture called "The Sign of the Cross."

of languages we call Aryan. The word for mother sounded very much alike in all the languages. The word for bread was almost the same in the different languages. So were other words for such common things as cattle, water, and home.

Many years after the ancestors of the Greeks and Romans had left the plains, other tribes also began to leave the plains, looking for better pastures. They, too, moved westward toward a region where there was more rainfall. But they did not find their way southward into Greece or Italy. Instead, they followed river valleys, like that of the Danube, westward and northward. Turn to the map on page 300 and locate the valley of the Danube River. See how it begins in the highlands north of the Alps and twists its way to the east. Many tribes followed this valley into Europe.

Now find the Seine, the Rhine, the Oder, and the Weser rivers. The barbarian tribes followed these rivers because they did not want to climb the mountains, where food was scarce. See how the valleys of those rivers lead into different parts of the plains of Europe. It was along these rivers and around the edges of the great forests that these barbarians made their homes.

There were many tribes of these barbarians, called by several different names. Some of them we have named Gauls, others Teutons or Germans. All these people were fierce and warlike, and when they found people in the land they wanted, they drove out the older settlers. The Gauls, for instance, moved


EUROPE
ASIA MINOR
AFRICA
SAHARA DESERT
MEDITERRANEAN SEA
ATLANTIC OCEAN
BLACK SEA
ÆGEAN SEA
RED SEA
ARABIA
SPAIN
PORTUGAL
FRANCE
ITALY
GREECE
TURKEY
SYRIA
EGYPT
LIBYA
TUNISIA
ALGERIA
MOROCCO
ATLAS MOUNTAINS
YUGOSLAVIA
ROMANIA
BULGARIA
UKRAINE
CAUCASUS MTS.
PYRENEES
BALKANS
CORSICA
SARDINIA
SICILY
CRETE
CYPRUS
RHODES
PALESTINE
TRANSJORDAN
SINAI
Danube R.
Rhone R.
Po R.
Douro R.
Tagus R.
Guadalquivir R.
Nile R.
Aswan
Cairo
Alexandria
Jaffa
Jerusalem
Bethlehem
Nazareth
Beyrouth
Damascus
Haifa
Lisbon
Oporto
Madrid
Seville
Cordova
Cadiz
Malaga
Gibraltar
Strait of
Valencia
Barcelona
Marseilles
Genoa
Florence
Leghorn
Milan
Turin
Venice
Trieste
Rome
Naples
Algiers
Tunis
Salonika
Athens
Piræus
Gulf of Corinth
Smyrna
Istanbul
Odessa
Land Heights in Feet
Over 10,000
6000 to 10,000
1500 to 5000
500 to 1500
Sea level to 500
300
400
500
Miles
R.M FORESTER

into the plains of France. A people called Celts were living there. The Celts fled, many of them going to England, which was then called Britain.

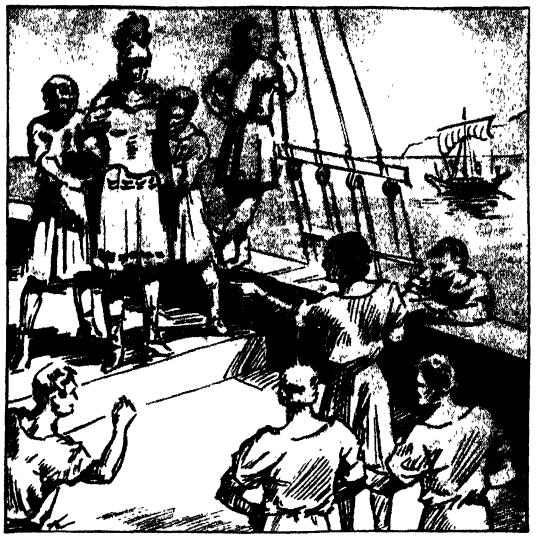
Where the tribes were living. Now look at the map on page 143 and find where the different tribes were living. You should understand that they did not "settle down" as the Mediterranean peoples had settled and become civilized. These barbarians did not entirely give up their roving life.

For nearly two thousand years before Caesar's time these barbarians had been wandering about central Asia and northern Europe. They hunted for the meat they needed, and at times they settled down for a while, living in rude huts made of mud and reeds. Sometimes they stayed long enough to harvest a crop of grain. Then they would move on to another hunting ground and plant crops again in some open space. Some of the tribes had tamed oxen, which they used for plowing and for hauling rude wagons.

Barbarian immigrants. Once in a while barbarians came into Roman territory and settled there. The Roman farmers probably did not object if a barbarian family or two settled near them, as long as the new-comers kept the laws and paid for their land. But more and more barbarians kept coming until the Romans began to worry about them. Study the map on page 143 and notice where the barbarians were pushing their way in.

Once, in early times, a tribe of Gauls had invaded Italy and burned the city of Rome. Now, as more and more barbarians entered the Roman lands, the Romans feared another invasion. They decided to conquer the barbarians and make them stay outside the Roman lands. The Romans then looked for a good general to lead an army into Gaul.

Caesar, the Roman hero. At this time a young man named Julius Caesar had become a hero to the Romans. The story begins with a band of pirates who hid among the bays and islands of the eastern end of the Mediterranean. The pirates captured richly laden merchant ships and held the passengers for ransom. On one of those captured ships was Julius Caesar. When he was ransomed, he told the pirates he would come back some day and hang them. They laughed at him.



When Julius Caesar was captured by pirates, he told them that some day he would return and have them hanged. At that time the Roman navy had not made the Mediterranean Sea as safe for travelers as was the land. On land the Roman army kept bandits from attacking travelers and plundering the people.

But Caesar did just what he had said he would do. He helped Rome to become the policeman of the Mediterranean. The pirates were cleared out, and Roman ships kept peace on the sea, just as the armies did on land.

Caesar was chosen to conquer the barbarians. He marched north with the army, defeated the barbarian tribes of Gaul, and drove back the Teutons to the north side of the river Rhine. Most of what is now France then belonged to Rome. Its rich fields raised grain for Rome, and Roman cattle grazed in its green pastures. Soon Roman colonists were established throughout the region, and gradually the Gauls learned Roman civilization.

You should not think of Gaul (the country which we now call France) as being nothing

The Romans built roads in Gaul, and many Roman farmers moved in to raise crops on the rich fields. The Gauls learned to build country homes like those of the Romans, as you can see by the picture. In this way another large part of Europe came to have a civilization very much like that of the Romans in Italy.

but a barbarian land up to the time of Caesar. There were many cities in Gaul, even then. You remember that the Greeks had colonies all along the shores of the Mediterranean. Look on the map on page 113 and find Massilia. There was a Greek city at that spot in the year 600 B.C., when Rome was still a little town. There were other Greek cities in Gaul, and many of the barbarians traded with the Greeks and followed some of the Greek customs and ways.

But after Caesar conquered Gaul, the whole country became a Roman province. Romans bought many things made in Gaul. For example, the Gauls made butter, which was new to the Romans, who used olive-oil. The people were given an opportunity to become Roman citizens and to have Roman laws.

Caesar also led an expedition across the narrow channel into the island of Britain. The Britons promised to pay tribute to Rome. After Caesar left, the Britons did not keep the promise, but at least Caesar had shown the way to that island. A hundred years later the Romans came back and conquered it. After that only a few more countries were added to the Roman Empire.

What Caesar did for Rome. Julius Caesar saw that the people of conquered lands would be better satisfied if they had more to say about how they should be governed. A law was passed which allowed the best people of conquered lands to become Roman citizens. They might even become members of the Roman senate, generals, or other officers. Some of the conquered cities were allowed to govern themselves.

Then Caesar turned his attention to things at home. The Roman calendar divided the year into months in a confusing way. Caesar asked the Greek scientists in Alexandria, Egypt, to help with the problem. They told him that a year was 365¼ days long. There couldn't be a part of a day at the end of a year, and so a whole day was added every four years. We call that year a leap year, and we have such a calendar today.

Caesar also had the laws of Rome arranged in order. Many beautiful buildings were put up—temples, public buildings, and even a library. Caesar was not only a great general in time of war, but a good leader in time of peace.

The plot against Caesar. All these things made Caesar popular with the common people. But many of the patricians hated and feared him. They said he was getting too popular and had too much power. He was accused of trying to make himself king. One day, as Caesar came to his seat in the senate, a number of the senators crowded around him and stabbed him to death. This happened in 44 B.C.

Caesar's death caused great excitement. The people hardly knew what to expect. No one knew who the next leader would be until finally Octavius, who was Caesar's grandnephew and adopted son, seized the power and became the Roman ruler.

The Roman Empire

Augustus Octavius Caesar, Imperator. While the Romans would not allow any man to call himself "king," they were willing that Octavius should have the title of *imperator*, for that meant only "commander of the army." Perhaps they did not stop to think that the man who commanded the army could make the people do as he wished. Our word "emperor" comes from *imperator*.

The army at this time was not like the old Roman army. When Rome was a small city, the army had been made up of free farmers who were not paid for fighting. The only reward was an opportunity of getting some land to farm. But later, soldiers were paid. Sometimes Romans hired men to take their places as soldiers. When Rome conquered other lands, the defeated country had to furnish soldiers for Rome.

Sometimes generals who commanded different Roman armies fought each other.

Not until the time of Augustus did the Romans use much stone for building. They used wood and a great deal of brick and stucco. Many pillars and columns that looked like stone were only brick, like those in this picture. The worker is covering the brick with a stucco made of marble dust. When polished, the pillar looked like real stone. Most roofs were of tile.

The Romans had great public baths that were like club-houses, except that many of them were free to all the people. Inside some of these huge buildings were hot and cold baths, pools, rest rooms, and even shops where food and clothing could be bought. Slaves attended the bathers, and other slaves kept the fires which warmed water and heated some of the rooms.

Julius Caesar had been in such a war. He knew how important it was to have a faithful army. Octavius knew it, too, and he kept his army satisfied by paying the men well. You can see that the general who commanded many troops was very powerful.

The people also gave Octavius the title "Augustus," which in a way means "Your Majesty." They also added the title of "Caesar," because his uncle Julius Caesar had been such a great man. For a long time after this the emperors of Rome were called Caesars. If you had been in Rome at this time, you would have heard the Romans salute young Octavius as "Your Majesty, Octavius the Emperor, Caesar!" After this we shall call him Augustus.

The Roman Republic was gone, and Rome was now ruled by an emperor, although it was some time before the Romans understood that they had lost their freedom. But from then on the people did not have much to say about how they were governed. You will remember

that the first time the people ruled themselves was in Greece. The second time was in Rome. Now that was all over, and it looked as if the two experiments of nations ruled by the people were failures. After the Roman Republic failed, no other people tried to govern themselves for hundreds of years.

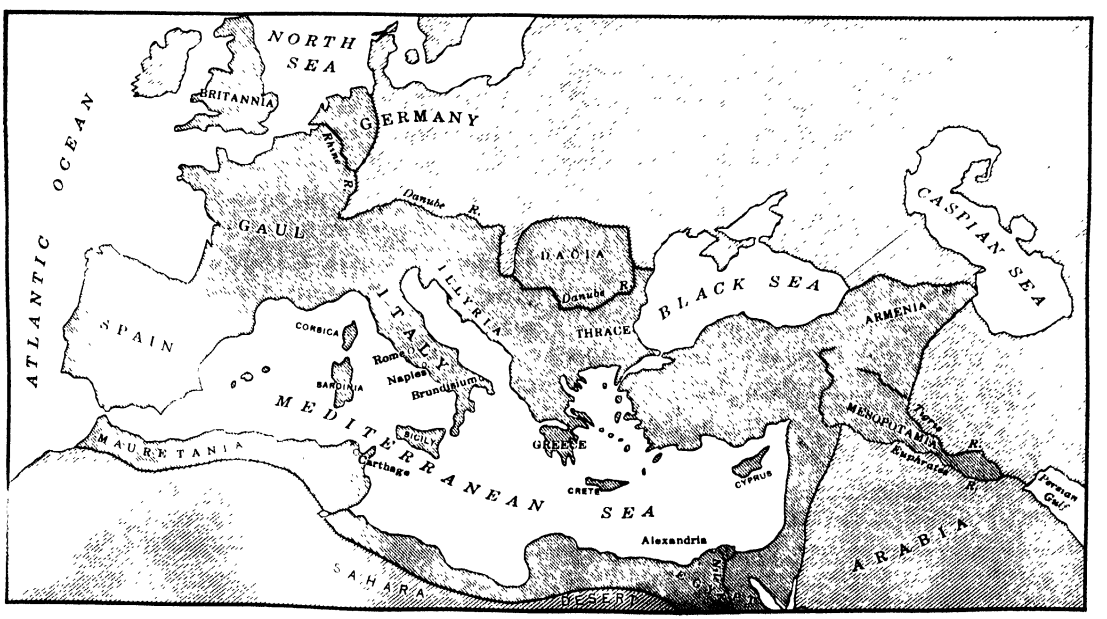
Civilization during the empire. Although Augustus ruled the empire for fifty years, he did not make it much larger. The only wars that were fought were against people who tried to break away and become independent. We do not know just how many people were living in the empire, but some students of history believe that it had about as many people as the United States has today, and that the city of Rome was almost as large as Chicago.

The peaceful time which began with Augustus lasted for about two hundred years. It was a wonderful period for Rome, at least for the rich people, just as the age of Pericles was a wonderful period for Greece.

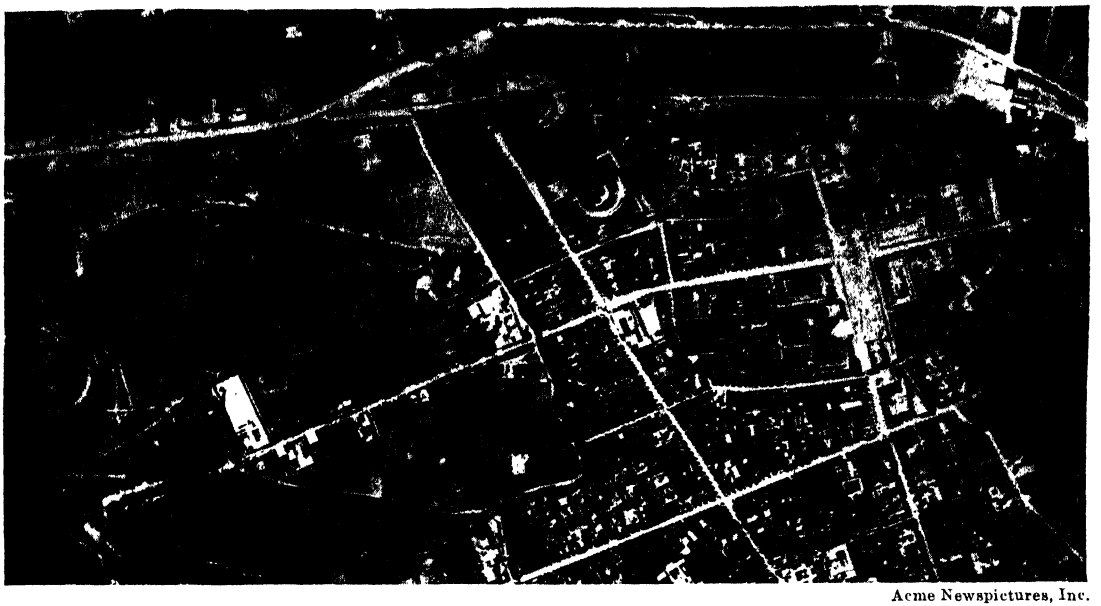
The Romans had spent so much time fighting wars and carrying on trade that they had not made much progress in painting, sculpture, or writing. They had been copying Greek temples, statues, and pictures, and had read a great deal of Greek literature. Now they began to make such things for themselves. Marvelous new buildings made the city of Rome beautiful; poets wrote famous books; and dazzling entertainments were given for all the people.

Famous Roman books. For a long time the best books in Rome were written in Greek, because educated Greeks had written them. But as the Romans became better educated, they began to write books for themselves in Latin.

Vergil was a great Roman poet. He told the story of early Rome in his famous *Aeneid*. Besides poetry and tales of heroes, the Romans especially liked orations, or public talks. Cicero was a great Roman orator, a famous senator who wrote brilliantly. Some day you may read Cicero's *Orations* and also the story that Julius Caesar wrote about his campaigns in his *Gallic Wars*.



During the time of the first emperors Rome spread out until it ruled all the lands around the Mediterranean Sea. All these lands had to pay taxes to Rome and help to support the Roman armies. All of them helped to supply Roman cities with food and the Roman armies with men. No wonder Rome became powerful.



Acme Newspictures, Inc.

This air view of Pompeii looks like a view of a city of today. You can see the houses, the narrow streets, and the wide boulevards. You can see a stadium and an open-air theater. But almost all of the houses are without roofs, for Pompeii was covered with ashes from Mt. Vesuvius more than two thousand years ago.

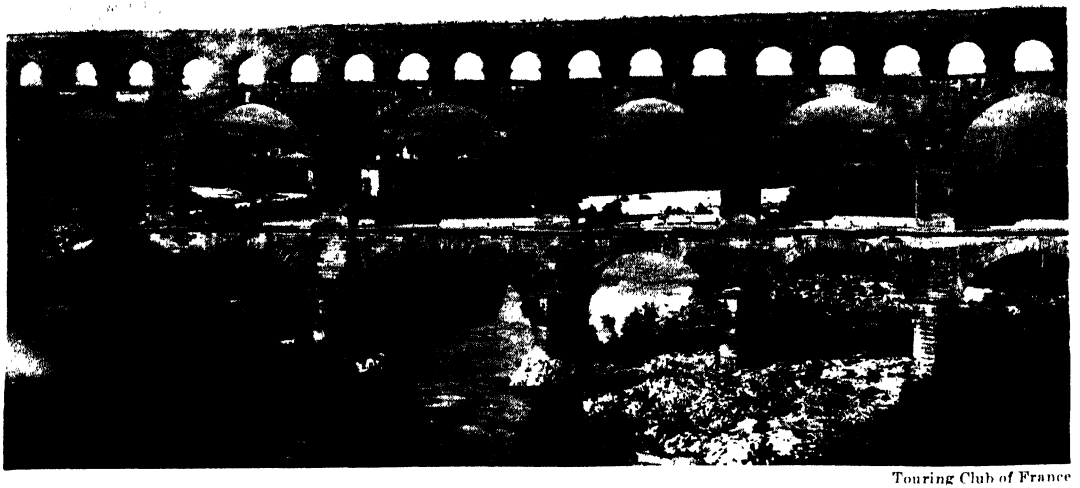
How Latin became a great language. Latin is important because so many languages of today grew out of Latin or have many Latin words. One very useful thing the Romans did was to make Latin the language of much of the world of their own time. Of course the traders used Latin, because it made business easier. But the scholars and the scientists used the Greek language.

Augustus founded a university at Rome. Other universities were started in other Roman cities. All these helped to make Latin the language for learned men to use.

The Romans had very few men like the great philosophers of Greece, such as Plato, Socrates, or Aristotle. Possibly they were too practical to spend much time wondering about life and nature and the reasons for things. The Romans were more interested in knowledge that could be put to immediate use. Perhaps that is why their greatest work was in building.

How Roman buildings were improved. Augustus liked to say that he found Rome a city of brick and left it a city of marble. In a way that was true. Before Augustus, the houses and many other buildings were of brick and wood. The early Romans had no marble to use. But they did find a soft limestone near Rome and used that for some of their large buildings. When trade became good and Rome was wealthy, the Romans imported stone from great distances. In the time of Augustus they brought marble from Carrara in northern Italy, and from Greece. They brought granite from Egypt and from other countries.

Imported stone was very expensive, and the stone from near by did not last long. The Romans, then, were always looking for a better kind of building material. They learned how to make concrete. But concrete was not beautiful like marble. They used it for foundations where it did not show. Or they built walls of concrete and then covered the walls with bricks or with thin slabs of fine stone. Sometimes they used stucco, which is a kind of plaster.



Touring Club of France

This aqueduct was built to bring water to a Roman city in Gaul. The water flowed in a covered canal on top of the smaller arches. Sometimes the aqueducts were many miles long and had to be built over valleys and across streams such as this one.

Rome was not the only city where the Romans built large buildings. There were many cities in Italy and in other parts of the Roman Empire where beautiful temples and great public buildings were erected. The picture on page 192 shows one of the many fine buildings located a long way from the city of Rome.

If you will look closely at pictures of Roman buildings and then at pictures of Greek buildings, such as the ones on pages 90 and 104, you will notice some differences. Perhaps the first thing you will notice is that the Romans liked flowery ornaments. Another difference is in the doorways and windows. The Greeks did not use arches and always had square-topped doorways and windows. Their roofs were flat or sloping. The Romans learned how to make arches from the Etruscans. They used arches not only for doorways and windows, but for roofs and for bridges. They found out how to make a dome by crossing arches. Do you see how they did this?

The arch helps to make a building strong, and that is one reason why so many Roman buildings are still standing today. Arches are particularly useful for making bridges. There are many Roman bridges still being used in Italy and other parts of Europe.

How cities were supplied with water. That series of arches you see in the picture on this page is part of an old aqueduct. These are great stone troughs which the Romans made in order to bring pure water to the cities. Wherever the Romans went, they made certain that their cities had plenty of water. During the time of Augustus many Roman homes had water piped into them. Large brick sewers underground carried away the waste. As the cities grew larger, water had to be brought in from great distances, just as for some of our cities today. At one time there were eleven large aqueducts bringing water to Rome from many miles away. Even today we can see Roman aqueducts stretching across the country-side in Italy, France, and Spain. So well were they built that some are still in use.

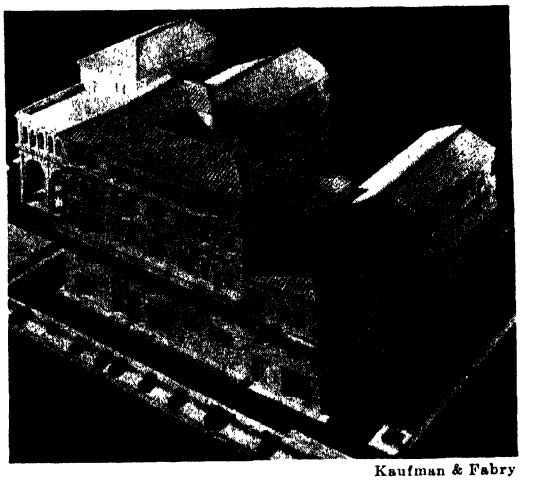
Public buildings of the Romans. Do you remember the kind of large buildings the Greeks, Egyptians, and Assyrians built? They had beautiful temples and palaces for their kings, but no buildings like our town halls,

libraries, or schools. The Romans built beautiful temples, too, but they also constructed other kinds of buildings.

All day long the public baths were thronged with people, for Romans of the best class spent several hours at the baths each day, especially during the hot summer. Do you wonder how they found time? You must remember that slaves did practically all the work.

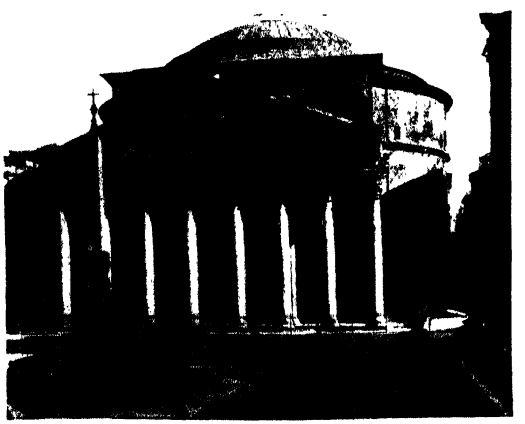
Another place where the Romans enjoyed themselves was the Circus Maximus. This was a stadium about six blocks long and two blocks wide. There were banks of seats rising around the track. The topmost seats were one hundred fifty feet above the ground. More than one hundred fifty thousand people could sit there to watch the races on the track and other shows. Whenever a Roman general came home from a war, he feasted the people and gave them free entertainments in the Circus Maximus.

After a time the Romans wanted a finer stadium of stone and marble. The Circus Maximus was built partly of wood and was most suitable for races. The people wanted greater thrills. An emperor who came later than Augustus built the Colosseum. In the Colosseum were held all kinds of fights, sometimes between men and wild beasts, and sometimes between trained men called gladiators. Usually the fights did not end until one man had killed the other. The Romans enjoyed these cruel fights more than races or plays and wanted more and more of them.



Kaufman & Fabry

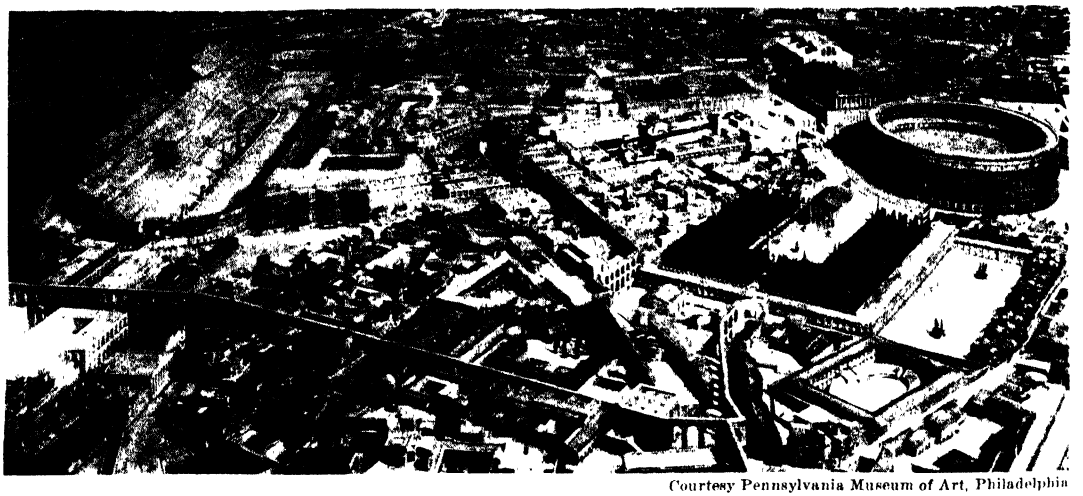
This model of a Roman apartment-house looks like some of our buildings of today. This one is five stories high. There are shops on the ground floor, and you can see a roof-garden. In Roman times such buildings were made of brick and wood, with tile roofs. Only by having tall buildings could Rome take care of its very large population.



This building in Rome was a temple to all the gods, and was called the Pantheon. It is still standing with its walls and roof in good condition. A round opening in the roof, thirty feet across, furnishes light for the inside. When the Emperor Agrippa built the Pantheon, architects knew how to build domes on round buildings, but not on square ones.

The Roman Forum. The Roman citizens spent much time in the Forum, which is the name they gave to their public square. Since very early times the people had left an open space in the center of their towns. In that open place they bought and sold goods, met together to decide about war and peace, tried men for crimes, and held their games. At first the buildings around the public square in Rome were of wood. Probably they were vegetable stands, cattle pens, warehouses for wool, and platforms for speakers. Because they burned so many times, the Romans rebuilt them of brick.

When Rome became too large for so many different activities in the Forum, the markets were moved to other parts of the city. Thea-



Courtesy Pennsylvania Museum of Art, Philadelphia

This model of the city of Rome shows many buildings which the Romans built centuries ago. On the left you see the Circus Maximus, where the chariot races and games were held. On the right is the famous Colosseum, where some of the Christians were thrown to wild beasts. And here the emperor gave shows in which men were paid to fight each other for the amusement of the people. These fighters were called gladiators. Notice the aqueducts which run through the city. These carried water to supply the city.

ters were built to take care of the entertainment of the people. And so the Forum came to be the place where only public business was carried on. Here Caesar and Cicero made their speeches. Near by was the building where the senate met to decide on the laws. There were other buildings for government workers, courts, and many temples. It was the center of Roman life.

Augustus began his new buildings in the Forum. He had many of the old brick and soft stone buildings torn down and replaced by marble ones. Splendid temples were built on all sides. The citizens became very proud of their Forum. A kind of daily newspaper, telling what the government was doing, was written out and displayed here for the people to read.

When a Roman boy was fifteen, he went with his father to the Forum and wrote his name on the list of Roman citizens. From that day he was considered a man, with all the privileges and duties of a citizen.

Opportunities for Roman boys. During the time of the emperors, Roman boys had a choice of many businesses to enter. In the early days there had not been so many. Then a young man might become a farmer, a trader, or a shopkeeper, or learn some craft, such as stone-cutting. As most Romans owned farmland and food was always needed for the growing city, farming was a safe and sure way to earn a living.

In the time of the empire most of the food came from lands outside of Italy. People in Africa and other countries, who did not live so well as the Romans, could produce food much more cheaply than could the landowners in Italy. Only Italian farmers with many slaves could raise cheap food. But there were other businesses for the Roman boys.

The Roman youths could become traders, for the Romans carried on business with all parts of the Mediterranean World. There were large banks, importing businesses, wholesale houses, and retail stores. Very little manufacturing was done, because it was much cheaper to bring in the goods from other countries. Numbers of young men became engineers or architects and built aqueducts, bridges, and public buildings. Others decided to study law, for there were many lawyers in

those days. Some young men took government positions of different kinds. The army also attracted Roman youths.

Roman schools. Roman boys had to go to school in order to succeed at most of these careers. Everyone had to pay to go to school, since there were no public schools such as we have today. Some schools were very cheap and cost boys and girls who were learning to read and write about two cents a day.

Roman boys and girls did not have to go to school every day. In the time of the emperors there were 175 holidays a year. On those days no one worked; everybody went to public festivals or games.

There were other schools, too, somewhat like our high schools and colleges, and Roman boys studied many of the subjects we study today. These schools were private and cost much more than the lower schools. After learning to read and write, most girls left school and spent the time at home, helping to manage the household.

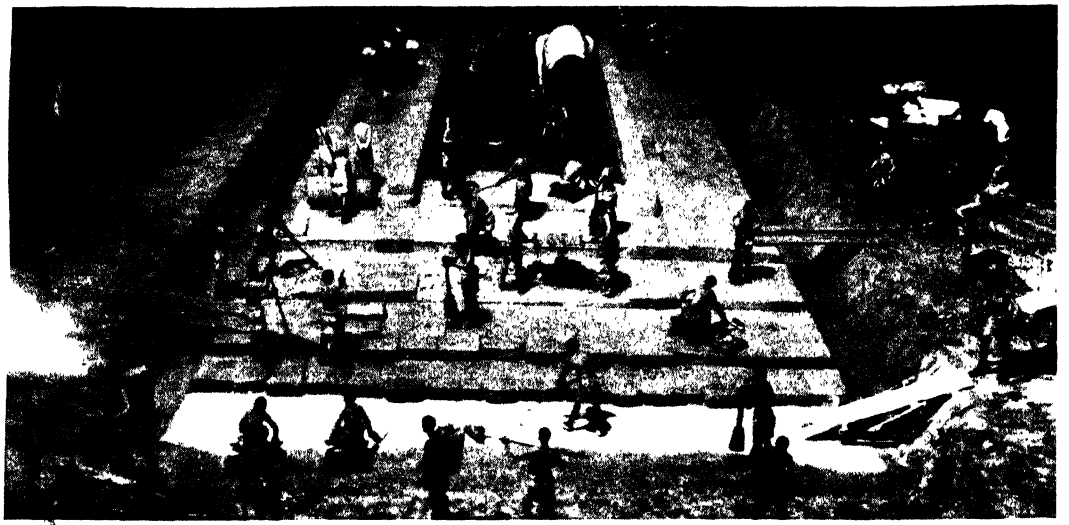
What Held the Roman Empire Together

Look at the map on page 132 and see what a large empire the Romans had. It stretched from the Atlantic Ocean almost to the Persian Gulf, and from the Sahara Desert to the North Sea. It was full of many different peoples, and yet the Romans ruled it and kept it together for a long time. Several things helped to make this possible. Let us see what some of them were.

The Roman colonies. In all of these lands there were colonies of Roman citizens. Almost every Roman ship sailing from Italy carried Romans who were moving to some distant place to settle down and "grow up with the country." The map shows how Italy was the center and how easy it was for Roman ships to reach almost every corner of the great empire.

By land, the valley of the Rhone River made a natural gateway to the north. Notice

One end of the Roman Forum appeared like this in the days of the emperors. The buildings which surrounded it were temples to the various Roman gods. Some of these were of brick covered with stucco to look like marble, and others were of marble. Through the arch at this end marched generals and their victorious armies in great parades called "triumphs." At the right you can see buildings on the Capitoline Hill.



Museum of Science and Industry, Chicago

A museum made this model to show how Roman roads were constructed. It shows the workmen digging the ditches to drain the road, leveling off the ground, and laying the foundation. Others are putting on the top layers and rolling the completed road. This kind of Roman road had a central lane for heavy traffic and side lanes for foot traffic. In the upper left corner notice the surveyor looking along his instrument.

that the mouth of the valley is not far from Italy. See how the valley stretches northward into Europe. After Caesar conquered Gaul, Romans began to move up that valley and settle all over the rich land that is now France. There were soon hundreds of estates, or villas, belonging to Romans. Each of these villas, with its dozens of slaves to do the work, was like a little colony. The same thing happened in many other countries.

It was easier for Rome to build up an empire that way than it had been for Greece. There was more fertile land for the people, and Italy was in the center of it all.

The wonderful Roman roads. The Persian king, Darius, you remember, built long, smooth roads so that he could travel quickly to many parts of his empire. But the Persian roads could not be compared with the famous roads built by the Romans. So well built were they that the foundations of many Roman roads are still used today. Perhaps you have heard the expression "All roads lead to Rome." That is just what the Romans intended they should do. Rome was the center of the empire, and good roads connected Rome with many parts of her empire.

These Roman roads were made for two purposes. One was to permit the armies to rush to any place where rebellion threatened. Armies had to march on foot in those days. There were no trucks or railroads to move them swiftly, as armies move today. In some places the army road could not be used for any other purpose. The soldiers themselves built the roads, and no expense was spared to make them straight and level. Engineers today say that the Romans always selected the best routes for their roads.

The second purpose of the roads was just as important. Food had to be brought to Rome from many parts of the empire. The large population of the great city could not be fed by crops grown close at hand. You know that one of the reasons Rome conquered so many other lands was to secure plenty of food. After these countries had been conquered, there had to be a good way to get the food to Rome. Ships could be used to bring food from countries on the Mediterranean

coast, but food from other countries had to be carried overland on roads.

The armies, too, needed food. Rome wanted wheat fields near her armies, and the armies could then protect the fields. For instance, the armies along the Rhine were fed with wheat from Britain. The grain came across the channel in ships to the mouth of the Rhine. Trace the route of the food on the map on page 132.

The main roads through the cities were wide. But the other streets were narrow and had raised walks at the side for people on foot. At street corners were stepping-stones about a foot high. They were useful after a rain, when the streets ran deep in water. Few cities had sewers like those of Rome.

Outside the cities the great roads were wide and smooth so that traffic could move quickly. They were most carefully built. First there was a layer of coarse stones, on top of which came a layer of finer stones. All these were held together with mortar. The top was a layer made of blocks of hard stone, fitted very closely together. People traveling in Europe today sometimes ride on one of these old roads. Then they are astonished at the patience and skill the Romans must have had to build such lasting roads.

Slow ox-teams pulling heavy two-wheeled wagons transported most of the Roman freight. There were larger wagons with four wheels, often pulled by four or more oxen. Some men rode horses; others traveled in carts that looked like chariots turned around. Rich people often traveled in litters which were swung between long poles carried by men. Many streets had stepping-stones at intervals so that people could cross when it was rainy or muddy. These stones must have slowed up the traffic through the city.

Bettmann Collection

These soldiers are transporting provisions for the army by boat. Notice the steering oars. Rudders had not yet been invented. This picture is from a carving on a huge stone column erected by the Emperor Trajan. Around the column, from top to bottom, were carved scenes which showed the emperor's army life.

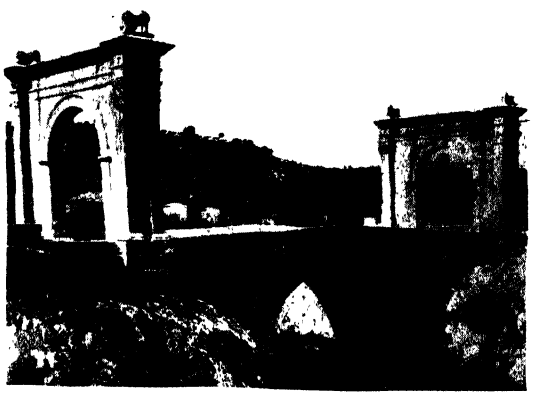
Probably the first great road the Romans built led north into Gaul. But the most famous was the Appian Way. Like all the others, it began at a bronze post in the Forum at Rome. This was called the Golden Milepost. Along every road were mile-posts showing how far it was to Rome. The Appian Way led south to Naples and then across to Brundisium, a port in southeastern Italy. Find Brundisium on the map on page 132. This was the road traveled by the Romans when they went to Egypt and eastern countries.

Suppose for a moment it is the year 200 A.D., and we are sitting on a mile-post beside the Appian Way. All day long a stream of travelers passes in chariots, sedan-chairs, litters, on horseback, on donkeys, and on foot. Here are merchants going up to Rome with lumbering wagons of grain from Egypt, Macedonia, or Asia. Other merchants have loads of silk, pearls, and spices from Asia, and wines from Greece. Suddenly the road is

cleared for the consul and his legions marching on their way to fight the Persians. Next come gay, rich young men riding in litters carried on the shoulders of slaves. They are on their way to the universities at Rhodes, Alexandria, and Antioch. Perhaps those plodding Jews are going to Jerusalem to pay their yearly tax to the temple. The Christian pilgrims are on their way to the tomb of Jesus. Here comes a messenger on a galloping horse. The emperor is sending orders to a general in Romania. A fast boat, rowed by a hundred slaves, will take him from Brundisium across to Illyria (now Albania). Another road there leads on to Romania.

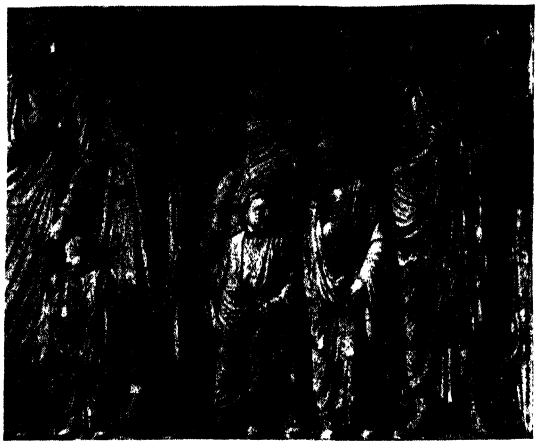
Today, if we should drive along the Appian Way, we should see tombs, monuments, and statues, and many ruins. In the time of the empire, it was the custom to bury famous people along this road. The people passing were reminded, by the tombs and the statues, of the dead persons and their famous deeds.

Uniform coins, weights, measures. Roman traders followed the Roman army. And wherever the trader went, he took Roman coins. It was handier for everyone to use coins of one kind. The Roman weights and measures were used, too. Trading was easier and fairer with weights and measures the same all over the empire.



Touring Club of France

The Romans built this fine stone bridge across a small stream in the country that is now France. It was so well made that it is still used. Many reminders of the Romans' skill in building are to be seen in France, Spain, and northern Africa. Others are found in England, Germany, Austria, and Romania.



Alinari

In this Roman carving you can see how Roman men, women, and children dressed. Men wore shorts and a loose-fitting garment called a tunic which reached the knees. Over it they draped the toga, which was a long, wide piece of woolen cloth. It was thrown over the left shoulder and draped about the body. Only Roman citizens could wear togas; foreigners were forbidden them. Women wore two tunics, and over them a cloak called a palla, somewhat like a toga. Children dressed in much the same way as their parents.

Wise laws and government. You have read that the Roman laws were so wise and just that they have been used as models even down to the present time. Those good laws helped to hold the empire together. The officials sent from Rome carried out the laws and kept peace and order. People liked the government because it helped them to live in safety and comfort. The laws were improved and made fairer in many ways. The Roman Empire was a successful kind of government.

How religion helped. The Romans did not interfere with the religion of conquered peoples, who were allowed to worship as they pleased. But the Romans knew that worshiping the same gods made people feel bound together. So they built temples to the Roman gods in cities and towns all over the empire. Festivals were held to honor the Roman gods, and gradually many people came to worship as the Romans did. You see, they wanted to have the holidays and take part in the festi-

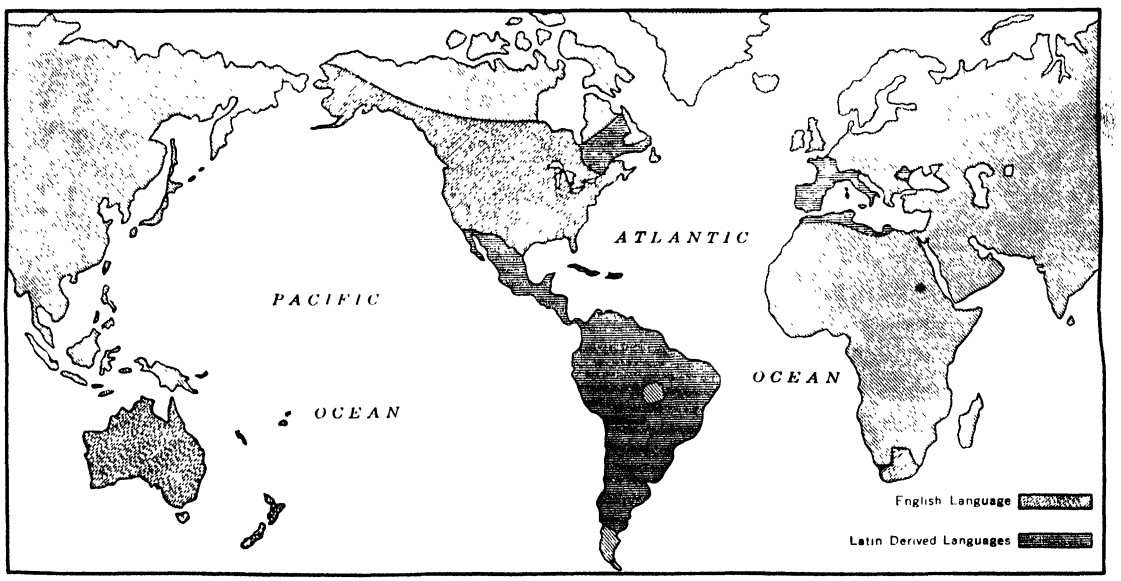
vals. Of course all the officials took part in the regular worship of the Roman gods and made public sacrifices as an example to the people.

The spread of Latin. You have read about the Latin language and know that it spread over the empire. It was easier to trade if both buyer and seller used the same language. Government officials also carried the use of Latin into far parts of the empire. Three teachers of Latin were sent into every important city and town in the empire. They taught the people Latin, rhetoric (the study of careful writing), and oratory. Educated people in many lands came to know the Latin language, too, from reading Latin books. That is why Latin had such a great influence on the languages of Europe. The Italian, French, Portuguese, and Spanish languages of today all come from Latin. More than half of the words in the English language come from Latin words.

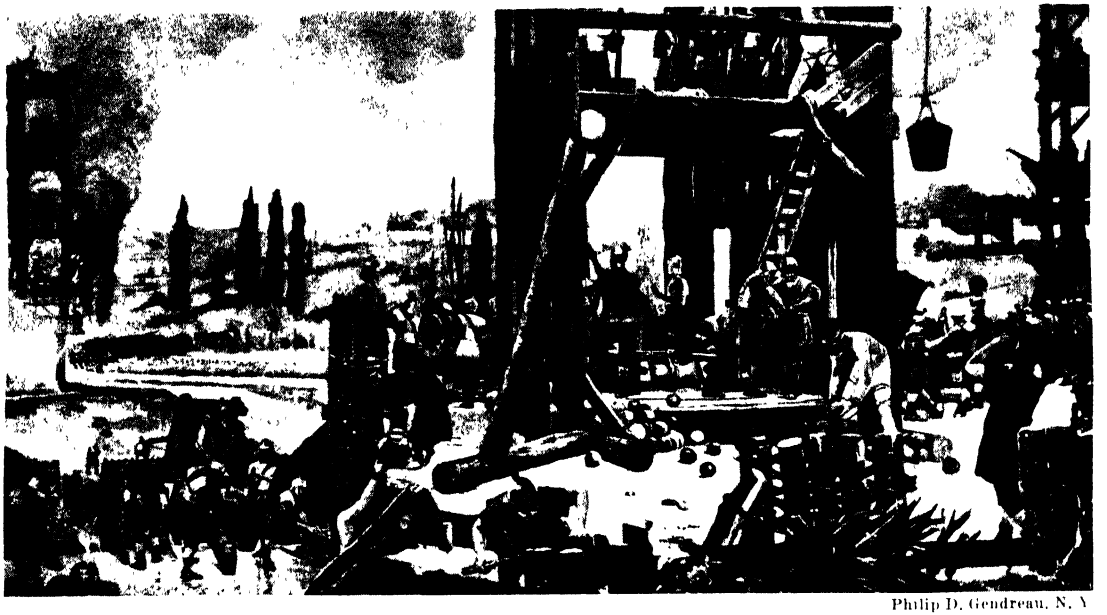
Like so many Roman activities, this school is being held outdoors. On the bench are an ink-well, an open tablet, and a roll of papyrus. The tablet was made of two thin pieces of wood with a coating of wax. The pupils wrote on the wax with a pointed implement called a stylus. Two of the boys in the picture are holding rolls of papyrus. These were the books. You can also see a case in which the rolls were kept. Our word "volume" comes from the Latin for "roll."

How Rome Became Weak

Why the Roman Empire fell to pieces. For nearly two hundred years after Augustus the Roman Empire was strong and prosperous. Roman citizens in Babylon, Palestine, Dacia, Britain, Gaul, Spain, and northern Africa looked to the Roman armies for protection. The citizen in Rome, or in Memphis, Egypt, or in Vienna on the upper Danube was tried by the same laws, and paid his taxes into the same treasury. Everywhere men were



This map shows you where people speak languages which have come from Latin. It also shows where the English language is spoken. Many words in the English language were taken from Latin or from languages that developed from Latin. Can you name some of those languages?



Philip D. Gendreau, N. Y.

The Romans did not have cannons or know anything about gunpowder, but they did make machines to hurl stones and huge arrows. They built towers from which men could fight and battering-rams to break down gates and walls. Notice what the various men are doing in this picture of the siege of Alesia by the Romans.

glad to be Roman citizens because citizens had rights which were always respected.

After Augustus, many different emperors ruled—some well, some badly. But finally the bad emperors ruined the empire, and it began to break up, just as Alexander's great empire had more than six hundred years before. Let us see how this happened.

Dividing the empire. About 330 A.D. the Emperor Constantine decided that the empire was too large for one man to rule. He appointed assistants and divided the empire into four parts. He took the eastern half for himself. On the shores of the Hellespont he made his capital, a city named after him—Constantinople. Now the city is called Istanbul.

The barbarians push their way in. Even after being divided, the empire might have lasted a long time if it had not been for the barbarians. There were many different tribes of them living beyond the borders of the empire. There were Goths, Vandals, Lombards, and many others. For centuries these tribesmen had been moving about in northern Europe. As they did not produce any more than just enough food for their own use, and had little wealth, the Romans had not been interested in conquering them.

These barbarians were dangerous neighbors for the peaceable Roman farmers. Bands of them occasionally invaded Roman territory and plundered the country-side. By this time the Roman army was not strong enough to defeat the barbarians. The Romans built a wall across what is now southern Germany to keep out some of the tribes. Along the Danube and other rivers there were forts with garrisons of soldiers to hold back invaders.

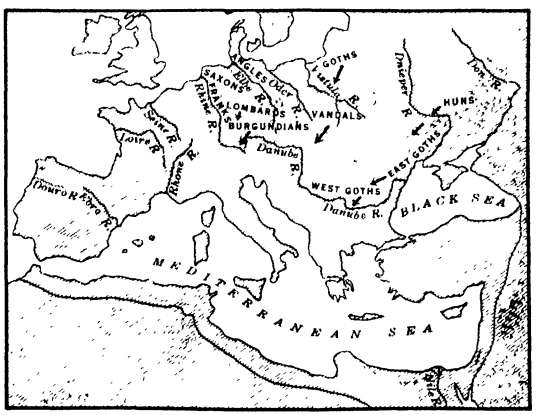
But the garrisons of Roman soldiers were sometimes made up of barbarians! That seems strange, but it is true. The Romans made the mistake of hiring barbarians as soldiers. These men were taught to fight in the Roman way. When the barbarian soldiers went back home, they told of the wonderful cities and wealth of the Romans. No wonder the tribes wanted to move into Roman territory. After a time they did move—not just a

few at a time, to buy small farms and settle down, but in large bands to conquer and plunder.

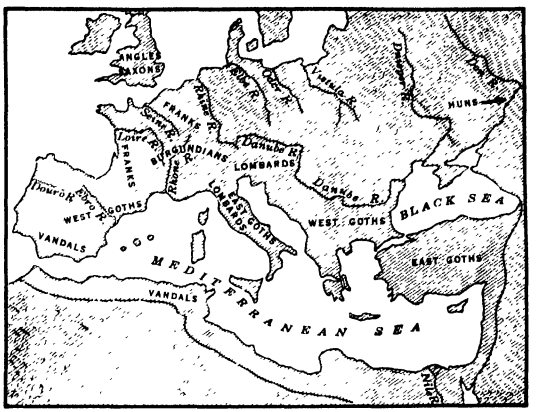
Goths, Huns, and Vandals. First came the Goths from the borders of Dacia, north of the Black Sea. Two bands of them came into the empire. The East Goths crossed the Danube River and moved toward Constantinople. The West Goths crossed the Rhine River and forced their way into Gaul. Then they invaded Spain and Italy. They even captured the city of Rome and robbed it. But they did not stay there. Afterwards they moved into Spain and settled down.

Next came another tribe called Vandals. Probably they came from the land south of the Baltic Sea. They passed through Spain on their way to Africa. From Africa they crossed to Sicily and marched on Rome. The Vandals burned and robbed Rome and carried away stores of treasure. What they could not carry away, they destroyed. Today, when people destroy things that they cannot use, we call them vandals.

Out of the plains of far-off Asia came another fierce tribe of a different people. These were the Huns. They came from the region of Mongolia, north of China. The Chinese had been fighting them off for many years. Huns were expert horsemen; one writer said they even slept on horseback. Mounted on their tough little horses, the Huns swept everything before them as they rode westward. They scattered the Goths and laid waste much of western Europe.



Barbarian tribes lived along the northern border of the Roman Empire, as you can see by this map. What two rivers formed a natural boundary? Notice where the different tribes lived. The arrows show the direction in which these peoples were moving as other tribes in the north and east crowded into Europe.



This map shows where the barbarian tribes settled after they entered the Roman lands. Some of them, such as the Vandals and Goths, traveled long distances before finding homes. Most of the Huns went back to Asia. In most of the lands the barbarians did not drive out the people who were there, but settled down with them; and the two peoples gradually mixed.

Under their leader Attila, the Huns moved into Italy and plundered wherever they went. The people who lived in the Po Valley had to flee to the marshes at the mouth of the river to hide. They built homes on the small islands where the Huns could not reach them. Today that piece of swampy land is the beautiful city of Venice.

The Roman army couldn't keep peace any more, either along the borders or within the empire. When the soldiers grew tired of an emperor, they drove him from his throne and selected another to suit them. Romulus Augustulus, the last emperor in Italy, was a sickly, timid boy. The people were taxed so heavily during his short rule that everyone was glad when some of his own barbarian soldiers drove him from the throne. The leader of the rebel troops made himself ruler of Italy. But he sent word to the emperor in

In 476 A.D. the young emperor of Rome, Romulus Augustulus, surrendered to one of his own rebellious generals. Odoacer, although a general in the Roman army, was not a Roman but a barbarian. We call this surrender the end of the Roman Empire.

Constantinople that he would pay tribute to the great Roman emperor. You see, the name "Roman Empire" was still powerful, although the western part of it was broken up.

The Byzantine Empire. That eastern half of the Roman Empire was called the Byzantine Empire from Byzantium, an old name for Constantinople. It lasted about a thousand years longer than the western part. The map on this page shows you how much of the Mediterranean region it controlled. Much of it was once a part of Alexander's empire.

After Alexander's death, you remember, his empire fell to pieces. Then Rome conquered many of the countries that had been a part of it. The Romans built roads through the hills and valleys and erected temples and palaces in the important cities. It was this part of the Mediterranean World that Emperor Constantine decided to rule when he divided the Roman Empire into two separate sections.

The Byzantine Empire lasted for centuries, but finally the Turks captured it, as you have read. That happened in 1453. It is often said that the Roman Empire fell in 476, because that is the date when the Teutons captured the last emperor in Italy. But you see that part of the Roman Empire lasted until 1453.

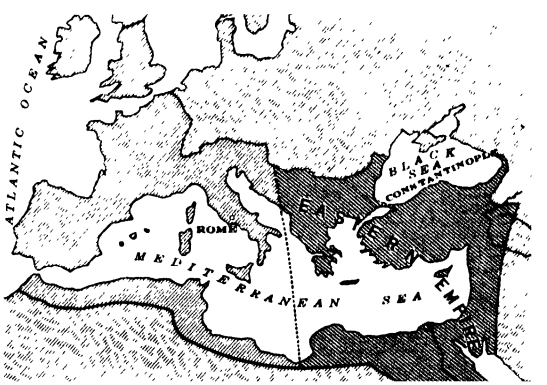
One other emperor of the Byzantine Empire, Justinian, needs to be remembered. He had all the Roman laws written down and sorted out into what we call a code. It is called Justinian's code. Many of the wise principles of law in this code are used in our laws of today.

What Rome Gave the World

Rome gave the world several important things. Romans showed that wide empires could be ruled with wise and just laws. The Romans showed people how to build solid roads, how to take care of sewage, how to furnish large cities with pure water.

Rome did not give the world such wonderful works of art as did the Greeks, but the Romans did leave many beautiful buildings, statues, and paintings. The Romans were the first people to make much use of arches in building. They were the first to make domes.

A nursery for religion. But perhaps the greatest thing Rome did for us was to be a kind of nursery for the Christian religion. To understand how important this was, we must learn a few things about this religion and see how it spread through the Roman world.



After the Roman Empire was divided, there were two capitals. The new capital at Constantinople was the home of the emperor, but Rome remained important in many ways. The emperors at Constantinople were able to keep their part of the empire together for many years, but the western part became divided into many small kingdoms. It was not possible for one ruler to unite all these kingdoms into a single strong empire like the old Roman Empire.

British Museum

These Roman carpenter tools were found in England. There are two squares and two plumb-bobs, very much like those used today. There are two pieces of a saw and a hammer head also. The Romans made very good tools, and their workmen were expert.

While the great Augustus was emperor of Rome, Jesus was born in the city of Bethlehem. That was in Judea, a part of the Holy Land which belonged to the mighty Roman Empire. So important did this event become that it marks the year 1 for all Christians. We record the time before the birth of Jesus as "B.C.," meaning "before Christ." The time after that is marked "A.D." That stands for "Anno Domini," a Latin expression that means "in the year of Our Lord."

The Hebrews, as you have read, believed in only one God, while the Romans, like the Greeks, believed in a number of different ones. Jesus, after He grew to manhood, taught that God was a kind and loving Father to all mankind. A very important part of His teaching is that we are all brothers and sisters and should love and be kind to one another.

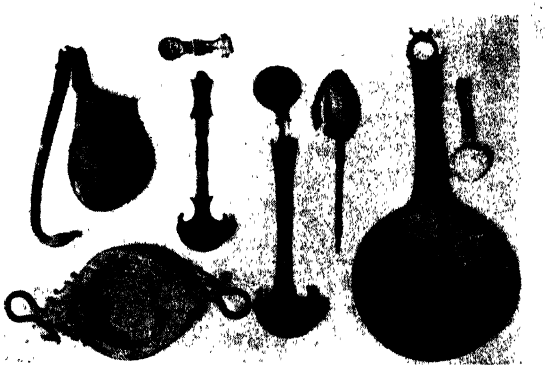
How Christianity grew. The disciples of Jesus helped to spread His teachings. They carried on His work after Jesus had been crucified. To do this, they traveled from Judea into many lands around the Mediterranean Sea. Almost everywhere they went, they were in Roman territory, and you know that for a long time the Romans allowed people to worship as they pleased. Many patricians and wealthy Romans became Christians.

It was not long before many of the common people—the plebeians and slaves—became Christians. In a time when only the rich were able to enjoy life, the poor people found hope and comfort in Christianity. They hoped that a time would come when everyone would realize that all men were brothers. Then there would be no slaves and no oppressed people. Gradually the Christian religion spread until its influence became very great among both rich and poor.

The persecution of the Christians. Just at the time when thousands of people were joining this new religion of Jesus, a change came. The Roman emperor decided to make his people worship him as though he were one of the gods. Christians would not do this. They would not take part in any processions in honor of the Roman gods. They would not offer any sacrifices on altars in front of statues of the emperor. The Romans looked on this refusal of the Christians as a rebellion against the government.

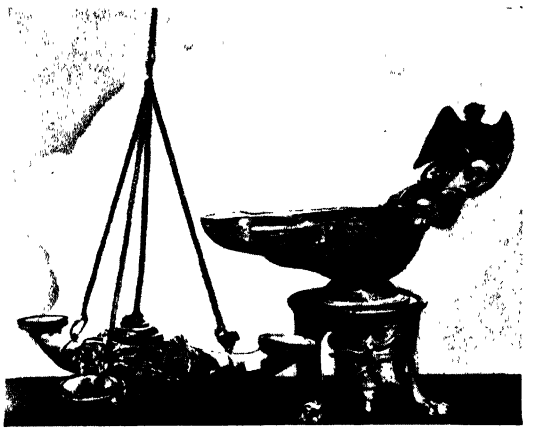
For many years the followers of Christ were persecuted. They were tortured and even sentenced to death. They had to worship in secret. Those who lived in Rome used to meet in underground rooms on the outskirts of the city. The ruins of these cave-like rooms, called the Catacombs, are often visited by travelers today.

The Christians thought that the fights of the gladiators were wrong and sometimes



British Museum

These kitchen strainers, ladles, and spoons were carefully made by hand. Notice how the holes in the strainer at the right form a flower pattern. The other strainer has unusual handles. The dipper at the upper left has a hinged handle. It was used for deep jars.



Roman houses were lighted by lamps which burned olive-oil or melted animal fat. In the spout of the lamp was a wick made of twisted threads. Fine lamps were made of bronze and were often decorated beautifully. Common lamps were made of clay. Some were made to stand on tables; others hung from chains like one of the lamps in this picture. It had three spouts in order to give more light than a single lamp. Such lamps were also used in other Mediterranean lands.

tried to prevent them from being held. Many Christians were thrown into the arena of the Colosseum to be killed by wild beasts.

But even this terrible persecution did not prevent the new religion from growing fast. Every year thousands of people joined. At last the Emperor Constantine became a Christian. He decided to make Christianity the religion of the empire and to give up the worship of the old Roman gods and goddesses.

Time went on, and the Christian religion became more and more important. As you read farther in our story, you will learn that the Christian religion saved civilization when the barbarian tribes conquered the Roman lands. Later you will read how important religion and the Church became in the lives of people.

The story moves again. Now, have you noticed how the scene of our story about man has been moving? It has been shifting from the valley lands at the eastern end of the Mediterranean toward the north and west. Now it is going to move again, north and west, toward the lands about the North Sea and the Baltic Sea and the broad Atlantic Ocean. But before we take up that part of the story, let us go west and see what happened in the Spanish, or Iberian, Peninsula. Then we shall glance over the whole Mediterranean World as it is today.

Talking Things Over

1. Name the empires you have studied this year and others you know about. In what ways are they alike? Think especially of how they started, of changes in the way people lived, and of how the territory became larger or smaller.

2. Think of differences between the governments of the Athenians and the Romans. Could the Romans have talked things over as the Greeks did? What difference would it have made if there had been air-mail, telephones, and radios in those days? What other means of communication have been invented since the days of Rome that have enabled millions of people to share each other's ideas?

3. Do you know who owned the Roman water system? Who owns the waterworks in your community? Do you pay for the amount of water you use, or do you pay a tax and use all you want? What difference would it make if the water business were owned by a private company and you had to buy the water as you buy clothes and food?

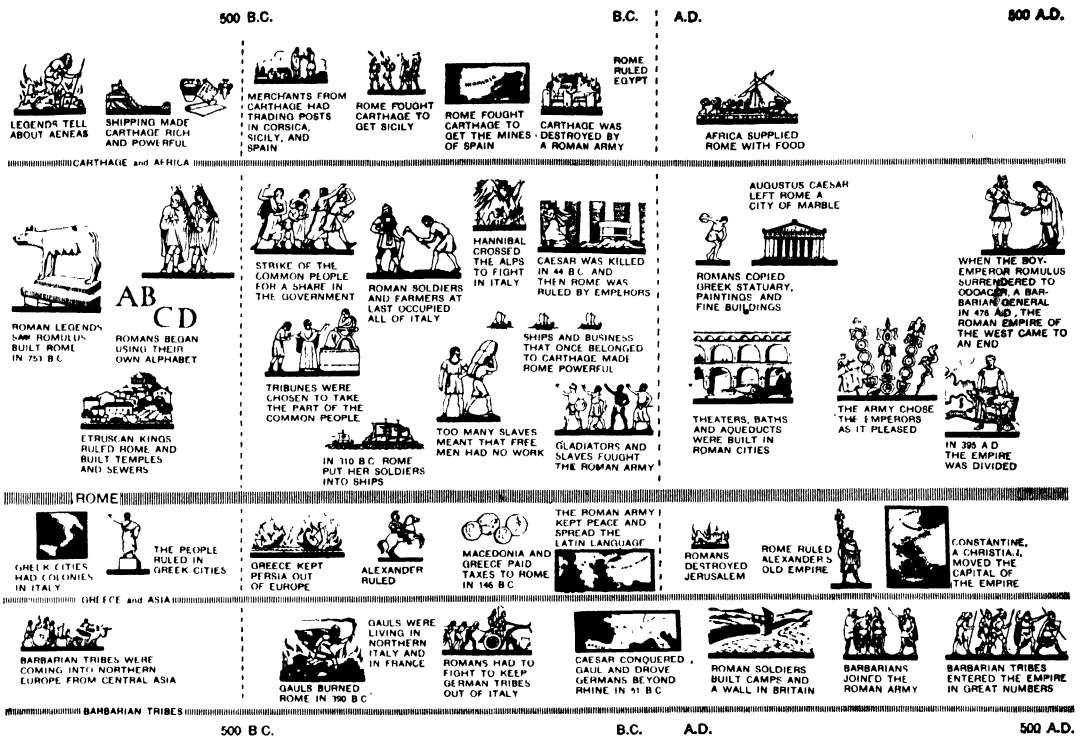
4. The Romans decided that sewers were necessary in cities, and that the city should build them. Why is it better for the city to do this work than to let each family take care of it?

5. The Romans developed the letters that we use in our alphabet. They also used some of these letters as numbers. Probably you can read Roman numerals—even large numbers used for chapter headings in books and for dates on corner-stones of buildings. Did you ever try to add or multiply with Roman numerals? Try to add CIX, LVIII, and XLV. It is much harder than to add 109, 58, and 45. One reason it is harder is that the Romans had no figure for 0, or zero.

Doing Things Together

1. Find as many different kinds of arches as you can. Notice that there are only a few ways of building them. Could you build an arch with wooden blocks or with bricks? If you experiment, you will see that the arch is a great invention.

2. Have you a place where you can draw three



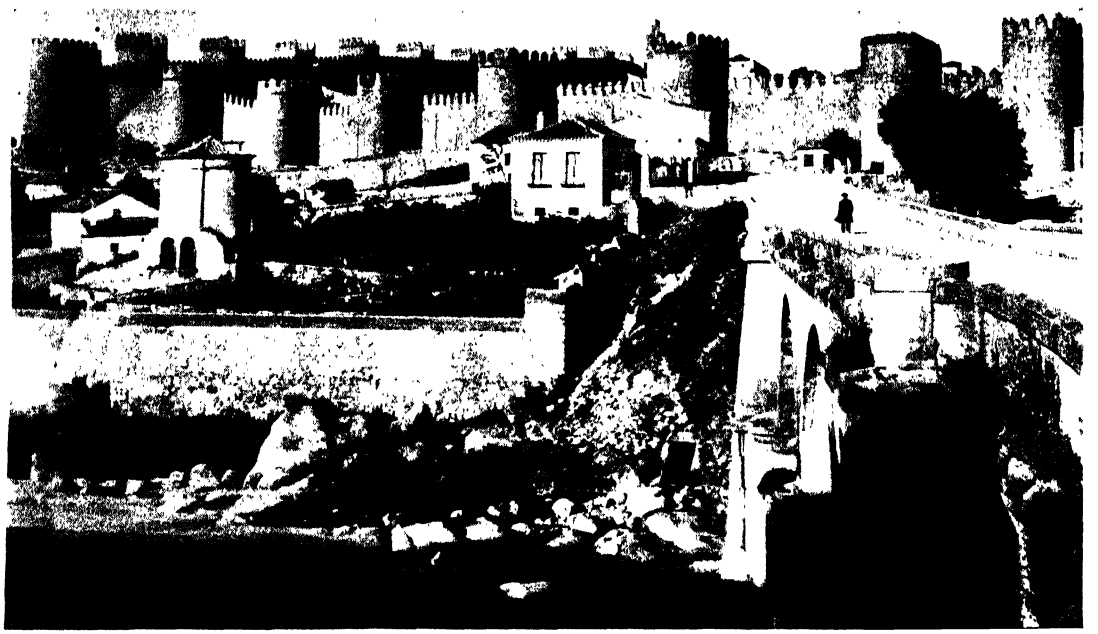
PICTURE HISTORY

Follow the story of Rome in this Picture History. Events were happening in other countries at the same time that the Romans were becoming civilized. See how the Romans spread out until they ruled many lands.

long, parallel lines—on a blackboard or on the floor? Could you find more room outdoors? Divide each line into six divisions. Mark the ends and the division points 1000 B.C., 500 B.C., 1 A.D., 500 A.D., 1000 A.D., 1500 A.D., and 2000 A.D. On one line find the approximate location of the beginning and end of the Greek Empire. On the second line do the same for the Roman Empire. On the third line locate and mark 1492, 1776, and 1940.

3. There may be statues of Roman gods in your school or in some other public building you can visit. If there are none, many books have photographs of such statues. Ask the librarian to help you find these books. See how many pictures of different gods you can bring to school. You can tell what kind of people the Romans admired, for they imagined their gods to be like the noblest and most beautiful men and women.

4. Building a durable highway is an accomplishment of which to be proud. Can you find a place on your school grounds where a short road would be an improvement? If not, there may be such a place near your home. Several of you together could build the road. A good job will require both study and experiment. Do not plan too big a road or expect to build it in a few days. If you cannot find such a place outdoors, you might try making a model highway like the one pictured on page 138 in this chapter.



Burton Holmes from Ewing Galloway

In this part of the story you will read about Spain and how the people there learned civilized ways. They learned to build large walled cities like this one at Avila. There are eighty towers in the four-mile wall that surrounds this city. The walls are twelve feet thick and forty feet high. Can you imagine how the soldiers used the towers when an enemy attacked? Do you think there might be a secret underground passage so that water could be obtained from the river? Which buildings seem to have been built much later than the city?

XI. THE IBERIAN PENINSULA

Early Days in the Peninsula

THE land of the Iberians. At the western end of the Mediterranean is a peninsula which gets its name from the people who lived there in ancient times—the Iberians. Find it on the map on page 128. Spain and Portugal are in the Iberian Peninsula. The Iberians were not like the people who settled in Greece, nor were they like the ancestors of the Romans. These Iberians were gradually pushed by conquering peoples out of the peninsula into the lands to the north. Many ed into what are now France and the ritish Isles.

It was not until the time of Columbus that this peninsula became the home of an independent nation. For centuries it had been a part of one great empire after another. It had been conquered by Carthaginians, Romans, barbarians, and finally by the Mohammedans. You will learn something about the Mohammedans in this part of your book. Today the peninsula is divided between the two countries of Spain and Portugal.

At the north of the Iberian Peninsula is the mountain wall of the Pyrenees. Farther north are the fertile green fields of France. On the French side the mountains are steep and wooded. On the Spanish side the slopes are more gentle, but they are bare and rocky. South of the Pyrenees are the mountain ridges and the treeless plateau of Spain.

Early conquerors of the Iberians. It was into this country, you remember, that Hannibal, the Carthaginian general, led his army on the way to Rome. After the Carthaginians had conquered the Iberians who lived along

the shores and near the trading cities, many Iberians fled into the Cantabrian Mountains, where they found refuge. It is believed that their descendants are the people called Basques, who today live on the slopes of these mountains and on both the French and Spanish sides of the Pyrenees along the Bay of Biscay. The Basques speak their own language, which is not like Spanish or French. In fact, it is not like any other language in the world.

The Carthaginians came in great numbers to the Iberian Peninsula, looking for gold, silver, and copper. They taught the natives how to mine the metals, which were taken to Carthage to be made into arms, armor, vases, and jewelry. Some of the metals were traded to other countries that needed them.

Even before the Carthaginian conquest, Spanish mines had attracted the eye of an invader. As early as 1100 B.C. the Phoenicians landed on the Spanish coast and founded Cadiz as a trading center.

How Roman customs came. Later the Romans sent laborers and war captives to work in the Spanish mines. That was after

Compare this map with the Spanish part of the map on page 161 and find the rivers and mountains on both maps. How are the mountains, hills, and valleys shown on the colored map? Find the mountains where the Iberians took refuge. Cadiz was a Phoenician trading town, and Barcelona was named for Hamilcar Barca, a famous Carthaginian general who was the father of Hannibal. Why is Hannibal remembered?

Publishers' Photo Service

The Romans built this aqueduct to bring water to Segovia, Spain. The arches you see are made of stones put together so carefully that no cement or mortar was needed to make the aqueduct stand. Do you think that water supplies are necessary to civilization?

the conquering Roman army had made its way along the narrow lowland at the eastern end of the Pyrenees. Gradually Roman colonists entered the peninsula to found their towns and take possession of the land. Before long the Spanish cities and trading towns were "Romanized." That means the people were living in much the same way as the people of Rome. Even the village people learned Roman ways because they were better ways and made living easier and much more comfortable.

The Romans built fine paved roads through the peninsula, as they did in Italy, in France, and in other Roman countries. They built aqueducts to supply the cities with water, and sewers to carry away wastes. Roman colonists married natives and brought up their children in the Roman way. The Romans gave the country good laws and good government. Thus for five hundred years the Iberian Peninsula developed in much the same way as the Italian Peninsula. The people lived in an orderly, civilized way, not like barbarians. There were schools, and there were businesses for young men to enter. People had opportunities to gain wealth and live comfortably.

The barbarian invasions. Then came the barbarian tribesmen from the country north of the Black Sea. Following the low coastal border of the Pyrenees on the east, the barbarians pushed down into the peninsula. The first to come were a tribe called Vandals. They settled in a part of the country known today as Andalusia, but in olden times it was called Vandalusia. After them came the Goths and Alani, other barbarian tribes. They settled in the region known as Gothland, which we call Catalonia. Locate these two parts of the country on the map on page 161.

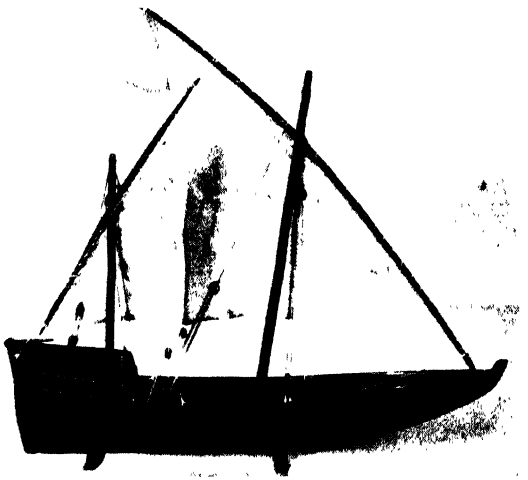
Later the Vandals decided to take up a kingdom in Africa, and 80,000 of them sailed away from Spain to the country around the ruins of the old city of Carthage. That left the Goths and a few other barbarian tribes in possession of the peninsula.

The Goths did not go about Spain tearing down buildings and destroying Roman civilization. But they paid no attention to the good Roman laws, for they had rules of their own. They did not bother to keep the Roman roads in repair. And they did not care much about living in cities, for they had been a wandering people.

The early Spaniards. The peninsula was full of cities, towns, and country estates. The Goths liked this country and settled down. These barbarian invaders simply took what land they wished. Sometimes the Roman owners were rich enough to bribe the barbarians to leave them alone. Living side by side with the Romanized people, the barbarians gradually adopted many Roman ways of life. Goths and Romans married, and their children became the early Spaniards. Missionaries came, and the people became Christians.

As the years passed, things went on rather peacefully for these people under the rule of their Gothic kings. There were quarrels among the kings to see who would rule the country, but the people continued to work

The artist has shown the exciting ending of Robert Southey's story, "Roderick, the Last of the Goths." After Roderick broke the spell in the enchanted tower, a great bird with a flaming beak appeared and set fire to the castle. Not long after this the Mohammedans invaded the country, and Roderick lost his throne.



Courtesy Philadelphia Commercial Museum

When Arabs invaded Spain, they came in ships like this. The Arabs called them "dhows." This is only a model, but the real ships were built in the same way. Are they like other ships you have seen? Notice that this ship has a rudder.

their farms and to mine silver and copper. Finally, in the eighth century, the Gothic rule came to an end. Roderick was the last of the Gothic kings.

There is an old Spanish story about an enchanted palace in Roderick's realm. In the palace was hidden an inscription in an urn. Since the inscription had to be kept secret, every king, in turn, put a new lock on the palace. Roderick put on the twenty-eighth lock, but he was curious to learn what this secret was. At last he yielded to temptation and broke the urn. Inside he found these words: "Whenever the spell of this urn is broken, the people in the picture shall invade Spain." The picture on the urn showed a group of people from Mauretania, a land in northern Africa, just across the sea from Spain.

The coming of the Mohammedans. These people did invade Spain. For a long time they had been sending spies into Roderick's country. When they learned that the Gothic army was a poor one, they decided to take the land. Soon an army of them crossed the narrow strait and conquered southern Spain. For a long time after that the peninsula belonged to the Moors, as these people came to be called, although the real Moors did not come until later.

The Mohammedan Empire

Who the Mohammedans were. Let us see who these conquerors were. We must find out a few things about another great empire which was just beginning to spread out from the eastern end of the Mediterranean.

The Babylonians and Assyrians, you remember, had built a great empire from a small beginning in the Valley of the Two Rivers. They belonged to a large group of peoples we call Semites. This group was different from the Egyptians and the Aryan-speaking peoples who settled in Greece and Italy. Once more now a Semitic people called the Arabs established a great empire.

The Phoenicians and the Greeks had built their empires by trading and colonizing. The Egyptians, the Assyrians, and the Persians had built their empires by conquest. The Romans had built their empire by both colonizing and conquest. The Arabs gained their empire by conquest, too, but they fought to

Burton Holmes from Ewing Galloway

The Arabs used windmills to pump water for irrigating long before Europeans did. The Spaniards kept on using windmills after the Mohammedans left Spain. If you have read about Don Quixote, this picture will remind you of the Don's fight against the windmills. These windmills are in La Mancha, where he lived.

Burton Holmes from Ewing Galloway

These Moorish soldiers of today probably look very much the way the invaders of Spain looked more than a thousand years ago. They wore turbans and flowing robes, and used spears and swords for weapons. Almost all the Mohammedan soldiers were mounted on Arabian horses. Each soldier furnished his own.

spread their religion, not just to get more land or more money.

The great leader Mohammed. For many centuries the Arabs had been of little importance. Their small, scattered tribes lived around the edges of the great Arabian Peninsula. The tribes made war on each other constantly. Each tribe worshiped its own particular gods. Some tribesmen worshiped a black stone located in the city of Mecca. Find Mecca on page 25 or 153. But in 570 A.D. there was born in Mecca a man who was to unite the Arabs under one great religion. His name was Mohammed.

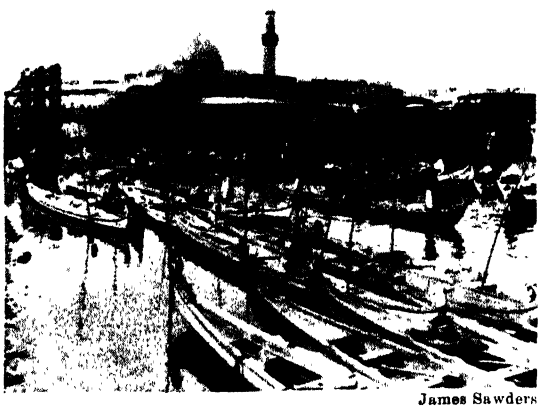
Mohammed spent much time thinking about all the strange and mysterious things of life. He felt sure that it was wrong to worship anything on earth. He knew about the religion of the Hebrews and their worship of one God. Gathering a few friends about him, Mohammed declared that there was only one god, called Allah, and that he, Mohammed, was Allah's prophet.

Mohammed's religion. The religion of Mohammed is very simple. A follower of Mohammed has to recite a creed, he has to pray five times daily, to give alms to the poor, to fast at a certain time, and, if possible, to make a pilgrimage to Mecca once in his lifetime. Mecca, where Mohammed was born, is the sacred city of the Mohammedans. When they pray, they always turn their faces toward Mecca.

The sacred book of the Mohammedans is the Koran. It is made up of messages that Mohammed recited and said he received from heaven. A Mohammedan church, called a mosque, is a place for prayer and for the reading of the Koran. Many of these mosques are also schools.

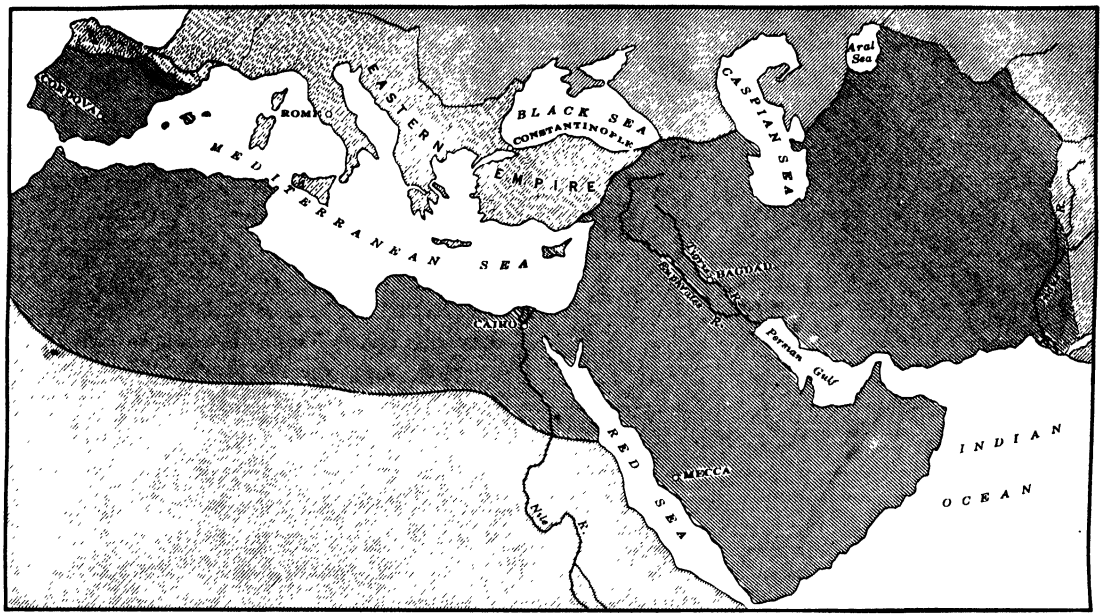
The Mohammedans believe that Abraham, Moses, John the Baptist, Jesus, and many other men we read about in our Bible were also prophets of Allah, but that Mohammed was the greatest of them all. They believe that all followers of Mohammed are brothers, and that it is their duty to spread their religion over the world.

How Mohammed's religion spread. As Mohammed's followers increased in number, he called on them to conquer other peoples and force them to adopt the worship of Allah. By the time Mohammed died, in 632, his religion had spread to include almost all



James Sawders

These long, narrow barges look somewhat like Venetian gondolas. Notice how the Arabs are poling them. The dome you see is part of a mosque. From the tall tower, called a minaret, the call to prayer is chanted five times every day. Notice the drawbridge.



Compare this map of the Mohammedan Empire about the year 800 A.D. with maps of other empires, such as that of Alexander's empire on page 108. The light shading shows the Christian empires. Only a part of the old Roman Empire was left by this time. It was called the Eastern, or Byzantine, Empire. The rest of it was split into many small kingdoms. North of the Christian lands were many barbarian kingdoms.

of the Arabs. Mohammed's successors were called caliphs. The caliph was not only the head of the church, but had complete power over the people, like a king.

With the caliphs as rulers and leaders, the Arabs went forth to conquer the territory around them. They found it easiest to spread westward across Africa, first into Egypt and then along the northern coast. Then they conquered more lands to the east and north. The Caucasus Mountains stopped them on the north. When they turned westward, they found they could not capture Constantinople, the city of the Byzantine emperors. But they did occupy the lands at the eastern end of the Mediterranean, and even some of the islands off the shore. In less than a hundred years after Mohammed died, the Arabs had established their empire over Arabia, Syria, Persia, Egypt, all the northern coast of Africa, and even parts of India.

It seems astonishing that the Mohammedans could have gone so far in such a short time. But their religion taught that it was their duty to fight all people who did not accept their new faith. It also taught that every soldier who was killed while fighting in the cause of Mohammed would go straight to Paradise. This belief made the Mohammedan soldiers hard to defeat. It was easy to conquer many of the peoples, because, after the Roman Empire broke up, none of the nations was very strong. Also, many men became really interested in the new religion and were perfectly willing to adopt it. They liked the idea of the "brotherhood of man," and they liked the just laws that the Mohammedans made.

What the Arabs Gave to Civilization

In building this great new empire, which now reached from the Indus River to the Atlantic Ocean, the Arabs did much for civilization. Let us see what happened in the Arabian Peninsula at the time when the Mohammedans began to conquer their neighbors.

First National Studios, Photographic History Service

Early in the Middle Ages the Arabs were the leading cloth merchants of the world. Many of our fabrics still have names given them by the Arabs, names such as cotton, gauze, satin, taffeta, muslin, and damask. This scene from the motion-picture "Kismet" shows a silk bazaar in an Arabian city.

An old land restored. The Arabs were skilled in irrigation. They took the land along the Tigris and Euphrates rivers and turned it into a vast garden. For many centuries, ever since the Babylonian Empire had been destroyed, much of this land had been a desert. The old irrigation canals and ditches had filled up with sand. The Arabs made new canals and raised large crops of grain and fruit.

The caliphs of Bagdad. One of the caliphs decided to build his capital on the Tigris, and founded Bagdad, which became a great city. Locate Bagdad on the map on page 25. At one time nearly two million people lived there. Bagdad was almost as large as our city of Philadelphia. Traders from everywhere came to Bagdad to sell goods. Trade, as you know, generally brings riches.

The caliphs of Bagdad and the merchants of the city became immensely rich. Perhaps you have read stories about them in the *Arabian Nights*. It is said that one of the caliphs spent fifteen million dollars on a pilgrimage to Mecca. There were a thousand coal-black horses in his stable and sixty thousand valuable rugs in his palace. He had over a thousand slaves.

Another of the caliphs not only built great palaces, mosques, and other public buildings, but he improved the roads to all parts of his empire. He built caravansaries, or inns, along the way, and had a post-office system, too. Messengers, in relays, brought him news from every part of his empire daily.

Famous craftsmen. The Arabs made beautifully ornamented metal work in silver, copper, and brass. They did not use gold, because their religion forbade it. But they made helmets and armor of iron, and some of the finest swords ever known. Damascus, an old city in Syria, was famous for weapons. Have you ever heard of Damascus blades?

James Sawders

The Mohammedan standing in front of the fountain in the wall is putting water on his face and hands before entering the mosque to pray. It is one of the rules of his religion to wash before praying. In the desert, though, he may use sand if water is scarce. Notice the tiling and the beautiful brass lantern. Arabs are expert in making wares of hammered brass.

An American author, Washington Irving, wrote a book about a famous Moorish palace in Spain, the Alhambra. The artist has chosen a scene from one of the stories in "The Alhambra." It tells about the poor Spaniard who discovered a treasure hidden in the rock on which the great Alhambra palace was built.

There are many stories that tell how sharp they were, sharp enough to cut a handkerchief tossed in the air, or a hair floating downstream in the water.

The Arabs made many things of leather, which they could tan and dye in beautiful colors. Their weavers made fine cloths of linen, silk, and wool, and they early learned to make cloth from cotton, which they called "the wool that grows on bushes." They learned another important use for cotton. In trading with the Chinese the Arabs found out how to make paper from cotton rags. They improved it, as they improved many ideas, and for the first time people had a sure and steady supply of paper. This paper was better than the papyrus made from Egyptian reeds, and not nearly so costly as parchment made from sheepskin.

Arab scholars and scientists. Among the Arabs were many famous scholars and scientists whose discoveries have been useful to the world ever since their day.

As the Arabs spread their empire outside of Arabia, they conquered Alexandria in Egypt, where there was a famous old museum. This was really a great university, which had been started by one of Alexander's generals, Ptolemy. Many famous Greeks had studied and taught there, making some important beginnings in science and learning. It was in Alexandria that Euclid worked out his science of geometry. Other scientists had measured the size of the earth and had made maps of the stars. One, named Heron, had even invented a kind of steam-engine.

There in Alexandria was a great library, one that included the writings of Aristotle, the books of the Old Testament, and Homer's two great stories, the *Iliad* and the *Odyssey*. Alexandria was a storehouse of learning for the quick minds of the Arabs. In Persia, too, the Arabs found scholars. Soon the Arabs were making great progress in mathematics, astronomy, medicine, and other sciences. Since they were dwellers in the desert, the Arabs were familiar with the starry heavens; and they worked out many problems of astronomy and map-making.

At one time in Bagdad hundreds of scribes were kept busy all day long, year after year, writing the Greek books in the Arabic language. That is the way the works of the great Aristotle have come down to us.

The Arabs established schools, many of them free, and some of their universities became famous throughout the world. Children could go to the mosques, where *imams*, or priests, taught them how to read and write and to recite passages from the Koran. Other priests taught older students law, mathe-

A Christian painted this picture of the Moorish kings of Granada, Spain, because no Mohammedan would paint pictures of living creatures. From this picture on the ceiling of a large room in a Granada palace we can see how the Moors dressed. Each king has a heavy sword, and each wears a turban around his head.

Burton Holmes from Ewing Galloway

These are merino sheep, grazing among olive trees. This is the breed of sheep which was brought to Spain by the Arabs. The wool is long and silky. What two crops could a farmer get by grazing sheep this way? Would either of them be found in American stores?

matics, and geography. The Arabs were interested in geography and used globes for map-study.

Arabic figures. The figures which we now use in arithmetic are called Arabic figures. Probably the Arabs borrowed them from India, just as the Phoenicians borrowed the idea of the alphabet from the people living in the Sinai Peninsula. But the Arabs improved the figures by adding another to stand for zero. That seems like very little, but how should we get along without it? If you think how hard it is to use the letters that the Romans had instead of Arabic figures, you can see how much easier the Arabs made arithmetic. How would you like to do all your adding, multiplying, subtracting, and dividing with the letters I, V, X, L, C, D, and M instead of with the Arabic figures 1, 2, 3, 4, 5, 6, 7, 8, 9, and 0?

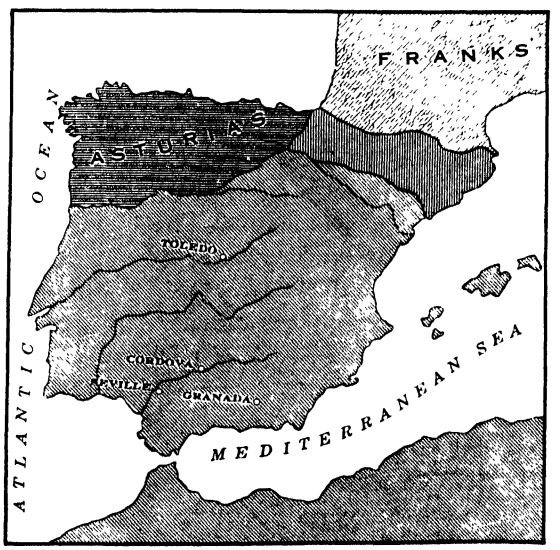
We owe many of our words to the Arabs, too. Alcohol, alcove, alfalfa, algebra, alkali, arsenal, candy, chemistry, cotton, and many others are Arabic words. Perhaps the words you some of the things in which the Arabs ere interested.

The Conquest of Spain

One of the peoples who became Mohammedans were the Berbers, who lived in Africa, across the Mediterranean from Spain. For some time they had been looking with greedy eyes on the country of the Spaniards. The Berbers, together with some Arab troops, and with Syrians to help, finally decided to invade the weak kingdom of Roderick, the king of Spain. Their general was named Tarik, and his name has been given to Gibraltar. In those days it was called "Gibal-Tarik," which means Mount of Tarik.

The invaders did not have much trouble in taking possession of the land. The Syrians stayed in the cities, for they liked to trade, while the Arabs seized the best farm and grazing lands for themselves. The Berbers took land in the central plateau. The Christian Spaniards were pushed farther and farther to the north.

How the Arabs helped Spain. Since the Arabs knew about irrigation, they immediately began to make use of the rivers of Spain. They dug canals and ditches to irrigate the fertile but dry coast of Spain and the basin of the Guadalquiver River. They were wonderful gardeners. Soon these irri-



This map shows four of the cities which the invading Mohammedans founded in Spain. Notice the kingdom of the Asturias, where the Christian Spaniards were driven. Next to it, just south of the land of the Franks, is a region over which the Christians and Mohammedans fought many times.

Ewing Galloway

This room, the Hall of the Ambassadors, is a fine example of Moorish architecture. It is in a palace, the Alcazar, in Granada. The design on the walls was made by carefully putting together many thousands of tiny colored tiles made of baked clay. Such work took many hours of patient labor by expert workers.

gated lands produced oranges, lemons, figs, sugar-cane, cotton, apricots, mulberry trees, dates, and many flowers. Grapes, that ripened on well-built terraces, were used for wine and raisins. Olives grew in abundance, and wheat flourished where it had never grown before.

The Spanish sheep were a poor breed, and so the Arabs brought fine merino sheep to graze on the slopes of the hills. They also brought their beautiful Arabian horses, and they improved the breed of mules which carried burdens over the rough trails of the hilly country.

The buildings of the Arabs. Find Cordova, Granada, Toledo, Valladolid, and Valencia on the map on page 161. These cities, built by the Arabs, became famous for their beautiful homes and gardens. Toledo grew to be a thriving city, although it is located on a dry plateau.

Different peoples have different ways of building, as you will remember when you think of the difference between the Egyptian, Babylonian, and Grecian buildings. The Arabs had their own style of architecture. They invented an arch shaped like a horseshoe and knew how to make domes on their buildings.

Many of the Arab buildings were decorated with colored tiles and carvings, so delicately done that they have been called "petrified lace." Some of these buildings were known and admired throughout the world. Especially noted was the Alhambra, a castle near Granada, which was the last stronghold of the Mohammedans in Spain. Today nothing remains of the Alhambra except the ruins of the two beautiful courts surrounded by low-roofed buildings. The Mohammedans built their stucco and tile houses around open spaces called courts. One of these courts of the Alhambra is known as the Court of Myrtles, because orange, lemon, and myrtle trees are arranged around a pond. In the other court, the Court of Lions, is a fountain surrounded by twelve marble lions, out of whose mouths gushed a flow of water.

As you look at the picture on this page showing a fine Moorish room, you will notice that the ornaments are figures, such as squares, circles, triangles, and diamonds. The Arabs did not copy any living plants or animals as ornaments for their buildings, because the Koran forbids it. They did not

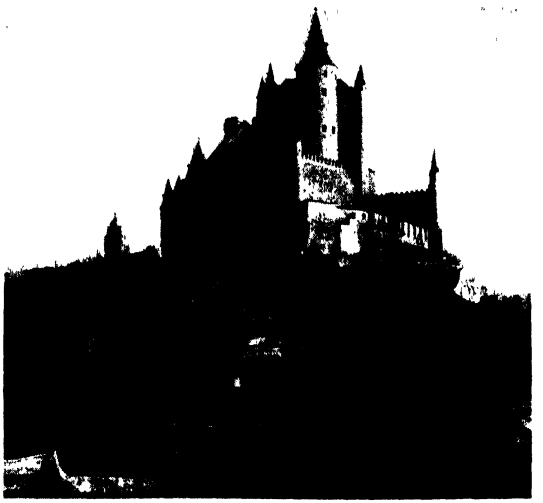
Burton Holmes from Ewing Galloway

On a hill near Granada one of the Moorish kings built a summer palace. It contained many beautiful gardens with fountains and tiny streams of water. This is one of the smaller gardens. Dozens of sprays of water fall into the narrow pool night and day.

paint pictures, for the same reason. But you can see how beautifully they were able to decorate their buildings.

The downfall of the Mohammedans in Spain. The Arabs had a clever way of making the people they conquered become Mohammedans. They never forced others to adopt the religion, but they made all people who were not Mohammedans pay extra taxes. Many of the people in Spain became Mohammedans because they cared more about escaping extra taxes than they did about their religion.

The Spanish Mohammedans had things their own way for many years. They became very independent and no longer paid taxes to the caliph at Bagdad. Some other Mohammedans from northern Africa, a people called Moors, also moved over into Spain. They decided to conquer the whole peninsula and extend the Mohammedan rule even into France. But the Moors were not successful in their raid into France. There they met an army of barbarians called Franks, a powerful people who fought savagely with spears and battle-axes. The Franks turned back the Moors, who never again tried to go beyond the Pyrenees.



Ewing Galloway

This fine castle was built by one of the Christian kings of Spain before the Moors were driven out. Queen Isabella was crowned here in 1474. Notice how hard it would have been for the Moors to attack. The rock rises almost straight up from the river.

The Christians in the northern and the western parts of Spain wanted to drive out the Moors. After many years they forced these Mohammedans into the southern end of the peninsula. The Spaniards have many stirring tales about their great hero, the Cid, who fought the Moors. Then Ferdinand and his wife Isabella became rulers of the Christian part of Spain. They united all the Christians against the Moors and at last completely overcame the Mohammedan armies. Ferdinand and Isabella set up their court in the beautiful Moorish palace of the Alhambra, while the defeated Moors left the country to settle in Morocco, across the Strait of Gibraltar in Africa.

Ferdinand and Isabella were the king and queen who helped Columbus. Knowing this, can you tell at about what date the Moors were driven from Spain?

Not all the Moors left Spain at once. Many of them stayed, and for a time the Christians and the Mohammedans lived to-

Acme Newspictures, Inc.

In the mountains of Spain the Christian Spaniards built many fortified cities like this one, in order to be safe from attacks of the Moors. The tower-like building is the belfry of an old church.

gether in various parts of the country. But about a hundred years after the time of Ferdinand and Isabella, the king of Spain declared that the Moors must give up all their customs, even their songs and dances, and become Spaniards. Then almost all of these Moors joined their own people in Africa, and that was the end of the Mohammedan Empire in Spain. Only a few flocks of Moorish sheep grazed on the hillsides, and only a few ruins remained where there had once been beautiful Moorish cities. But these invaders did much for Spain during the seven hundred years they ruled in the Iberian Peninsula. They also did much for the civilization of the world, as you have seen.

What happened to the Mohammedan Empire. The great Mohammedan Empire flourished for nearly seven hundred years, but you know what was certain to happen to any empire that became very rich. The people grew lazy and thought little of their duty to their country. Instead of using citizen soldiers, the Mohammedans hired troops to fight their battles. Finally, out of Asia came a people called the Turks, who conquered the Mohammedan lands and became Mohammedans. Though the empire fell, the Mohammedan religion has remained in the desert world through all the centuries that have followed. Today Mohammedanism is an important religion in extensive regions of the world.

Burton Holmes from Ewing Galloway

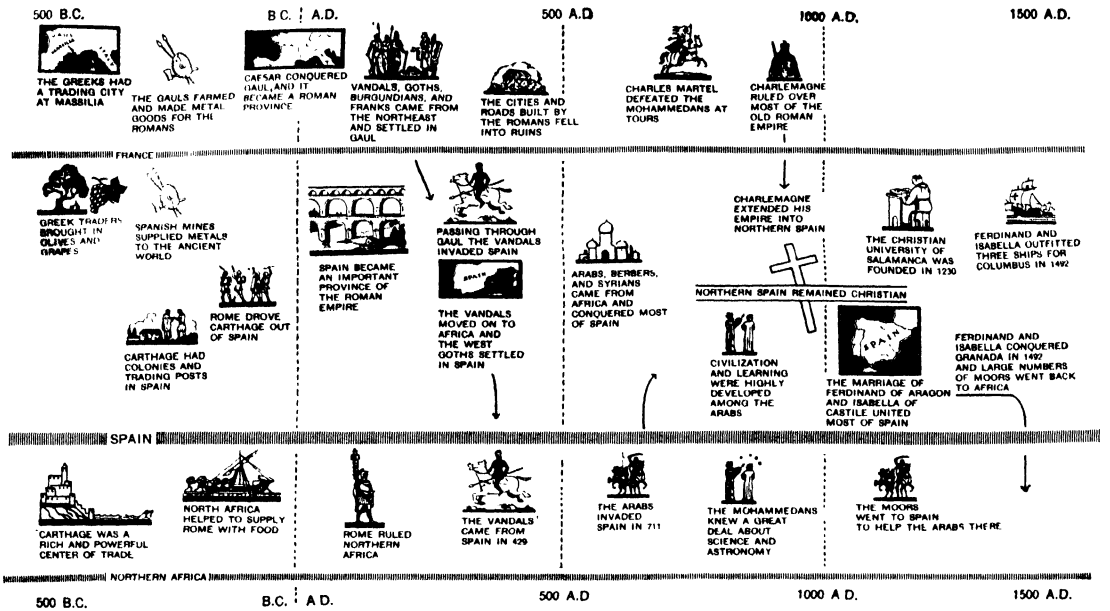
The Arabs brought this way of irrigating with them when they came to Spain, and the Spaniards have used the method ever since. Have you seen a similar picture in an earlier part of this book? What kind of power is used in your community to pump water?

Burton Holmes from Ewing Galloway

This farm-house is in the foot-hills of the Pyrenees. It is built of stone, plastered over, and the roof is covered with thin slabs of stone like slate. The two large doors below must lead to the stables and store-rooms. The people live upstairs and use the door you can see at the right. Perhaps you can decide where some of the rooms of this farm-house are located.

What we owe to the Arabs. During the days of the Roman Empire, as you have seen, the nations about the Mediterranean became highly civilized. Later the barbarian invaders destroyed much of this civilization. Laws were not observed, roads and aqueducts were not kept in repair, and it became harder to carry on trade. After the Mediterranean peoples had mixed with the barbarians for a while, they became almost as ignorant as the barbarians. By the time the Mohammedans came into the Mediterranean World, the people of these regions were sinking back into a rough way of life.

Fortunately for us, the Mohammedans never destroyed civilization in the countries they conquered. Instead, wherever they went, they helped the civilization they found. They took advantage of new ways and improved many others because they were a quick-witted, intelligent people. By reviving the ancient science of irrigation, they showed how it was



PICTURE HISTORY

Follow the story of the Iberian Peninsula on this Picture History. Do you see how peoples from many different lands settled in Spain and gradually became the Spanish people of today?

possible for many people to live on the produce of the land even in regions where there was little rainfall. Mohammedan scientists worked out many problems and made discoveries in chemistry and mathematics.

Later on in this book you will read how some of the ideas of the Mohammedans were carried into all parts of Europe. In this way some of the Mohammedan and Arab ways have become a part of our own civilization.

Talking Things Over

1. This chapter does not tell from where the Iberians came. Why? We have not found out enough to be able to tell each story from the very beginning. Talk again briefly about the first part of the stories of the Egyptians, the Hebrews, the Greeks, and the Romans.

2. The story of Roderick and the prophecy was written after the Mohammedans invaded Spain. Other peoples have stories that are based partly on facts. Why are such stories told, and why are they changed as time passes? Do you know any such stories about our own country?

3. The Arabs would not use the left hand to eat. Sometimes it is hard to understand why a people do not do things that other people do all the time. Can you think of some things that "are not done" by other families or in other localities? For example, in some churches women must wear hats. In others they need not.

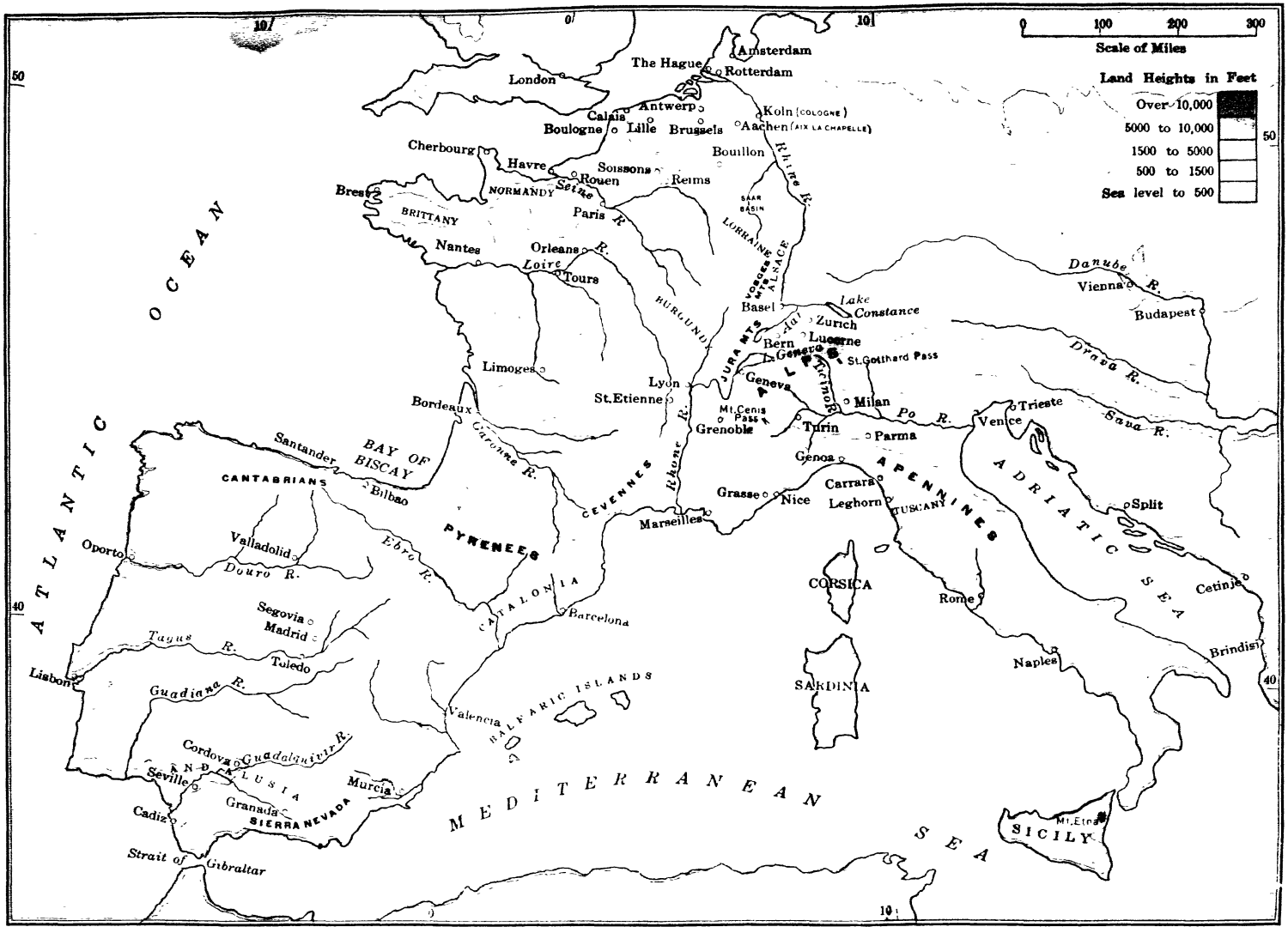
Doing Things Together

1. Have you tried to make designs with circles, squares, and diamonds? The Arabs decorated their buildings with such figures. Perhaps you can find a space in your room that can be used for decorating in the Arab style. Use bright colors.

2. Have you kept the three time-lines you made when you finished the last chapter? If so, you might add a fourth line to show how long the Arab civilization lasted in Spain.

3. You are using more words all the time. It is fun sometimes to stop and count them. Words have more meaning if you look them up in a dictionary. Write sentences of your own using these words.

4. If you were successful in building a Roman arch, try to build one like those of the Arabs. You can see examples of them in the pictures on page 157.


Scale of Miles
0 100 200 300
Land Heights in Feet
Over 10,000
5000 to 10,000
1500 to 5000
500 to 1500
Sea level to 500
ATLANTIC OCEAN
MEDITERRANEAN SEA
ADRIATIC SEA
London
The Hague
Amsterdam
Rotterdam
Antwerp
Calais
Boulogne
Lille
Brussels
Koln (COLOGNE)
Aachen (AIX LA CHAPELLE)
Cherbourg
Havre
Soissons
Rouen
Reims
Bouillon
Rhine R.
Brest
NORMANDY
Seine R.
Paris
BRITTANY
SAAR BASIN
LORRAINE
VOSGES MTS.
ALSACE
Nantes
Orleans
Loire R.
Tours
BURGUNDY
Danube R.
Vienna
Budapest
Basel
Lake Constance
Zurich
Aar R.
Bern
Lucerne
Geneva
St. Gotthard Pass
JURA MTS.
ALPS
Limoges
Lyon
St. Etienne
Rhone R.
Mt. Cenis Pass
Grenoble
Milan
Turin
Parma
Po R.
Trieste
Venice
Drava R.
Save R.
Bordeaux
Garonne R.
Santander
BAY OF BISCAY
Bilbao
CANTABRIANS
CEVENNES
Marseilles
Grasse
Nice
Genoa
Carrara
Leghorn
TUSCANY
APENNINES
Split
Cetinje
Brindisi
Naples
Rome
CORSICA
SARDINIA
Oporto
Valladolid
Douro R.
Ebro R.
PYRENEES
CATALONIA
Barcelona
Segovia
Madrid
Tagus R.
Toledo
Lisbon
Guadiana R.
Valencia
BALEARIC ISLANDS
Cordova
Guadalquivir R.
ANDALUSIA
Seville
Murcia
Granada
SIERRA NEVADA
Cadiz
Strait of Gibraltar
Mt. Etna
SICILY

Burton Holmes from Ewing Galloway

This farm is like many others in the Mediterranean region. It consists of grain fields, an orchard, and a hillside pasture. Some of the land you see is too steep and rocky to be used. All the family must help at the tasks, as you see in this harvest scene. The farmers do not often have machinery, and so their work is done by hand with old-fashioned tools, such as the sickles these workers are using.

XII. MEDITERRANEAN LANDS

A Look at the Present

A WORLD to itself. Do you remember reading that a Greek who lived thousands of years ago spoke of the people living about the shores of the Mediterranean Sea as "frogs about a pond"? In ancient times the different peoples of this region raised much the same kind of crops and lived in much the same way. Although merchants from the Far East went back and forth, bringing fine things from China, India, and Persia, the region around the Mediterranean was a little world by itself.

So, too, the Mediterranean lands today make up a little world in themselves. In many of the lands the people work at the same occupations and raise the same foods as in ancient times.

In other ways our Mediterranean World is very different from the Mediterranean World of ancient times. For one thing, this region is not the most important part of Europe, as it was then. For another thing, no one nation rules over it as an empire. The Phoenicians, the Greeks, and the Carthaginians thought that the Mediterranean was their own sea. Finally, up to the time the barbarians came, Rome was mistress of the entire region. But never after that was the Mediterranean World under the control of a single nation.

The Mediterranean World of Today

The nations around the sea. Today, in place of one great empire, there are many nations around the Mediterranean. Find these countries on the map on pages 230-231,

beginning at the western end. There are Portugal and Spain in the Iberian Peninsula; Italy in the Italian Peninsula; Greece in the Grecian Peninsula; and in the Balkan Peninsula (of which the Grecian Peninsula is only a part) there are Bulgaria, Yugoslavia, Albania, and the part of Turkey which is in Europe.

Southern France also touches the Mediterranean Sea. It was once in the Roman Empire, but it is now considered a part of western Europe rather than of the Mediterranean World. We shall learn about France later.

All of northern Africa faces the Mediterranean, too, for the great Sahara Desert shuts it off from the lands to the south. Egypt is the only independent nation in northern Africa. All the rest of that coast belongs to European nations: Libya belongs to Italy; Tunisia, Algeria, and part of Morocco belong to France; while the rest of Morocco belongs to Spain. Look at the map and see how the southern shore of the Mediterranean differs from the northern shore.

Ewing Galloway

Instead of farming, some Mediterranean peoples fish for a living. This is an Italian fishing village, like hundreds of others along the sea. Here the people live crowded together in buildings four and five stories high You can see the fishing boats at anchor in the sheltered harbor. The narrow beach is often covered with smaller boats and with racks for drying nets.

James Sawders

Another way of earning a living in Mediterranean lands is to raise fruit. Almost everywhere are found orchards, like these in this picture taken in Tuscany, Italy. You can be sure that the thrifty farmer is also putting the land under the trees to some use. Can you tell how he gets an extra crop from the land?

At the eastern end of the Mediterranean are Turkey, Syria, and Palestine. Turkey is an independent nation, but Syria is under French control, and Palestine is under British control.

Turn to the map of the Mediterranean lands on page 128. Notice the mountains that shut the various Mediterranean nations off from the rest of Europe. There are the Pyrenees, the ranges of the Alps, and the Balkan Mountains. The Atlas Mountains and the Sahara Desert shut off the Mediterranean lands on the south, and mountain-chains and desert hem them in on the east. To the west is a narrow entrance to the Atlantic Ocean.

These natural barriers make land travel between the Mediterranean countries and the rest of Europe, Africa, and Asia both difficult and costly. It is no wonder that these nations still rely mainly upon the Mediterranean Sea in their dealings with other people.

A great world trade route. In another way, however, the Mediterranean region is not a world to itself. The sea is like a wide

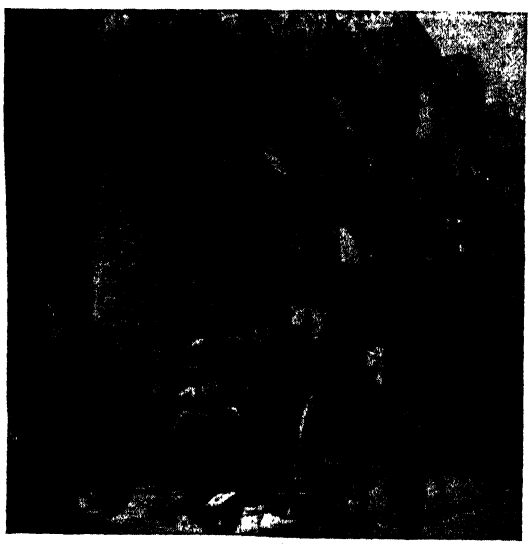
street in a busy city, along which people from all nations pass. The sea is a great trading route, as we shall see later, and the people who live along its shores have connections with all parts of the world.

Farming in Mediterranean Lands

A crowded land. After countries have been lived in for thousands of years, as these countries have, they are likely to be crowded with people. In some of the Mediterranean lands there are nearly ten times as many people for every square mile as there are in the United States.

If we should scatter the people in our own country evenly over the land, we would have about thirty-five people on every square mile. If the Italian people were scattered evenly over Italy, there would be three hundred forty people to the square mile.

You can see that if there are more than three hundred people for every square mile in a country, those people will have a hard time to raise enough to eat. Do you understand just how crowded that really is? If the land could be divided up evenly, each person would have a space about the size of half of a city block. On that small space he would have both good land and poor land. From it he would have to supply himself with food, clothes, shoes, building material, and everything he needed. Would you like to live on an island that size? Do you think you could get along? It would require a great deal of hard work.



Ostrander-Nesmith & Associates

The Mediterranean lands are crowded with cities and towns, and the cities are crowded with people. This picture was taken in an old part of the city of Naples, Italy, which is like many other Italian cities. Perhaps the wheat on the cart is for macaroni.

Raffius-Nesmith & Associates

Here and there in the Mediterranean lands are garden spots where there is water enough for irrigating. In such places, like the one in this picture, the farmers can raise good crops of vegetables and fruit.

In the crowded countries of the Mediterranean World more than half the people are farmers. Everyone has to work very hard just to get a place to live and enough food and clothing.

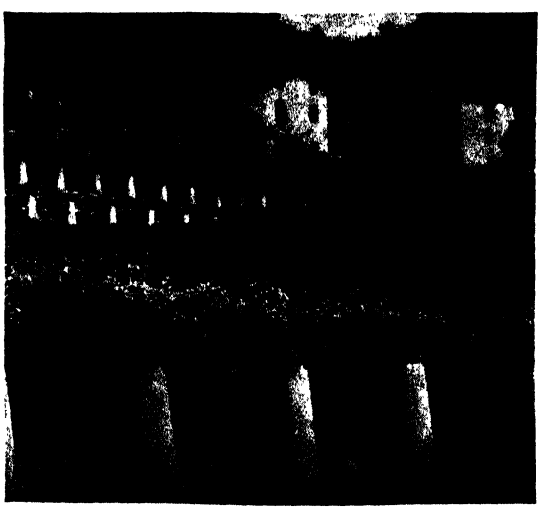
The lack of rainfall. Mediterranean farmers not only live in crowded lands, but they have other troubles, too. One of them is the lack of rain in summer.

Summer, as you know, is the growing time for crops in the part of the world north of the Equator. In many parts of our country the farmers may expect some rain every few days in spring and early summer. In most of the Mediterranean region the lack of rain at this time of year is a real problem for the farmers.

They solve this problem in two ways, just as their ancestors did in ancient times. One of these ways is by irrigation; the other is by planting crops that need little rain.

Not all of the land can be irrigated, for there is not enough water. Most of the farmers plant crops that will grow without much rain in the summertime. During the rainy season some water soaks deep into the ground, where it does not evaporate in the hot sun. Plants with roots long enough to reach this moisture can live through the time when there is no rain. Olive trees, fig trees, and grape-vines are especially adapted to get their moisture in that way. These fruits grow in all Mediterranean countries. With oranges and lemons, these provide the chief fruit crops of the region.

Farming a rough, hilly land. We think of farm-lands as wide, fertile plains. In Mediterranean regions, however, there are few wide plains. Most of the land is made up of mountains, hills, or plateaus. The map on page 128 shows how the peninsulas are ridged with mountains.



Burton Holmes from Ewing Galloway

Land is so valuable in the Mediterranean countries that farmers work every foot they can. This hillside vineyard is very steep, but the farmer has made stone terraces so that his vines will have soil. The vines are trained on arbors held up by pillars.

Courtesy Consulate General of Portugal

The modern way of handling grapes from the many vineyards of Mediterranean lands is to bring them to a winery, where the juice is pressed from them. This picture was taken in Oporto, Portugal, where port wine is made. Women are bringing in the grapes.

Farmers in such regions must grow their crops on patches of land that are often too steep to plow. They must break up the soil with fork, spade, or hoe. Sometimes, to make it easier to grow crops, the farmers make terraces, which are like broad, level steps going up the mountainside.

Terraced vineyards are common on the mountain slopes of southern Spain, of Greece, and especially of Italy. On some southern slopes of the Apennines a traveler may see nearly two hundred terraces, one above another. The farmers have built raised, level strips of land supported by stone walls. Some of the walls are hundreds of years old, for this way of making good use of the land was discovered centuries ago.

Tree crops. In our country when we speak of crops, we generally think of grains and vegetables. But crops grown on trees can be very important. If it were not for such crops, many farmers of the Mediterranean region could not raise enough food. In some districts trees supply most of the crops, because there are many trees which can thrive on steep, rocky slopes.

Ewing Galloway

Thousands of large and small orchards of gnarled old olive trees produce their fruit for Mediterranean farmers. The ripe fruit of the olive is oily, and Mediterranean peoples use olive-oil for the fat which strong bodies must have. Enough olives and oil are produced for their own use and to export. If you have olive-oil at home, find out where it was made.

In parts of Italy you will see groves of chestnut trees everywhere as you climb the slopes that make up such a large part of the land. The chestnut is one of the commonest of the trees grown for their crops. The people eat chestnuts raw, baked, boiled, mashed, and made into puddings.

The olive tree is almost as widespread as the chestnut, and probably more valuable to the farmers. It seems perfectly suited to these lands, for it can endure drought and seems to live forever. Along the shores of northern Africa there are olive trees which were planted by the Romans during the glorious days of the empire. Today you may pick olives from the very same trees that bore fruit for Caesar and his people.

Not only does the olive tree provide a ...us fruit for the family, but also its ...supplies the fat that people must have. ...n our country we use mainly the fat of animals, such as butter from milk or lard from the fat of pigs. But in the Mediterranean countries the dry, parched summer grass cannot support herds of cows and droves of pigs. So the people use olive-oil instead of butter or lard.

Olive-oil is pressed from the ripe fruit of the tree. The green fruit is pickled in salt water. Ripe olives are also prepared in the same way. The pickled olives and the oil are shipped from Mediterranean countries to other parts of the world.

Although the olive tree grows everywhere about the Mediterranean, southern Italy and Spain produce most of the oil and the pickled fruit. Almost every farmer in the region has his own little grove of olive trees and makes oil for his family.

In some places there are groves of English walnuts—the name of which should really be Persian walnuts, for they were first grown in Persia. There are also many almond and fig trees, especially in the eastern part of Spain and on the Balearic Islands off the Spanish coast. Toward the eastern end of the Mediterranean great quantities of pistachio nuts are grown.

Almost as common as the chestnut and the olive trees are the oak trees. One special

Burton Holmes from Ewing Galloway

Other orchards of Mediterranean lands produce many thousand boxes of fruits. Orange groves cover many acres, particularly around Valencia, Spain. This Spanish family is busy packing apricots from their orchard. Each one has a special job to do.

Courtesy Armstrong Cork Company

These men are prying off the bark of a cork oak. They must be careful not to injure the trunk of the tree under the bark. If the cork is removed carefully, the tree will grow another layer of bark. Can you name some of the things for which cork is used?

kind is the cork oak, which makes a valuable crop for the farmer. The biggest crop is grown in Portugal, where almost half of the world's supply of cork is harvested.

Although cork oaks grow wild, the greater part of the crop now comes from trees that have been planted. Every nine or ten years the bark—which is the cork—may be taken from these oaks. It is stripped in great sheets from the trunks of the trees. Then these sheets are sent to factories in Lisbon, Portugal, and other cities, where they are soaked, pressed flat, and then dried again to make them ready for market.

From time to time, as the trees grow larger, some of them are cut down to thin out the groves. The wood is valuable, for wood is scarce in all the Mediterranean countries.

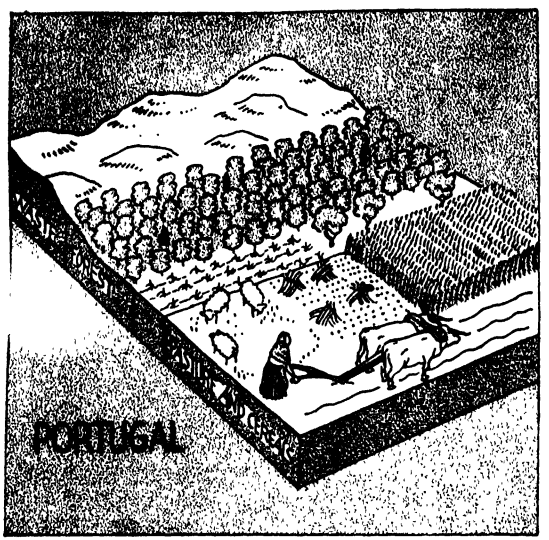
Oak trees produce acorns, and since many of the hillsides where the oaks grow are too rocky for other crops, the farmers keep pigs under the trees to feed on the acorns. The people also eat acorns, boiled or ground into meal. Goats, too, are often turned loose in oak groves. They are the only milk-producing animals that can live on the scanty pasturage found on these mountainsides.

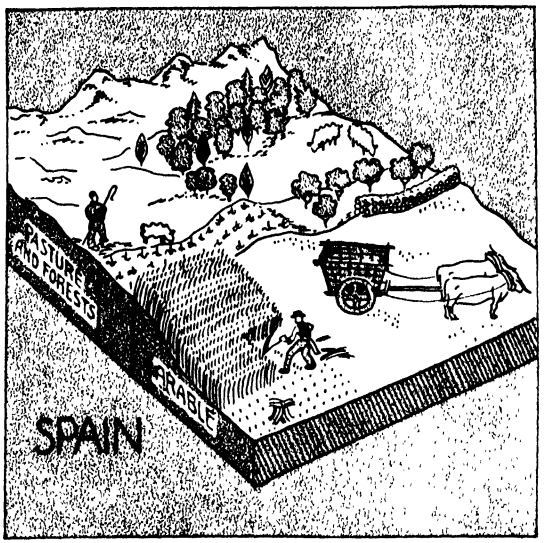
In some parts of the hill country mulberry trees are raised in order to feed silkworms. The silkworms eat mulberry leaves and then spin their cocoons. The fine threads are unwound from the cocoons and spun into raw silk. In the Po Valley of Italy many mulberry trees are raised. The climate there is a little too cool for such fruits as oranges and lemons.

"Two-story farming." Do you remember how some of the desert farmers carry on "three-story" agriculture in the oases, with date palms, other fruit trees, and grain or vegetables? The mountain farmer in Mediterranean lands makes the most of his ground by "two-story" farming. Beneath his groves of trees he often produces a second crop. The trees may be chestnut, walnut, olive, almond, fig, oak, or mulberry trees; the farmer gets a useful crop from these trees. Underneath

Burton Holmes from Ewing Galloway

In the market square of Cuneo, Italy, near Turin, heaps of silkworm cocoons are offered for sale. There are many silk factories in this city, and farmers living near by raise quantities of silkworms. Why can you say that silk is a tree crop? Who do you think buys the cocoons in this market?

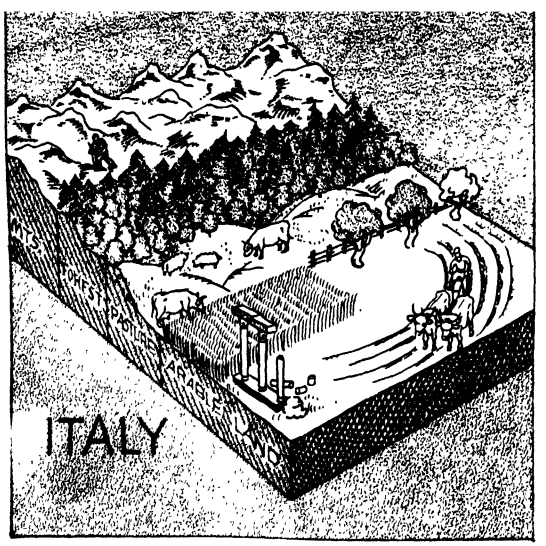


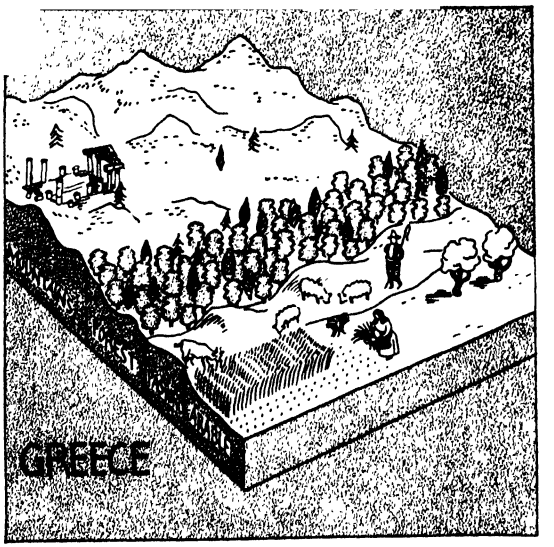


PICTURE CHARTS OF MEDITERRANEAN LANDS

The first chart shows that in Portugal one-quarter of the land is waste land. Another quarter is occupied by forests. A tenth of the land is used for vineyards and orchards, while the rest of the land is used for pasture and for growing crops of wheat and other cereal grains. How much of the land is used for pasture and cereals? Almost a third of the land of Spain can be farmed, as you can see by the second picture chart. Pastures and forest land take up almost half of the country. Only one-tenth of the land is used for fruit trees and vineyards.

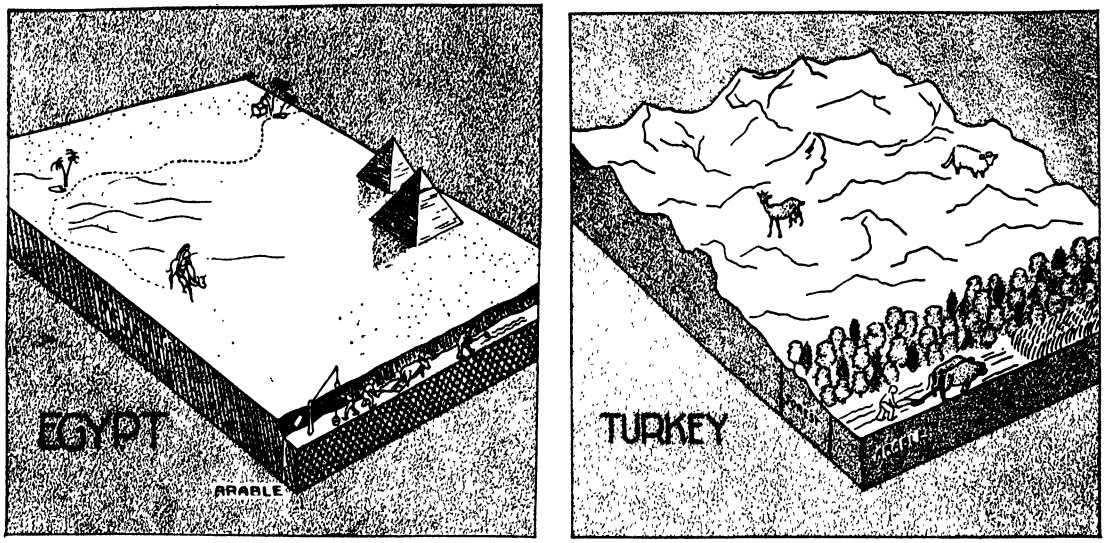
The rest cannot be used for crops. Arable land means land that can be plowed and sowed to crops.





HOW THE LAND IS USED IN MEDITERRANEAN COUNTRIES

The picture chart at the left shows how the land is used in Italy. Two-fifths of all the land is sown in crops. Another fifth is in forests and chestnut and olive groves. One-sixth is used for pasture. Part is land too rough to use. Can you tell what fraction that is? The chart at the right shows that more than half of the land in Greece is too rough and mountainous to be farmed. A tenth is used for pasture, and two-tenths for forests and orchards. The rest of the land, less than two-tenths, can be used for farming and for raising grapes in vineyards.



Only one thirty-third of Egypt's land can be farmed. The rest is desert and rocky waste. More land might be farmed if there were more rivers to supply water. You have read that the Nile is the only source of water, for there is almost no rain in most of Egypt. The chart at the right shows that in Turkey only one-twelfth of the land is farmed. About one-eighth of the land is covered by forests. That leaves a very large part which is used for little except sheep pasture. Some of it is too rough even for pasture and is not used at all.

them he can raise grain or vegetables. Or perhaps goats or pigs pasture in the groves. But in either case, the farmer gets two crops at once from the land.

Old ways of farming. In these ways, then, the mountain farmers make the most of their land. Look at the map on page 128 and see how much of the Mediterranean region is mountainous. Yet nearly half of Italy, a fifth of Greece, two-fifths of Spain, and a fourth of Portugal are farmed. In Italy, Spain, and Portugal, out of every hundred people, sixty work on farms. In Greece forty-five out of every hundred people are farmers.

Most of these people, especially in the hilly sections, are poor. Their farms are usually small, and few of the farmers have any modern machinery. Most of them must work the land by hand, with the same kind of crude farm implements that have been used there for centuries. You wonder that these people are willing to go on year after year working so hard just to make a bare living.

Garden Spots of Mediterranean Lands

Lands that blossom under irrigation. You must not suppose, however, that every Mediterranean farmer has a hard time making a bare living. There are places where the fields can be irrigated. There the farmers can raise almost any crop they wish.

Wherever a mountain stream permits irrigation—and there are hundreds of such tiny valleys—you may see farmers bringing water to the thirsty ground. There are only a few places where large tracts of ground can be irrigated. Elaborate irrigation works have been built near the mouths of a few rivers.

These irrigated regions are wonderful "garden spots" scattered here and there in the Mediterranean countries. Look at the map on page 128 and find the larger river valleys and the places along the coastal plain where several smaller valleys come together.

Aside from these larger lowlands, which you can easily pick out on the map, the better farming land is in little patches along rivers or tucked away among the mountain ridges.

Publishers' Photo Service

Someone must make the boxes and barrels to hold the products of Mediterranean lands. These Spanish coopers are making casks to hold sherry wine. In addition to boxes for fruit and casks for wines, what other containers are needed to hold the products? How many different kinds of workmen will be needed to make these containers? Do you know where the workmen will get the materials needed?

especially near the coast. Such irrigated garden spots grow their green crops quickly in the warm Mediterranean sun. Suppose we look at some of these places and see what the products of the land are.

The land of many vineyards. One of the things a traveler notices first of all is the large number of vineyards in the Mediterranean countries. The people living in these lands have always made wine, for they have found it hard to get pure drinking water. Milk, too, is scarce, since it takes a great deal of land to support grazing cattle.

As far back as history goes, we read that the Greeks and Romans had vineyards and made wine. And today, just as it has been for centuries, the making of wine is an important industry throughout the Mediterranean World. Wines make up a large part of the cargo of ships that ply the blue, sunlit waters of the Mediterranean.

The grapes are gathered in September and October. From the terraces they are carried to giant vats of stone or wood, in which the juice is pressed out. In the cool of the evening during the grape harvest there is much merriment with dancing and singing, for these people think this is the happiest season of the year.

Two coastal valleys. Two of the prettiest "gardens" are the sections around Valencia and Murcia in Spain, especially when the groves of orange trees are in bloom. For many centuries the groves have been irrigated by a network of canals fed with water from mountain streams.

The orange groves of Valencia and Murcia are the chief citrus orchards in southern Europe. The fruit grown here is exported to countries in northern Europe.

Slopes in these regions are terraced and are closely covered with vineyards. The grapes from these vines are famous for making sweet, thin-skinned raisins, rich in flavor.

The Valencia district is noted also for its fine Spanish onions and other vegetables,

which are sent to cities throughout Spain and to England. The farmers fertilize the land carefully, and the growing season is so long that often six crops of vegetables can be raised in a single year.

In Valencia we might see something very interesting—a strange group of judges called the Tribunal of the Waters. It meets every morning at the Cathedral to settle disputes over the use of the water. Seven black-robed judges, elected by the peasants, conduct the court with much dignity. This reminds us again of the scarcity and importance of water in these lands.

The Guadalquiver Valley. Between Seville and Cordova, in the valley of the Guadalquiver River of Spain, is a regular forest of olive trees. Olives are so important to the people of this country that they are grown on good land as well as on the rough slopes of the hills. This is one of the important olive-oil producing regions of the world.

Many people have crowded the rich flood plains in the valley of the Guadalquiver. They live in cities, some of which have as many as thirty thousand inhabitants. The people go out each morning to work their small farms in the surrounding land. Since the days of the Romans there had been many large estates, but in recent times most of these estates were divided into smaller farms. The industrious poor man now has a better chance of becoming comfortable and independent.

Courtesy Consulate General of Portugal

Rivers as well as roads are used to carry products to market. This sail-boat on the Douro River, Portugal, is carrying casks of wine to Oporto, where some of it will be bottled and shipped abroad. The wine takes its name "port" from the city of Oporto.

Courtesy Consulate General of Portugal

After wine is made from grapes, it must be taken to market. In Portugal the casks are hauled on ox carts from the wine-presses to the nearest market town. Notice the heavy leather pads on the heads of the oxen, and the crude cart wheels. The oxen are slow and pull the carts about four miles in an hour.

Everywhere flowers are growing. Before each small cottage is a tiny garden filled with gay blossoms. The courtyards of the larger houses are filled with geraniums, carnations, and roses. Walls and balconies are vivid with a riot of colorful and fragrant flowers.

Gardens by the Atlantic. In the western and northern parts of the Iberian Peninsula we find quite different garden spots. The country of the Cantabrian Mountains of northern Spain is so different from the irrigated valleys and the dry plateau that we can hardly believe we are still in Spain. This is the land of the Basques. Ocean winds bring even temperature and cloudy days during

much of the year. Frequent rains make possible the thick forests and meadows heavy with grass. But the Basque country is cut up by mountain ridges into narrow valleys, and so most of the farms are small, rarely more than six or seven acres.

The Basques cultivate fields of Indian corn, flax, and hemp. They have orchards of apples, plums, and cherries. All these crops, as you know, require more rain than falls in most parts of the Mediterranean World. There are a few flocks of sheep, for these people are self-supporting and raise wool for their own clothing. The farmers also raise cattle and pigs.

In this region the farmers own their land. They live in little villages so closely spaced that they seem to be almost one long chain of towns. The houses are not made of adobe, as they are elsewhere in Spain, but of wood. Wood is plentiful, as you can see when you notice the forests of chestnut, beech, and oak.

The Portuguese gardens. Portugal, bathed in ocean breezes that bring mild temperatures through most of the year, is blessed with abundant rainfall and rich vegetation. The northern part is sometimes called "the garden by the side of the sea."

Burton Holmes from Ewing Galloway

In the Basque country are many little villages like this one. You can plainly see a field of corn like the corn we grow in this country. In the distance are pastures, orchards, and fields of grain. In this Basque region of Spain most of the houses are of stone. In other Basque regions the buildings are often of wood.

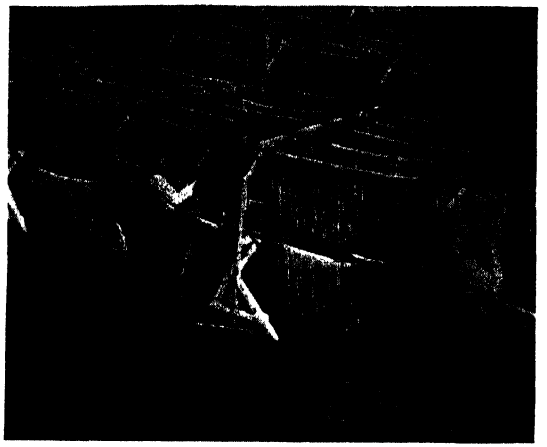
Burton Holmes from Ewing Galloway

These Basques are making soles for canvas shoes out of hemp fiber. In most Mediterranean lands articles are made chiefly by hand, rather than in factories where machinery is used. Much of the work is done in the homes of the workers or in tiny shops.

Southern Portugal is a good deal like Spain. It, too, has its garden spots. They are very much like the Mediterranean district of Andalusia in southern Spain. In these spots you may see orange groves, vineyards, and orchards of olive, fig, and almond trees. There are also many vegetable gardens.

The Italian gardens. The *campagnas*, or coastal river plains, about Rome and Naples are among the most thickly settled regions in Italy. The soil is very fertile, and there is abundant water from the mountain streams. From one year's end to another the farmers are busy raising melons, oranges, lemons, figs, olives, grapes, wheat, and many kinds of vegetables.

Much of the wheat grown in the Italian Peninsula is suited for making macaroni, which is one of the chief foods of the Italian people. Great quantities of macaroni are also exported. To make it, flour from this kind of hard wheat is mixed into a stiff dough. The dough is forced through a cylinder that is full of tiny holes. Then it comes out in long strings and is next draped on racks to



J. Jay Hirz

This is a macaroni drying yard outside a factory in Naples, Italy. The long strings of pasty dough are hung over poles in the sunlight until they dry hard. In the better factories, which make macaroni and spaghetti for export, the drying is done in rooms where dust and dirt can be kept from the food. Then it is packed in cardboard boxes and large wooden cases.

dry in the sun. The poor people make their own macaroni and spaghetti, hanging the racks in the street to dry, regardless of the flies and the swirling dust. Macaroni that is to be exported is made in factories in a more sanitary way, and the drying is done in special rooms.

The sunny island of Sicily to the south, off the "toe" of the Italian Peninsula, is another citrus-fruit region. Lemons are sent from there to northern countries.

The Po Valley. The richest of all the garden spots is the valley of the Po River in the shadow of the Alps. This is another region which lies outside the lands having a Mediterranean climate. The Po Valley receives rain all through the year and so has a long growing season. Its soil is deep and fertile. Many of the farmers irrigate their fields to get just the right amount of moisture. Because of the long growing season and plentiful water it is possible to raise one crop right after another. Three and sometimes four crops can be raised on one farm in a year's time.

The farm-land of the Po Valley is an important wheat-producing and Indian-corn-producing area of Europe. And it has water enough to be the only important rice-growing district in all Europe.

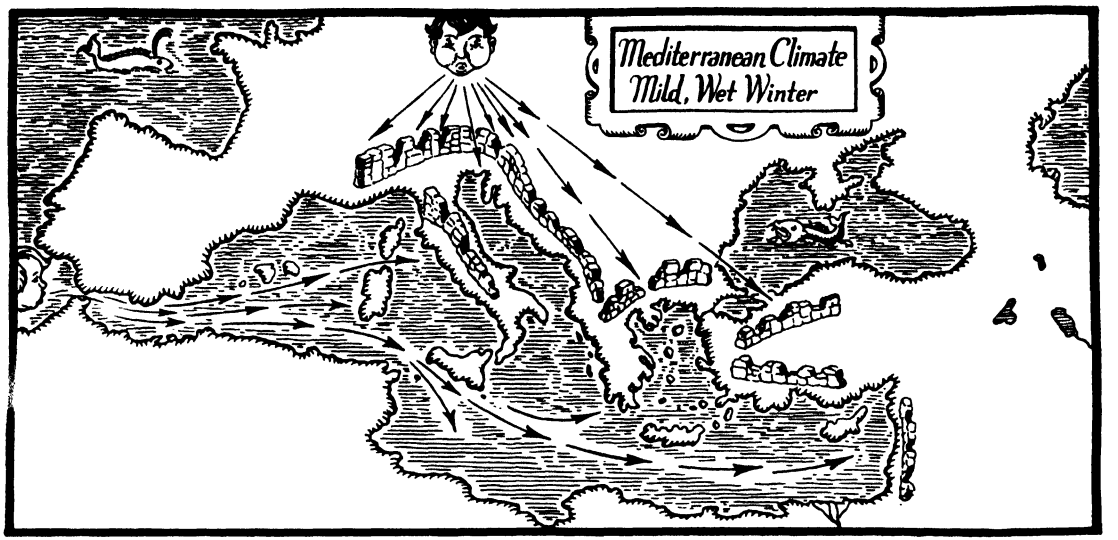
The farmers here are prosperous. Because the plain is wide and they can have large fields, they use much modern machinery. They carry on a thriving dairy and cheese business, too, for in part of the valley great herds of cattle are pastured. Some of the noted varieties of cheese from this region are shipped to far-distant world markets. Have you ever heard of Parmesan cheese, which comes from Parma?

On the slopes in the northern and western parts of this great valley there are groves of mulberry trees and thousands of acres of vineyards.

Gardens in the mountains. Garden spots are widely scattered throughout the mountains in the Balkan Peninsula. Find these places on the map on page 93. Most of the products raised here are for home use only. But two things from this region have become famous in other countries. They are Turkish tobacco, from the plains of European Turkey and Bulgaria, and attar of roses, a perfume from Bulgaria.

Courtesy Turkish Embassy

Both Turkey and Bulgaria produce tobacco. In the harvest season the families, children and grown-ups, go into the fields to help with the crop. The white bags you see in the picture are put over the flowers of the plants to protect the seeds.



On this map the mountains are shown as walls, and you can see why. Notice how the walls keep out most of the cold winds from the north. The warm westerly winds help to keep the Mediterranean lands warm and also bring rain. Notice the walls that stop the westerlies. What effect do you think the walls have?

The currant country. A famous garden in Greece lies along the south shore of the Gulf of Corinth. Here, and around the eastern side of the Greek Peninsula, as well as on many of the neighboring islands, are hundreds and hundreds of vineyards producing small black grapes. These are called currants when dried. Thousands of Greeks depend for their living on these vineyards, for millions of pounds of currants are exported yearly, many ship-loads coming to America.

Through the long, hot summer the currant grapes ripen and store their sugar. About the first of August they are harvested. The grapes are taken to the drying-ground in baskets and there spread on wooden trays. Through the long sunny days they lie, wrinkling and shriveling, but growing sweeter and richer in flavor. It is only in these lands of summer drought about the Mediterranean, in southern California, and a few similar places in the world that the dried-fruit industry can flourish. Greece produces most of the world's supply of currants.

Thessaly, the granary of Greece. For contrast let us turn to a quite different region, to Thessaly, the granary of Greece. Here you might easily think you were back in the days of the ancient peoples. The fields are cultivated as in olden times. The farmer plows the land with an old-fashioned plow drawn by oxen, or else he scratches it with a wooden stick. He pumps water from wells into reservoirs for irrigating his fields. At harvest time he cuts the grain with a sickle and takes it to a threshing-floor.

On the hard stone or packed dirt of the threshing-floor the grain is spread out to be tramped on by the slow, patient oxen which the farmer drives back and forth over it. They tread out the grain from the straw and heads. The grain is winnowed by tossing it in the air so that the wind blows away the chaff, and the grain falls to the ground.

These farmers do not use fertilizer. The soil is naturally fertile, and the crops are "rotated." In one small area we can see wheat, barley, and tobacco growing. On the hill slopes are grape-vines and groves of olive, orange, chestnut, and oak trees. The oaks and chestnuts supply food for droves of pigs. Still higher are pastures for sheep and goats.

Most of the farms in Thessaly are large estates. The land is worked by peasants, who take part of the crop as payment for their work.

Seed-time and harvest time. Wherever you go through this Mediterranean region, in garden spots or on the hills and mountains, you will find the people at work. The farmers are never idle, for farming goes on in this part of the world throughout most of the year. This may seem strange when you look at the map on page 196 and see that these lands are as far north as Philadelphia, New York, Chicago, and Denver. But it will not seem so odd when you remember that the protecting mountain wall along the northern border and the warm Mediterranean Sea give this region the special weather we call the Mediterranean climate.

Suppose we follow the farmer in his activities. In the autumn he is planting wheat, especially in the northern, damper regions. In the southern, drier sections he will be planting barley. Wheat is by far the most important crop in these countries. The wheat and the barley grow during the moist, mild winter. They are ready for harvest in late spring or by early summer, before the dry season really sets in. In spite of their hard work, the Mediterranean farmers cannot grow enough wheat for all the people in this crowded part of the world. Some wheat has to be imported each year from other countries.

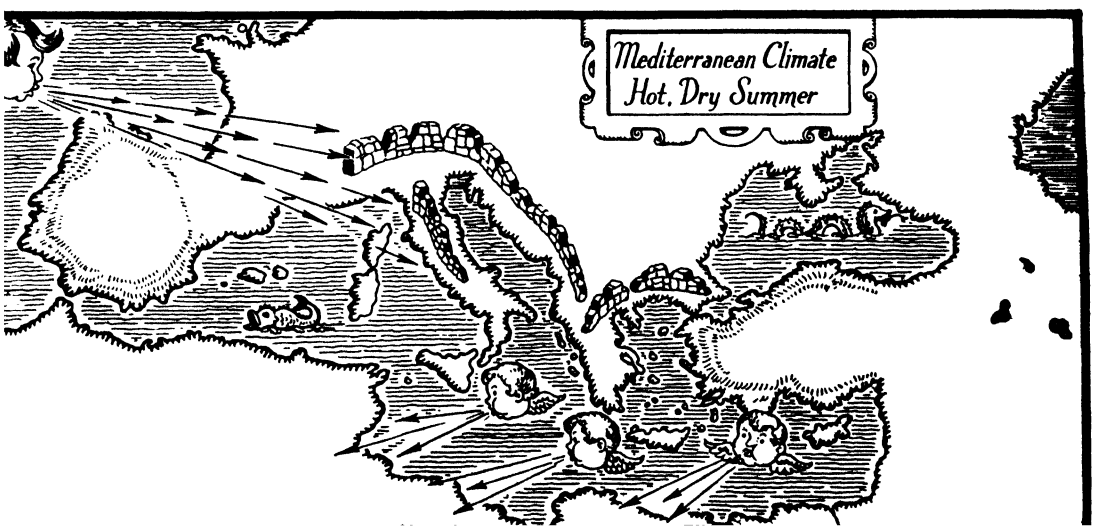
In the autumn, while the farmers are planting their wheat and barley, they are also busy harvesting olives and gathering grapes.

In the early spring the farmers plant vegetables and flowers. These are gathered early in the summer before they are withered by the scorching summer sun.

The Plateau Grazing Lands

Parts of the Mediterranean mountains are too high and rough for even the most patient and thrifty farmer. But these lands are not wasted; they are used as pasture lands for sheep and goats. One of the large grazing regions is a plateau, known as the Meseta, which makes up a large part of the Spanish Peninsula.

The Meseta Plateau is so high that winters are cold and windy. Farmers cannot



The warm westerlies that bring rain in the winter do not reach much of the Mediterranean region in the summertime. There are no strong north winds to leak through gaps in the mountain walls and cool the lands. The hot sun beats down, day after day, and the lands become drier and browner.

grow vegetables or fruits there in the winter, as can be done in most Mediterranean lands. In the northern part of the plateau the summers are so dry, hot, and dusty that only wheat is grown. Over the greater part of the vast grasslands on the plateau roam flocks of merino sheep, whose fine, silky wool brings high prices.

On the plateau and through the hills and mountains of the Mediterranean region the commonest scene is of shepherds wandering over the mountainsides. In many places women herd the flocks. Each woman carries a distaff and spins while she watches her sheep or goats, just as women of this region have been doing for many centuries.

Burton Holmes from Ewing Galloway

Cooking, spinning, and weaving are not the only tasks performed by women in Mediterranean lands. They help the farmers in the fields and vineyards. These Italian women have been cutting hay on a steep hillside and are carrying it home in bundles.

Resources of the Mediterranean Lands

When you travel about the Mediterranean region, you see men, women, and children at work in the fields and orchards. When you look at a list of the things that the Mediterranean countries sell to the rest of the world, you find that fruits, vegetables, wines, cork, and nuts are a large part of the total. These are the produce of small orchards and gardens rather than of large fields.

Visual Education Service

This Sicilian woman is using a distaff and bobbin. On the distaff she has wound wool. The twirling bobbin helps to twist the wool into yarn as she pulls fibers from the distaff. As the yarn is made, it is wound on the bobbin. All through the sheep countries of the Mediterranean the women make yarn and weave cloth. In this way they produce much of their own clothing.

You will not find much manufactured goods in the ships that leave Mediterranean ports. Although the Mediterranean peoples have some factories and mills, they cannot be called manufacturing nations. Why do you suppose this is true?

Lack of raw materials. One reason for so little manufacturing is the lack of raw materials. The Mediterranean region is not rich in wood, coal, iron, and other raw materials which manufacturers must have.

Why the region has little lumber. One of the important things that men use in manufacturing is wood. And today the Mediterranean region is almost without forests, except in the mountains of the Balkan Peninsula, back from the coast. Of course there are patches of woodlands. But most of the trees are in cultivated groves of oak, chestnut, walnut, olive, and other fruit trees. These trees are much too valuable for their crops to be cut down as timber.

The wild forests of this whole region are largely gone. Many things are responsible

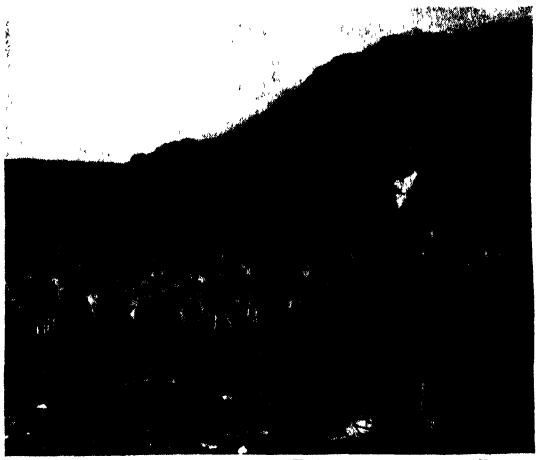
for this condition. Each time a barbarian tribe from the north came plundering and making war, it destroyed some of the forests in its way. When the young shoots of the forest were struggling to grow again, goats nibbled them off. Shepherds burned the bushes and young trees to let the grass grow for their sheep. Then, too, the peasants cut down trees to make charcoal, a fuel much used in Mediterranean countries. No one thought about taking care of the forests, and so today there is little lumber for manufacturing.

Minerals are scarce. Coal, iron, and other minerals are also necessary raw materials. There are not many deposits of these minerals in Mediterranean lands. Some of the deposits are not mined because the people do not have machinery or good roads over which to haul the minerals to market. That is true of the mineral deposits in Greece, the other Balkan countries, and Turkey.

Minerals in Spain. Spain is the only Mediterranean country which has very much wealth in minerals. For many centuries Spain has been producing metals. The first Phoenician traders brought metals from Spain to the other Mediterranean lands. The iron mines of Spain are her greatest treasure, although they are not worked by modern methods. Instead of using steam-shovels, Spanish miners slowly scratch out the iron ore with picks and shovels. Then they carry it in baskets on their backs to cars that haul it to the railroad or the ship.

Burton Holmes from Ewing Galloway

People use charcoal for fuel in many Mediterranean countries because coal is scarce and expensive. This is the hut of a charcoal burner. He will cut wood into short lengths, stack it in a large heap, and cover the pile with sod. Then he will set fire to the wood. It slowly chars but never bursts into flame.



Burton Holmes from Ewing Galloway

If you paid a visit to Mediterranean lands, you would see many scenes like this. Perhaps the shepherd would not be dressed like this Spaniard, but you would see sheep grazing on the same rough land.

The Bilbao mines are in the northern part of Spain in the Cantabrian Mountains. The southern part of the country has other important mines in the Sierra Nevada Mountains. The quicksilver, or mercury, mines and the copper mines are famous. Spain is also one of the leading countries of the world in the production of lead, and she still mines some silver. But so far Spain has made little use of the great beds of coal hidden in her mountains.

The wealth that came from her mines helped Spain to build her splendid colonial empire. This was long after the days of the Roman Empire. The Spaniards understood how the possession of mines could make a nation rich, and Spanish adventurers were eager to explore the New World in order to find more of the precious metals.

Ewing Galloway

This kind of mine is a placer mine. Water washes away the sand and gravel from the mountainside. The water flows in a ditch and through troughs. If there is gold, it sinks to the bottom in places where the miners put mercury to catch the tiny particles. There are other kinds of mines in Spain.

Minerals in Italy. Italy has almost no coal and not very much iron. Perhaps the most famous mineral product of the Italian Peninsula comes from the marble quarries of the northern Apennines. From this beautiful Carrara marble the Romans made many of their lovely statues and beautiful buildings. Today most of the marble quarried in Italy is shipped out to other countries, where it is used by artists and builders.

The island of Sicily, at the southern tip of Italy, is noted for its sulphur. Mount Etna, a huge volcano on the island, holds great stores of this mineral. Recently, however, Italy has been producing less and less because deposits of sulphur are being mined in America, on the gulf coast of Texas.

Manufacturing in Mediterranean Cities

With few raw materials close at hand, you can see why so little manufacturing is done in the Mediterranean region. The farmers solve their problem of lack of rain by irrigating and by growing crops that do not need much water. But manufacturers cannot solve the problem of getting materials so easily. They have to import most of their raw materials from other lands. That makes the cost high, for it is expensive to transport raw materials.

There are a few manufacturing cities in the Mediterranean region. These are Milan, Genoa, Barcelona, Naples, Bilbao, and a few others. Suppose we see why these places are favored.

Why the Po Valley leads in manufacturing. You know that the Po Valley is a fertile farming district. But it is also a busy industrial center. The chief business is the making of many kinds of textiles—cotton, silk, and woolen cloth.

As Italy has almost no coal, you may wonder how this valley can be a manufacturing center. Enormous quantities of coal are used by the Italian factories and mills, and almost all of it must be imported from other countries. However, more of the factories are now using electric current which is made by dynamos run by the swift mountain streams of the Po Valley. Look at the map on page 128, and you will see that there are many rivers on the slopes of the Alps and the

Ewing Galloway

Modern machinery brings rocks containing sulphur to the surface of this mine in Sicily. But the sulphur is taken from the rocks in the old way. They are piled up in stone towers and heated until the molten sulphur runs out in a stream which soon hardens.

DeCou from Ewing Galloway

Swift streams furnish power to run many Italian factories. The enormous pipes on this mountain slope carry water to turbines, which are a special kind of water-wheel. The turbines turn dynamos which produce electricity for power and light.

Apennines. All of these rivers are fairly close to the cities of the Po Valley.

Factories must have people to work in them. In the Po Valley there are many people who are glad to work in the mills. There are often more children in a farmer's family than can make a living on the farm. The crowded population means an abundant supply of cheap labor.

Another reason that mills are located in the Po Valley is the central location of the region. Turn to the map on page 300 and see how close the valley is to the markets of neighboring countries. Railroads run through the Alps, often in long tunnels, to France, Switzerland, and Austria, connecting these countries and others with the Po Valley.

Manufacturing in Spain. In Spain, Barcelona is the chief manufacturing city. Large textile, leather, metal, and paper factories are located there. Bilbao and Santander are also important with their plants for smelting, ironworking, and ship-building. These three cities seem more like cities of northern Europe than cities of the Mediterranean.

Home industries. Throughout the Mediterranean lands the people make things in their homes. It would surprise you how many homes contain spinning-wheel looms so that people can make their cloth. Most of the farmers make their furniture and do a great deal of wood ca ing. Many of them make shoes for t family, too. In fact, many articles that are made by machines in northern Europe are made by hand in the Mediterranean region.

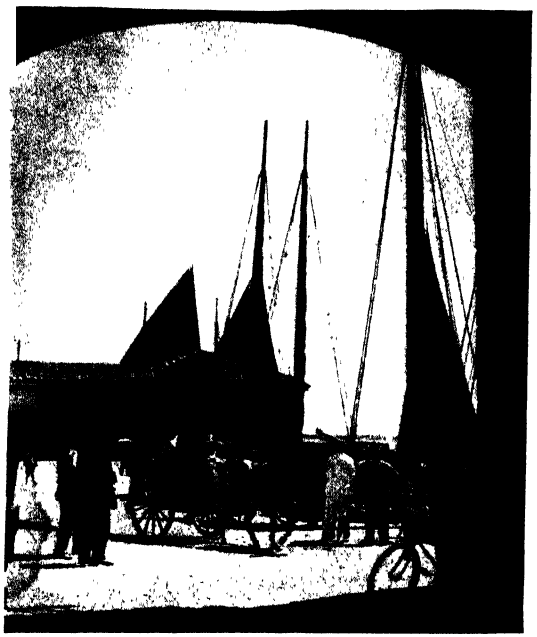
In the Balkan Peninsula the people grind their flour, make their own olive-oil and cigarettes, and weave a little woolen cloth and carpeting. But they make all these from materials which they produce themselves and have barely enough for their own needs. And so they have to buy most of their manufactured goods from neighboring countries.

Making a Living on the Sea

Mediterranean farmers cannot raise many cattle for meat as we do in our country. They would rather get the wool from a sheep than eat the meat. Goats supply not only mohair

European Picture Service

Like the Basques you saw on page 172, these Italian basket-makers remind you that people make many things by hand in the Mediterranean lands because there are few factories. Tools, kitchen utensils, furniture, and many other things are made in homes and in little shops without the help of machinery.



H. Armstrong Roberts

In hundreds of Mediterranean villages the people earn a living from the sea. The men are fishermen or sailors, while often the women and children work in canneries where the fish are prepared. Can you name any kinds of canned fish from the Mediterranean?

but milk as well. Of course the people do eat some mutton and goat flesh, but they are used to getting along with very little meat. They eat beans, cheese, and olive-oil to take the place of meat. Those near the coast eat a great deal of fish.

Another source of food. People in the Mediterranean region have always taken to the sea. On rough, mountainous land it is not easy to make a living. To increase their food supply, many people, as you have seen, turn to the sea for fish. This was true, as you know, of the ancient Greeks. It is true today of most of the Mediterranean peoples.

All along the shores of the sea are fleets of little fishing boats sailing out to catch sardines and tunny. The fishermen of Portugal even cross the Atlantic to the Grand Banks of Newfoundland for cod and haddock.

The supply of fish caught in the Mediterranean is not enough for the millions of people who live along the shores of that great sea. Most of the countries have to import some salted and canned fish from other countries, such as Russia, Norway, and others even farther away.

The Mediterranean Highway

Ages ago, because they were fishermen, the Mediterranean people learned the ways of the sea. One by one the various peoples became seafarers. From early days the Mediterranean has been one of the world's great highways.

Early seafarers. The Phoenicians first learned their way about the great inland sea and established colonies along its shores. One of the colonies was Carthage, and as you know, Carthage became a great sea power. Both the Phoenicians and the Carthaginians were traders; the sea was necessary for their life and prosperity.

The Greeks began their seafaring life looking for wheat, you remember. First the Greeks roved about the islands and coves of the Aegean Sea, but soon they spread farther. Look again at the map on page 86. Ships plied between those colonies and the home cities of Greece.

Today the ships of Greece sail around the same seas, the Black, the Aegean, and the Ionian, to Marseilles in southern France and to Alexandria in Egypt. They are still going after wheat, as well as the many other things that the Greeks need but do not produce in their own country.

The Romans found the Mediterranean a means of holding their great empire together. It was the shortest and most direct highway to link the colonies to Rome. Look again at the map on page 128 and compare the distances that armies would have to travel by sea and by land to reach Judea, Egypt, or northern Africa.

The Roman ships carried something besides armies and government officials. Rome had to have wheat, too. She had conquered prov-

Acme Newspictures

The village spring, where everyone must go for water, is a most important place in this little Greek mountain village. There would not be a village here if water could not be found. At the right, notice the patient donkeys with their loads.

ince after province in order to have enough food for the people at home. And so the Roman ships brought back cargoes of grain. Because the Romans were traders, the ships carried silks and spices from the East, ivory and feathers from Africa, metals from Spain, and a host of products from the whole Roman world.

A sea free to all nations. For many hundreds of years one nation after another tried to own the Mediterranean Sea and prevent others from using it. Today, though, the sea is free to all. Most nations now think it is not right that any one country should control a great commercial highway like a sea.

The Mediterranean has become something more than a "sea in the midst of land." It is a part of a great highway that leads from Europe to India, China, Japan, and Australia, as you can see by the map on pages 230-231. The Suez Canal now connects the Mediterranean with the Red Sea. Until that canal was built, about seventy years ago, goods from the East had to be transported by camel caravan across the neck of land between the two seas. Nowadays ships can sail directly from the Mediterranean through the Suez Canal into the Red Sea, then down to the Indian Ocean and to ports of the East. A company composed of people from many nations owns the canal, and ships of any nation may use it at any time, in peace or war, by paying the toll.

And so today ships by the thousands use the great Mediterranean highway.

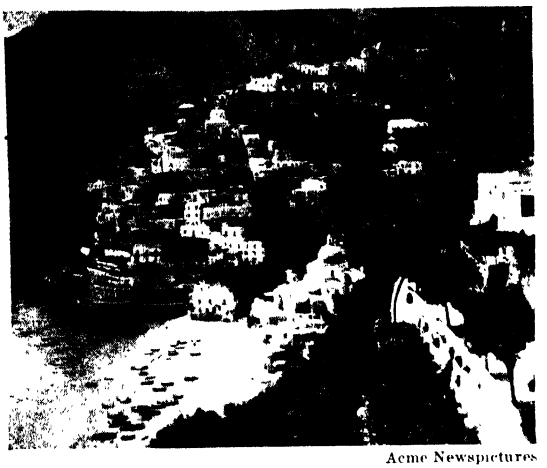
A Land of Many Towns

It surprises us to find so many cities in lands where most of the people are farmers. In farming districts in our own country large cities are rather far apart. There must be a reason why cities and towns are rather close together in a farming region like the Mediterranean World. Perhaps we can see why if we take an imaginary trip in an airplane and get a bird's-eye view of the country.

Towns must have water. Around the blue sea, dotted with fishing boats, we see the hills and mountains. They are not green, or in the distance bluish, but are a yellowish brown at this time of year. Wherever we see the towns closest to one another and notice the greenest fields, we know there is a plentiful supply of water for the people and for irri-

H. Armstrong Roberts

In almost every Mediterranean city there is a public market like this one in Verona, Italy. In Roman times this square was the forum, but now it is given up to stalls, carts, and stands where a great variety of merchandise and foods is offered for sale.



Acme Newspictures

Many cities were located in steep, rocky places so that they could be defended easily. Notice how this city is built on terraces. Although this is a fishing village, some of the terraces are planted with fruit trees and vines. Some of them are gardens.

gating. It is a landscape that reminds us of the California country-side. From our plane we see clusters of towns strung in chains at the base of the mountains, or perched high on the slopes, as though clinging there for protection. The towns are there because they can get water, which is so precious in Mediterranean lands. A mountain stream or springs will be found in every town.

Towns built for defense. Many of the towns in the Mediterranean region were located in places where they could be defended easily. We must remember that for many, many years life and property were not safe in these lands. Farmers and herdsmen, fearful of attack, settled in groups. In time these settlements became towns. That was the way many ancient Greek cities grew. In the same way Rome changed from a village to a mighty city.

Usually the towns that were built for defense were located at some distance from the coast because pirates often raided the shores. Tyre and Venice were built on islands for protection against enemies who came by land. Scattered through Italy and Spain are many hill towns that were built long ago on high places for safety against attack, just as ancient Rome was built on hills.

Where other towns have grown. There are also the seaport towns that carry on fishing and trading. We know why they are so located. Traders also settled towns at crossroads, particularly where passes led through the mountains. Venice, Turin, and Milan grew up for that reason. They lay close to the passes which the traders used on their way to and from northern and central Europe.

Now we know some things about the cities of the Mediterranean World. There are many cities, because the land is crowded. And cities grew up where people could get water, be safe from enemies, or have a good opportunity for trade.

The Mediterranean World Today

Before we leave these countries of the Mediterranean to follow the story of civilization into central Europe, let us pay an imag-

European Picture Servi

Venice was built on islands during the fifth century, when barbarians invaded the Roman lands. For centuries, you see, the people have been used to moving around in boats. Here are some of the boats called gondolas, and in the distance is the church of St. George, or San Giorgio, as the Italians call it, with its tall bell tower standing beside it.

inary visit by boat to the important seaports and other towns of the Mediterranean countries.

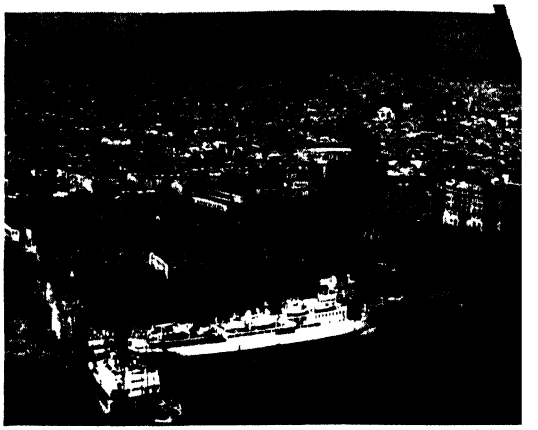
Portugal. Oporto, in Portugal, is our first stop. Here we get a hint of what we may expect to see in every Mediterranean country. The wharves are loaded with wine waiting to be sent to America and to northern Europe. Our next stop is at Lisbon, which is important not only for its trade, but also because it is the capital of the country. Portugal is only about the size of our state of Maine, but it supports about eight and one-half times as many people.

Once Portugal had a great colonial empire. Brazil, in South America, belonged to this seafaring little country. But Brazil became independent more than a hundred years ago, and now Portugal has only a few small colonies left. Find Goa, in India, on the map on page 465 and Mozambique and Angola, in Africa, on the map on page 533. Besides these colonies Portugal owns the Madeira Islands and the Azores in the Atlantic Ocean.

Portugal has not had a king since 1910. The people elect representatives for a National Council which governs the country. Their language is somewhat like Spanish. Perhaps this little country does not seem important to us, but when you walk on linoleum or see a bottle cork, remember that Portugal produces most of the cork used in the world.

Publishers' Photo Service

In Venice even the vegetable peddler must use a gondola to call on his customers. This picture gives you a good idea of the narrow streets and the walks beside the canals. An automobile would not be of much use to a Venetian family. Gondolas are as thick on the canals as taxicabs in an American city.



Lionel Green

You can see that Barcelona, Spain, is a modern, businesslike city. Exports of fruits, wines, and olive-oil leave this port. But Barcelona also makes and exports textiles, leather goods, and chemical products, such as fertilizers, dyes, soaps, and drugs. Where do the Spaniards get the raw materials for these products?

Spain. Our ship stops next at Cadiz, in Spain, a port on the Atlantic Ocean. Spaniards tell us that the Phoenicians founded this city in 1100 B.C., and they claim it is the oldest in all Europe. Once it was very important. From the harbor, ships sailed to Spanish colonies all over the world. Now the wharves are piled with quantities of figs, wine, and cases of olive-oil.

Next we pass through the gateway to the Mediterranean, the Strait of Gibraltar. A great British fort, hidden inside the rock, is there to protect a trade route. This route is the short way from India to England, and England wishes to be sure that no hostile nation can interfere with the passage of her ships.

Now we visit the ports of Valencia and Barcelona, in Spain. The goods loaded at Valencia tell the story of this part of Spain. There are huge quantities of fruits, vege-

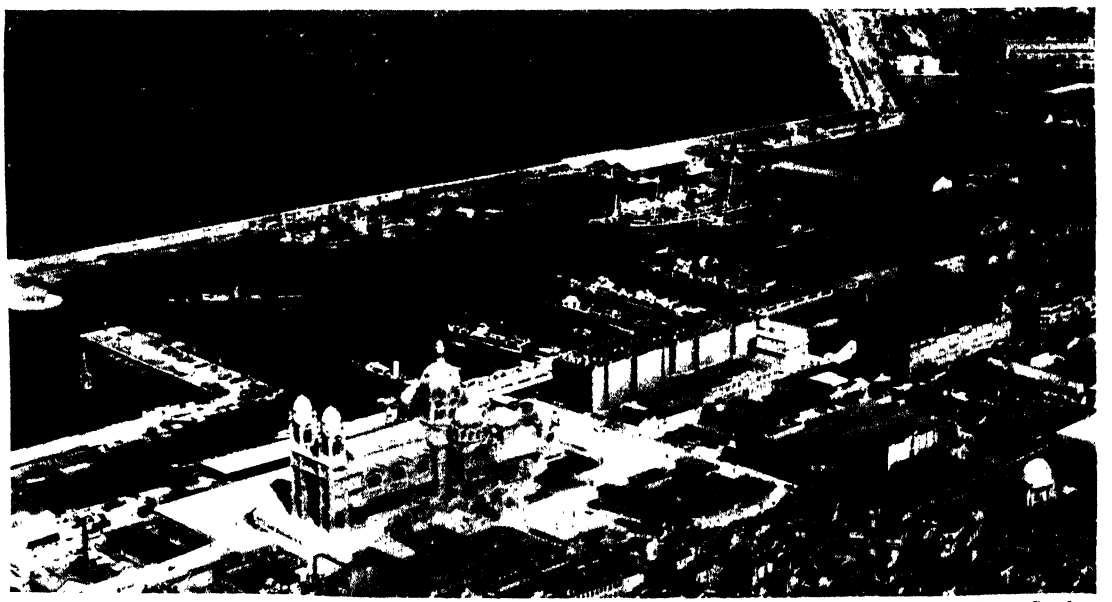
tables, and grain. There are bales of cloth, for Valencia is the center of Spanish silk manufacturing. Barcelona is a busy port, too, but here the factories make cotton cloth. At the docks we see piles of copper, lead, and iron ore ready to be shipped to British and German factories. These Spanish ports are on the fertile rim of the central plateau.

Mediterranean France. On the way to Italy we stop at Marseilles, in France, the greatest of all Mediterranean ports. Here, the workers on the docks, called stevedores, trundle boxes and barrels filled with the famous French wines, soaps, perfumes, and many other products of French farms and factories. We recall that there has been a city here since Grecian times. Produce from France and northern Europe comes down the Rhone Valley to be shipped eastward from this port. Surrounding Marseilles is the Mediterranean part of France, where the land produces much the same things as in other parts of the Mediterranean World.

At Marseilles we notice that the city is not located at the mouth of the river but to one side of it. Most Mediterranean river ports are not on the river. You may wonder at this. You know that a river is constantly bringing down silt and sand, which it drops when it reaches the deep water of the sea. A delta will be built up if the deep water is fairly quiet. The mouth of the stream becomes choked with sediment, and sand-bars are gradually formed across it.

Where there are strong currents or tides, the silt is washed away, and the harbor is left clear. At New York City the Atlantic tides twice daily scour out the sand and silt that would otherwise choke the river mouth.

Since there are no strong tides in the Mediterranean, the river mouths are so crossed by sand-bars and the streams so filled with shallow places that only small boats can enter. For this reason the Mediterranean ports of Marseilles, Leghorn, Barcelona, Alexandria, and several others are



James Sawders

This air view shows some of the many miles of docks, piers, and breakwaters which the French have built at the port of Marseilles. This is a very old city, as you have read, but it has grown very large since the Suez Canal was opened. Do you know why the Suez Canal helps this French city? Do the buildings of this city seem to you to be old-fashioned or modern? What kind of shipping do you see in the picture?

Hudson Historical Bureau

Many of the ancient buildings of Rome are being restored so that visitors may see how they looked in the days of the great Roman Empire. Other old buildings are to be left as ruins. Can you find the triumphal arch at the left side of the picture? The Forum begins at that arch. At the right are the ruins of one of the great baths. During the Middle Ages, people used material stolen from these great buildings to make houses.

built some distance away from their river mouths.

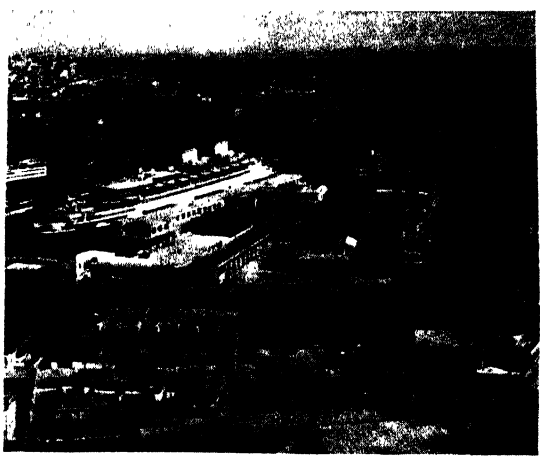
Italy. We go on to Genoa and Naples, the two great ports of Italy, the former in the north and the other toward the south. Genoa does business in textiles, raw silk, and automobiles, all of which are produced in the Po Valley. Naples sends out such Mediterranean products as fruits, vegetables, wines, and olive-oil. On the other side of Italy, Venice, built on islands and with canals for streets, used to be an important port. But Genoa and Naples are now more important for world trade. Look at the map on page 128 and see why.

Although Rome is not a port, this capital of mighty emperors and ancient glory is still called the "Imperial City." Today the Pope (the head of the Roman Catholic Church all over the world) lives there. Here tourists come from every nation to study Italian art and to visit the ruins of ancient Rome.

The Italian government is not only preserving the ancient ruins but is also restoring Italy to an important place in the world. The country has a king, but the real power is in the hands of a council. Recently swamps have been drained and better farming methods taught the people. Manufacturers have been encouraged to make better products and to use electric power, which is now being made cheaply from mountain streams in power-plants like the one pictured on page 179.

Italy has large possessions in Africa. Turn to the map on page 533 and locate Italian Somaliland, Libya, Eritrea, and Ethiopia. Besides these lands, Italy owns a whole group of islands in the Aegean Sea at the eastern end of the Mediterranean.

Greece. Our ship crosses the little Ionian Sea between Italy and Greece. We do not have to go around the peninsula, as there is a



Genoa is Italy's largest seaport, and it is also the center of Italy's air-lines. Out of this modern port the Italians export wine, olive-oil, soap, paper, silk, and marble. Into Genoa come most of Italy's imports, such as meats, grain, coal, iron and steel, oil, and lumber. Do you remember what famous seaman was born in Genoa many centuries ago?

canal cut across the Isthmus of Corinth. Our ship passes Patrai; then we steam between towering walls of rock and soon find ourselves close to Piraeus, the port of Athens.

Life in modern Athens will not remind you of the glory of ancient Greece, although the ruins of wonderful temples still stand on the Acropolis. Athens is now the capital of a united Greece. At the head of the government is a king, although the laws are made by representatives who are elected by the people.

At Piraeus, and at Thessalonike, which is farther north in a part of Greece called Thessaly, our ship loads currants, olives, wine, citrus fruit, tobacco, hides, bales of wool, and woolen goods.

Turkey. One corner of Turkey lies in Europe. Its port of Istanbul, once called Constantinople, is a cross-road where traders from all nations have always met. Here we see ships loading with nuts, figs and other fruits, with cotton, sugar, and tobacco. This part of Turkey is a noted tobacco country. We see rugs and other woolen goods.

Beyond the domes and minarets of the mosque you can see part of the harbor of Istanbul, Turkey. For many centuries traders passed through this city on their way between Europe and Asia. The city has been important since the days of Emperor Constantine. Do you know the three names the city has had?

James Sawders

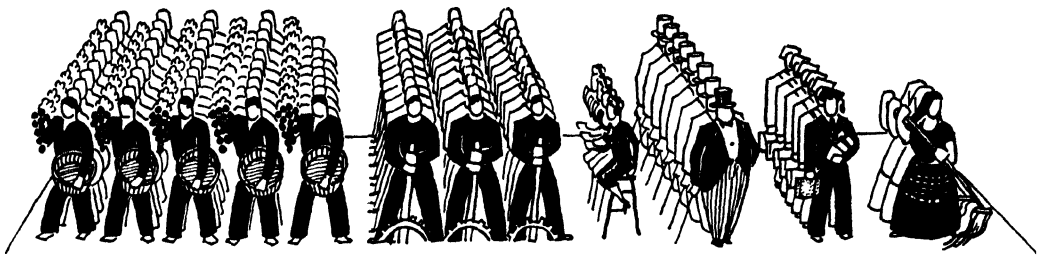
On the southern shore of the Mediterranean are many small valleys where the people can raise several crops of vegetables each year. Although much of the food is sold in native markets, like this one in Rabat, Morocco, northern Africa sends many fresh vegetables to the cities of northern Europe.

Now our ship moves southward along the islands of the coast of Asia, where the old Greek civilization probably began. We come to Smyrna, noted for its figs. But quantities of olive-oil and woolen goods, such as rugs, are loaded here, too.

Syria. The only other important port at the eastern end of the Mediterranean is Beyrouth. To Beyrouth come the caravans from Damascus, located inland at the edge of the desert. What do you suppose the caravans from Damascus bring to Beyrouth?

Northern Africa. Our ship now takes us past the Nile Delta to Alexandria, at one side of one of the river mouths. Cotton, rice, tobacco, and vegetables from the rich delta farms are shipped out, and manufactured goods are brought in.

Along the desert coast of Libya we see sponge-divers at work. The ports of Tunis and Algiers send fresh vegetables by fast steamers to the cities of northern Europe. The growing season in this warm land is far



This picture chart shows how the Italians earn a living. Out of every one hundred people who work, forty-seven are either farmers or fishermen. Thirty out of the hundred work in factories, and four work at the business of transportation and communication. Eight out of each hundred are employed in commerce and banking, six are engaged in professional work, and three have domestic occupations. Out of each hundred, that leaves two workers, not shown in the picture, for all other occupations.

ahead of that of the northern countries, and their produce finds a ready sale.

Thus we have made a circuit of the great inland sea, the Mediterranean. Along its shores we have found some people living in tents and huts like their ancestors of long ago. And we have seen other people living in modern apartments and homes in cities much like our own. Truly it is almost a world by itself. Yet we know it is no longer a complete little world, because it supplies other parts of the world with its produce in exchange for articles the Mediterranean nations cannot produce for themselves.

Talking Things Over

1. The climate in the Mediterranean region is milder than in American regions the same distance north of the Equator. The reasons for this are told in different parts of the chapter you have just finished. The map on page 174 shows two reasons for the warm climate. Can you find others?

2. The Italians dry macaroni outdoors. The Greeks dry currants in the sun. Does this tell you anything about the amount of rain these people have in summer? How long can you leave things outdoors in the sun without danger from the rain? Will the answer be different in various parts of the United States?

3. Growing season is the time between the last frost in the spring and the first frost in the fall. What difference does the length of this season make in the kind of plants that grow in a region?

4 We use the leaves, the seeds and pods, the roots, the bark, and the sap of various plants. Can you name some of these plants and tell how we use them? What trees are grown in the Mediterranean countries, and what uses has man learned to make of them? Remember that all plants were once wild, and that many of them have been changed by carefully choosing and planting their seeds.

5. Would it be simpler to plan irrigation for a level farm or for terraced fields? Remember that water must be brought to the field, and that it must also be spread over the field.

Doing Things Together

1. Terraced land gives more space for planting than a slope and is easier to plow and to irrigate. Could you build a small artificial hillside and then make a terraced slope of the same size? You might do it on the playground or in a sand pile. It will help to make this clear to others.

2. Do you know why cork is good material for stoppers? Why does it make a good floor covering? Why does it make good bulletin-boards? Bring some corks and some bark from other trees to school. Cut them, pinch them, soak them in water, and then let them dry again. How is the cork different?

3. If you have a phonograph at school, try to find a group of records of Italian and Spanish folk-songs. Play them through, listening carefully. Remember that these people sing while they work as well as while they play. Now is a good time to learn any Italian or Spanish songs in your music books. If you can sing them well, you might have a program.

4. Some of you have gymnasium classes. If you have a special teacher, ask her if she can teach you some folk-dances from the Mediterranean countries.

Soldiers and missionaries from Christian countries visited the tribes of northern barbarians in the region beyond the Rhine. In the following chapters you will read about the Franks, Saxons, and other tribes who inhabited the country we know as Germany. They are the people who carried civilization onward.

Courtesy German Railroads Information Office

Roman soldiers were kept in fortified camps along the northern frontier. This camp near the Rhine was in ruins until a few years ago. Now it has been rebuilt so that travelers can see what it was like in the days of the Roman emperors when the Roman army had to protect the people from the barbarians.

XIII. OUR CIVILIZATION BEGINS

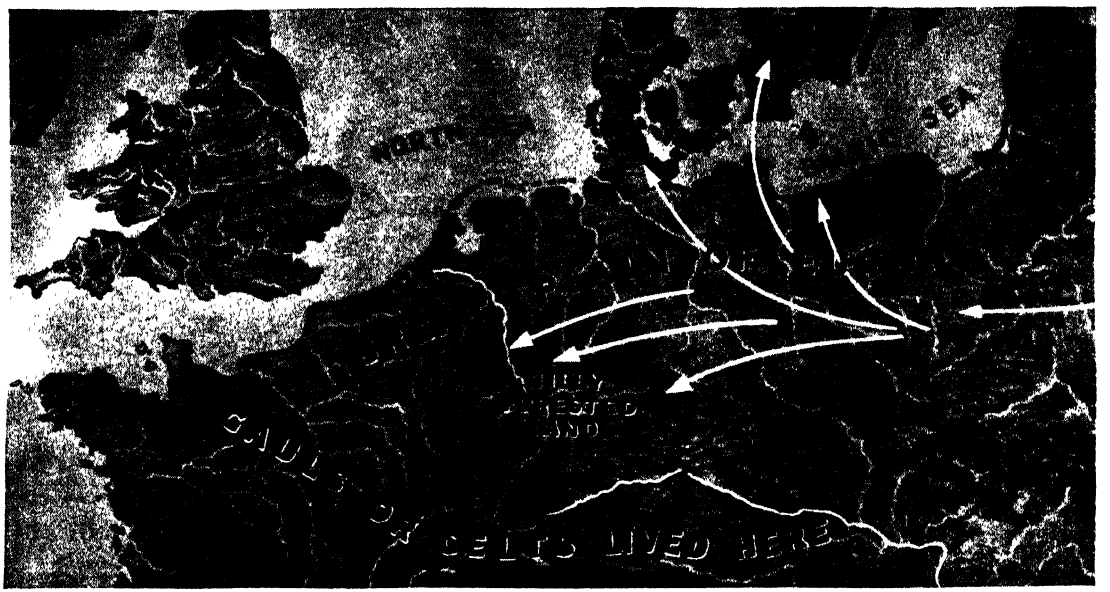
Fighting Tribes from the North

IN THE story of the Romans we saw how their great empire grew weaker and weaker. We read how it was divided into two parts so that it no longer had a single ruler or government. And we learned how tribes of barbarians, one after another, invaded the Roman lands and settled there. Now we shall read the story of these barbarians, whom we call Teutons.

There were a number of different Teuton tribes. The Romans called most of them Germans, but we shall read about tribes of Teutons called Franks, Angles, Saxons, Vandals, Goths, and other names.

It is hard to believe that these rough, war-loving people were going to carry civilization further ahead. When we last heard of them, they were helping to destroy Roman civilization. But we have seen other barbarians slowly become civilized. We saw how tribesmen became civilized in the valleys of the Nile and of the Two Rivers. We read how the Greek tribesmen destroyed the Aegean civilization and then, after many years, made a finer one of their own. The Romans, before they were civilized, destroyed much of the Etruscan civilization. But at last the Romans became more civilized than the Etruscans had been. Now we shall read how the Teuton tribes developed a greater civilization than the Roman one they destroyed.

The invaders of the Roman Empire. You will remember reading how barbarian tribes came from the plains of central Asia. They spoke languages very much alike, at first. We call these languages Aryan. The people who had settled Greece spoke one of those Aryan languages. So did the people who settled the Italian Peninsula and became the Romans. The Teutons also spoke an Aryan language. Probably all of them came from about the same region in Asia. Perhaps, then, you will wonder why the Teuton tribes were so different from the Greeks and the Romans.



Various tribes of Teutons moved into Europe from Asia during the time that Rome was becoming powerful. The map shows where some of the different tribes found homes. Notice the kind of land where they lived. Do you see how two great rivers formed a natural boundary between the Teutons and the peoples who lived south of them? The Celts who lived in what is now France were called Gauls by the Romans.

We find one answer to that question when we study the land where these barbarian tribes were living during the time of the Roman Empire. After they left Asia, the Teuton tribes roamed about the northern and western parts of Europe. These parts of Europe are quite different from the Mediterranean region we have been studying. The soil is different, and the climate is different. As our story goes on, we shall see how these two things helped to make the people different.

The Teutons

Where the Teutons lived. The Teutons dwelt in the forests on the great European plain. This plain stretches from the Alps Mountains on the south to the Arctic Ocean on the north, and from the Rhine River on the west to the Vistula River on the east. Locate it on the map on page 300.

The neighbors of the Teutons on the west, in the lands we now call France and Belgium, were the Celts. The Romans called them Gauls. To the east of the Teutons were another people called Slavs. They had come out of Asia, too, like the Teutons.

For many centuries the Teutons did not live close to the borders of the Roman lands. The people called Celts lived between the Romans and the Teutons. But when the Romans conquered the lands of the Celts, the Roman civilization came closer to the Teutons. At the time when the Romans were pushing their boundaries toward the Teutons, another people from Asia were crowding the Teutons from the east. The Teutons, then, had less and less land for themselves.

How the tribes-people lived. When the ancestors of the Teutons had lived in Asia, probably the people were roving shepherds and also cattle-raisers. But when the Teutons reached the plain of Europe, they did not need to wander about, looking for pasture for their flocks and herds. It was much easier to make a living on the plain of Europe.

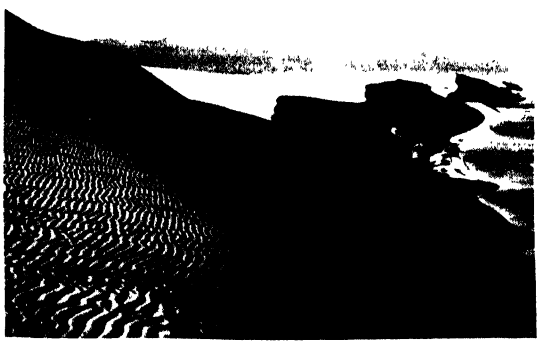
There were forests in which many wild animals lived. That meant a plentiful supply of meat. There were open places with plenty

of grass for pasture. There were many river valleys where the soil was rich. That meant good crops. At the time our story begins, the Teuton tribes were changing their ways of living. They were becoming a hunting and farming people. The farmers stored up some grain for the cold winters, and the hunters found game in the forests.

The Teuton tribes were not very good farmers, for they were just learning. They soon wore out the soil on their little farms by planting the same crops year after year. Then they moved on to a new spot. Since there was plenty of food everywhere, these tribes moved about as they pleased.

Living like this for centuries kept the Teutons from becoming civilized. They did not have to settle down near some precious spring or river and share the water as did the peoples of the Mediterranean region. They did not need to make rules about using the water or the land, for there was plenty of both for all. Such rules would have helped them to become civilized much faster.

Teuton settlements. There were no cities in the country of the Teuton tribes, and the people did not learn the civilized ways of city life. There were small villages, but each one



Courtesy German Railroads Information Office

This sandy seacoast along the Baltic Sea is where most of the world's supply of amber is found. In ancient times, traders found their way from the Mediterranean to the Baltic just to buy amber. But no traders settled in that region of warlike tribes.

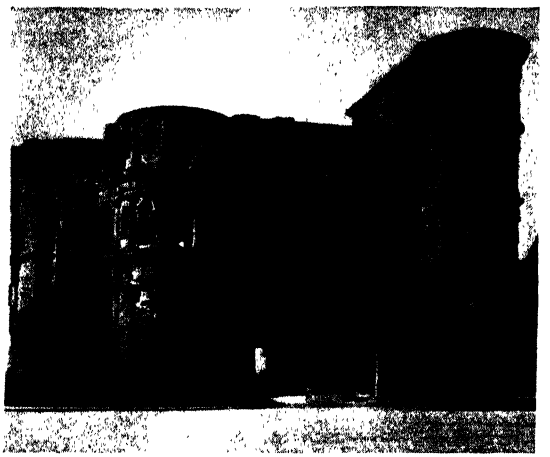
Many details in this picture of a Teutonic hunting party tell us facts about the life of these people. The man with a basket of vegetables seems to be a slave. The animal skulls on the house and on poles show that the hunter was proud of his skill. What shows you that these people knew about cloth? Did these people have domesticated animals?

was made up of people who were related to each other, like a large family. Families that were joined together made a tribe.

Around the little villages were the pastures and the clearings where farming was done. Each family had its own herd of cattle, which were carefully tended and greatly prized. The Teutons had learned how to tame animals. Cattle were used for plowing and to haul their rough wagons.

In every group there were leaders, but there was no government like that of the Romans or other nations around the Mediterranean. Every man had to protect himself. If a man was killed, his family had to take up the quarrel and punish the murderer. And so there was constant fighting among the people. You can see, then, that these tribes were not civilized.

Trading and warfare. The Teutons did not do much trading with other people for many years. They did not have much to trade, as each family raised only enough for its own needs. They made their weapons out of iron, but could not make them well enough to sell to the people of the Mediterranean lands. They had amber, which was picked up on the shores of the Baltic Sea, to sell; but



Courtesy German Railroads Information Office

Not far from the Rhine the Romans built a walled city which is called Trier today. This building was one of the gates of the city. The Roman government officials and the army officers lived here. It is the finest Roman building now left north of the Alps. It is about fifteen centuries old. Iron clamps were used instead of mortar to hold the stones together.

traders were afraid of them. A Greek trader from Massilia (Marseilles) visited them about 350 B.C. He came back with the report that the people were too fierce and warlike to carry on trade. Later there was a little trade.

The stories and customs of the Teutons show that they were fond of fighting. The only leader they respected was a good warrior. If a leader showed any sign of weakness, the men chose a new one. At all times the warriors would rather die than be defeated. It is not surprising, then, that after Caesar's time the Romans gave up trying to conquer these people. Instead, the Romans kept armies along the border to prevent attacks from the Teutons. Walls and forts were built, and Roman soldiers were given farms so that the army could always be fed and ready.

The Teutons were just about as different from the Romans as they could be. The Romans were short and dark, while the Teutons were tall and light. Roman men shaved, but the Teutons let their hair and beards grow. The Romans called them blue-eyed giants with yellow hair. We know that some of them must have had red hair, too, because at one time it was the fashion in Rome for women to have wigs made of yellow or red hair that came from the land of the barbarians. The great-great-ancestors of some of us were among these Teutons; and so today many of us have light hair and blue eyes.

Myths of the Teutons

Although there were many different tribes of Teutons, all of them were alike in some ways. Their languages were much alike. All the tribes had *skalds*, or bards, who sang tales of Teuton heroes, just as the ancient Greek bards told stories of the Greek heroes. Many tribes had the same stories, which tell us something of their customs and beliefs.

The tribes of Teutons worshiped many gods. Many tribes had sacred groves or clumps of trees where a little wooden building sheltered a rudely carved idol. Some of the tribes had gods with the same names as the

The northern tribes had legends about a great tree which reached from heaven to earth. If you have read the story of Siegfried, you will know about the squirrel, the eagle, and the serpent, and also about the dwarf who had a forge in a cave among the roots of the giant tree, which was named Yggdrasil.

Part of the Siegfried story tells how the hero, Siegfried, found the spellbound Valkyrie maiden, Brunhilde, lying within a ring of flame. Her father, Woden, chief of the gods, had decreed that she should remain there asleep until a hero came brave enough to enter the ring of fire and free her from the magic spell.

gods of other tribes. Almost all of them worshiped a goddess of the earth, for they knew it was the earth which supplied them with food.

After many years the Teutons thought of their gods as a great family, just as the Romans and Greeks thought of their gods. The father and leader was Woden, god of wisdom and of war. Thor, the god of strength, was a son of Woden. Thor's brother, Tiu, or Tyr, was the god of battle and of courage. There were many others, but you can see that their principal gods were fighting ones.

We remember some of the Teutonic gods because four days of the week are named after them. Tuesday is Tiu's day, Wednesday is Woden's day, Thursday is Thor's day, and Friday is Frigg's day. Frigg was Woden's wife and was the goddess of the home and of marriage.

The Teutons believed in giants and dwarfs, monsters and elves, and thought there were good and bad spirits everywhere. They said that heaven was a place where warriors spent the days fighting and the evenings feasting. Some of the old Teutonic myths have been made into great musical dramas, or operas, by Richard Wagner, a famous German musician.

The Teuton Invasions

We read in the story of Rome about tribes of Teutons invading the Roman Empire. Before we discover what happened to these tribes, we shall find out why they left their own lands in northern and western Europe. They could raise plenty of food in their own country. Why, then, do you suppose they forced their way into the Mediterranean lands, where farming is such hard work?

The country of the northern barbarians. First of all, we must find out what kind of country they had. Was it walled about by mountains and deserts, like the Mediterranean region? For the answer, turn to the map on page 300 and find the mountains. Of course there are the Alps and the other mountains that run toward the east. These mountains, we know, were the north wall of the Mediterranean World, and so they were the wall at the south of the lands of northern and western Europe. These mountains keep cold

On this map you can locate the Great Plain of northern Europe and the hilly country where the Teutonic tribes lived. You can see how it was easier for them to follow the plain when they entered Europe than to cross the rough mountain chains. Notice that the plain lies open to the eastward.

north winds out of the Mediterranean region at certain times of the year. At other times these mountains keep hot winds from the south out of northern Europe. We are sure, then, that the weather will be colder than in the Mediterranean region.

There are other mountains and highlands to be found. These are in the Scandinavian Peninsula, in the British Isles, and in the peninsula of Brittany in France. Then, toward the east, in Russia, we find the Valdai Hills and the Ural Mountains. North of them is a cold desert.

We know that mountains and deserts kept enemies out of the Mediterranean lands, but were there walls enough to keep enemies out of these northern lands? No, for just south of the Ural Mountains we find a wide, flat region which makes a gateway between Asia and Europe. The Teutons had used this gateway to get into Europe, and they were followed by other barbarians who also wanted to leave Asia and find new homes.

The Great Plain of Europe. As we look at the map, we see that this gateway leads from the plains of Asia to a great plain in Europe. It is not an absolutely level plain, because here and there it is broken by low hills. In the days of the barbarians this Great Plain of Europe, as we call it, was full of forests and swamps. Today most of the forests are gone, and nearly all the land is farmed.

The western shores of this plain are washed by the North Sea and the Baltic Sea. Notice how these seas are almost "in the midst of land"—like the Mediterranean. Many gulfs, bays, coves, and inlets make the northern and western edges of the plain very irregular. You cannot get more than a thousand miles away from the sea in any part of Europe.

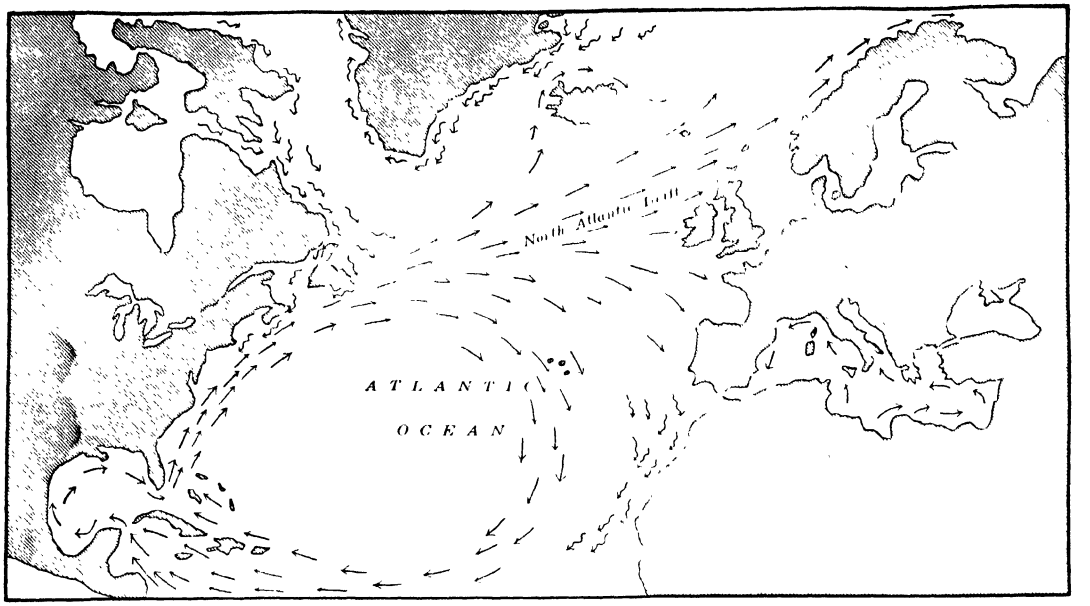
There were not many plains in the Mediterranean region, you remember, and most of them were small. Many people had to live close together in the little fertile plains, and it was hard to raise enough food. Already we can see that the northern part of Europe is quite different. The plain is so large that people had room to spread out.

Rivers and valleys of the European plain. In the Mediterranean region water was

Courtesy German Railroads Information Office

The Teutons found land like this when they entered Europe. There were forested hills, swamps, streams, and stretches of sandy meadow land dotted with huge boulders. Farther south were rougher hills and mountains leading to the high peaks of the Alps.

SHETLAND ISLANDS
ORKNEY ISLANDS
NORTH SEA
ATLANTIC OCEAN
HEBRIDES
SCOTLAND
Don R.
Dee R.
Aberdeen
Glasgow
EDINBURGH
Clyde
Londonderry
NORTHERN IRELAND
BELFAST
IRISH SEA
Newcastle
Tyne R.
Wear R.
Tees R.
DURHAM
CUMBERLAND
CUMBRIAN MTS
PENNINE MTS
YORK
York
Bradford
Leeds
Hull
Halifax
Manchester
Liverpool
Huddersfield
Grimsby
Sheffield
CHESHIRE
LINCOLN
Stoke-on-Trent
Trent R.
DUBLIN
EIRE
NORFOLK
SHROPSHIRE
Birmingham
WARWICK
SUFFOLK
Cambridge
WALES
ENGLAND
Cork
Queenstown (Cobh)
OXFORD
Oxford
ESSEX
LONDON
Thames R.
Swansea
Cardiff
WILTS
SURREY
Canterbury
KENT
Dover
Strait of Dover
SOMERSET
HANTS
SUSSEX
DORSET
Portsmouth
DEVON
CORNWALL
Plymouth
ENGLISH CHANNEL
Scilly Islands
Alderney
Guernsey
Sark
CHANNEL ISLANDS
Jersey
Land Heights in Feet
1500 to 5000
500 to 1500
Sea level to 500
0 100 200 300
Scale of Miles



The straight arrows show currents of warm water in the Atlantic Ocean. The wavy arrows show cold currents. We call the current along the coast of the United States the Gulf Stream; but when it reaches the northern ocean, it is called the North Atlantic Drift. Winds blowing over this current of warm water are warmed and also pick up much moisture. As these winds blow over the coast of Europe, the lands are warmed. The winds also bring clouds which drop their loads of rain as they blow inland from the west.

scarce, which was another reason why the people had to crowd together, close to the rivers. How is it in these northern lands? The map on page 300 shows plenty of rivers. From the mountains many streams cut across the land and finally flow into the ocean. Find the Loire, the Seine, the Rhine, the Elbe, the Weser, the Oder, and the Vistula. Trace them from their sources in the mountains to the ocean. In Russia find the Volga, the Dnieper, the Don, and the Dvina. Trace them from their sources in the Valdai Hills to their mouths.

Notice what kind of country these rivers flow through. Do you see how much easier it was for ancient peoples to follow the valleys than to cut across the higher lands?

There is one more important river to trace. Its valley was a pathway which many tribes followed. Find where the Danube River enters the Black Sea and trace it back to its source in the Alps. Not many miles away, on the other side of a peak, is the source of the Rhine River. A good walker can cover the distance between these two little streams in a day. But the Rhine flows in the opposite direction from the Danube and empties into the North Sea.

For many years these two rivers, the Rhine and the Danube, formed a part of the northern boundary of the Roman Empire. North of the rivers, the Romans said, was the barbarian country, where there was neither law nor order. But to the south lay the Roman lands, where people were civilized.

So far we have discovered that this northern land has more rivers and much wider plains than the Mediterranean region. Unless it is too cold in winter, it looks like a better place in which to live and make a living than the dry lands around the Mediterranean. Perhaps the map will tell us more.

The climate. Look at the map at the top of this page and see what part of North

America is as far north as the countries of Norway, Sweden, Denmark, Germany, England, and the others of this region. We know that few people live in northern Canada. But we know that many people do live in the northern European countries and that they are among the most civilized of all nations in the world. The weather cannot be so cold there as it is in the northern parts of Canada. If it were, the people would have to live as the Eskimos and northern Indians do.

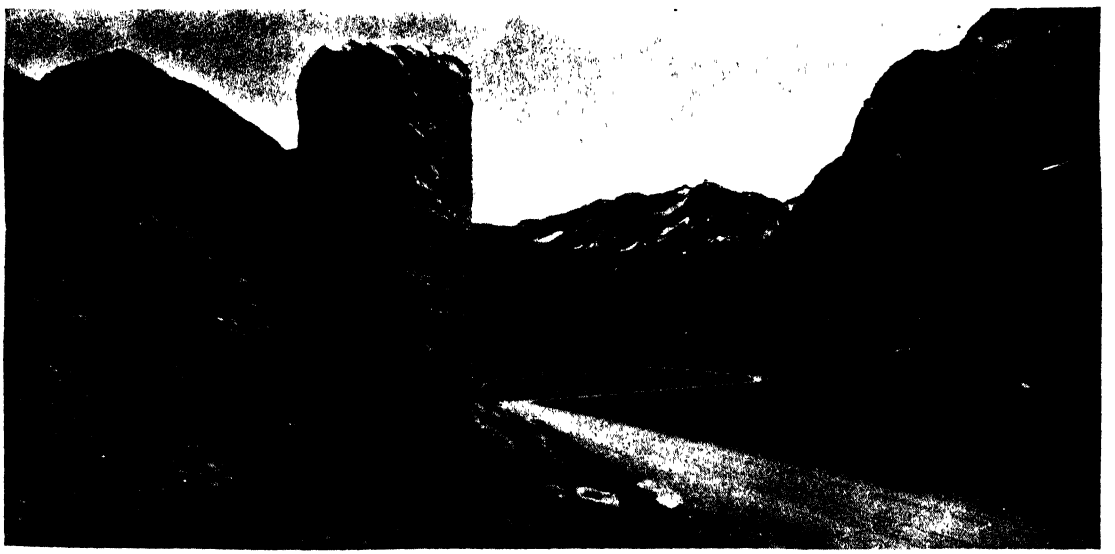
Look at the two maps on pages 198 and 199. Follow the bands from this country to Europe, and you will see that most of the countries of northern and western Europe have a mild climate. We call it a temperate climate, which means neither too hot nor too cold.

Why should this part of Europe have a temperate climate, like that of most of the United States, although it is much closer to the North Pole? It is because warm air blows off the Atlantic Ocean.

How the oceans "make" weather. There are currents of warm water always moving in the oceans of the world. There are some cold currents, too. The fierce sun at the Equator warms a great deal of water. Most of it flows toward the west, but when these currents reach the shores of the oceans, they are turned aside by the land.

One of the largest warm ocean currents is called the Gulf Stream, because it flows through the Gulf of Mexico. Follow its course on the map on page 196. It is like an enormous river of warm water, flowing slowly along, even more slowly than a man walks. Follow this great current on the map and see where it touches the shores of Europe.

The winds that blow over this current are warmed by it, just as your hands will be warmed if you hold them over a pan of warm water. These winds are called "westerlies," because they blow from the west. The warm west winds, and the southwest winds, also, do more than give western Europe a mild climate. They bring a great deal of rain, too. As the winds cross the wide ocean, they take up moisture. They are wet winds, loaded with rain, by the time they reach the British



Albert Steiner

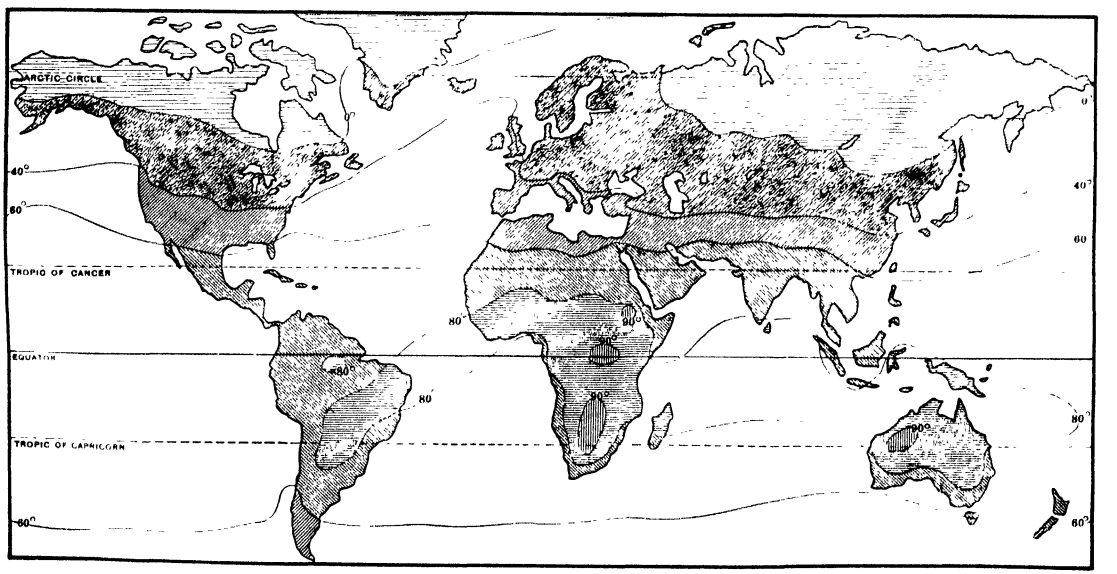
The huge stone pillar is a Roman milestone. This one marked a pass through the Alps on a road that led from Roman lands to the barbarian country. As long as a trader passed Roman milestones, he knew that he was in a land with laws to protect him. But when the milestones ceased, he was in barbarian country.

Isles and the Scandinavian Peninsula. These countries, as well as others along the western coast of Europe, have plenty of rain. In the winter some of them have heavy snows.

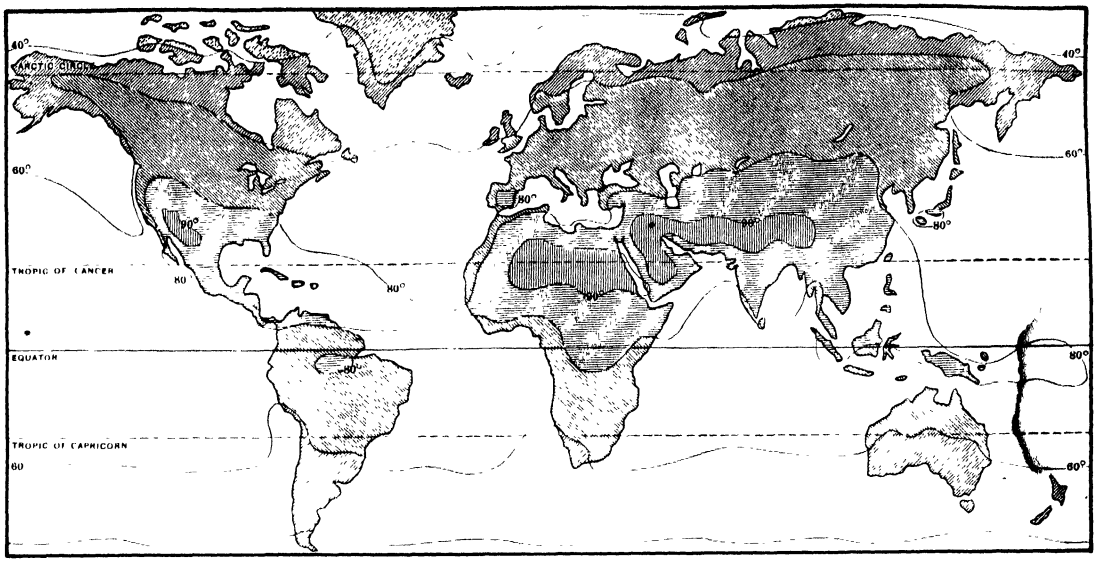
Now we know what kind of land it was where the barbarians lived, north of the Mediterranean World. It was quite different from the lands within the Roman Empire. Instead of many small valleys and tiny plains, there was a huge plain cut by the valleys of large rivers and the streams flowing into them. Instead of barren, rocky mountains, there were wooded hills full of game. The summers were cool, with frequent rains, not hot and dry as in the Mediterranean lands. The winters were much colder and not nearly so comfortable. But even these cold months were not too bitter because of the warm ocean current. Except for the winters, we might think the barbarians' land a better place to make a living. Why did the tribes leave it?

Why the barbarians moved. Probably some of the barbarians wanted to move into lands where the winters were not so cold, but there were other and better reasons why they invaded the Roman lands. First of all, the barbarians, rough as they were, had to fight off enemies all the time. Other, fiercer barbarians from Asia kept coming into their land through the wide gateway that lies between the Ural Mountains and the Caspian Sea. Find it again on the map. To these tribesmen from Asia, Europe looked like a very good place to live. They were willing to fight the European barbarians to get in. As more and more people kept coming from Asia, the barbarians in Europe were crowded toward the mountains in the north and west and toward the south.

There was still another reason why the barbarians of northern Europe entered the Roman lands. Probably it was the best reason of all. They wanted to live more comfortably, and the people in the Roman lands knew how to do so. For many years the barbarians entered the Roman lands peaceably, a few at a time, just as immigrants from Eu-



This map is marked to show the temperature of different regions of the world. It shows the average temperature for the whole month of January. Do you know how to find the average temperature of some place for a whole month? Find the region in the United States where the average January temperature is between zero and 40 degrees. What part of Europe has the same temperature? Notice the region which has the next highest average for January. Do many people live where the average is below zero?



This map shows the average temperature in July in different regions. Compare Europe with the part of America in which you live. Is it warmer or colder? The temperature lines are much more crooked and harder to follow than on the map showing average January temperatures. There are many more little "islands" where the temperature is different from that in surrounding lands. Find some of these places in the Old World and see if you can find a good reason for the higher temperature.

rope came to the United States not many years ago. As you have read, a time came when many of the barbarians insisted on coming in. Some even demanded that land be given them. Then the Romans became alarmed and kept garrisons of soldiers on the borders to keep out the tribes.

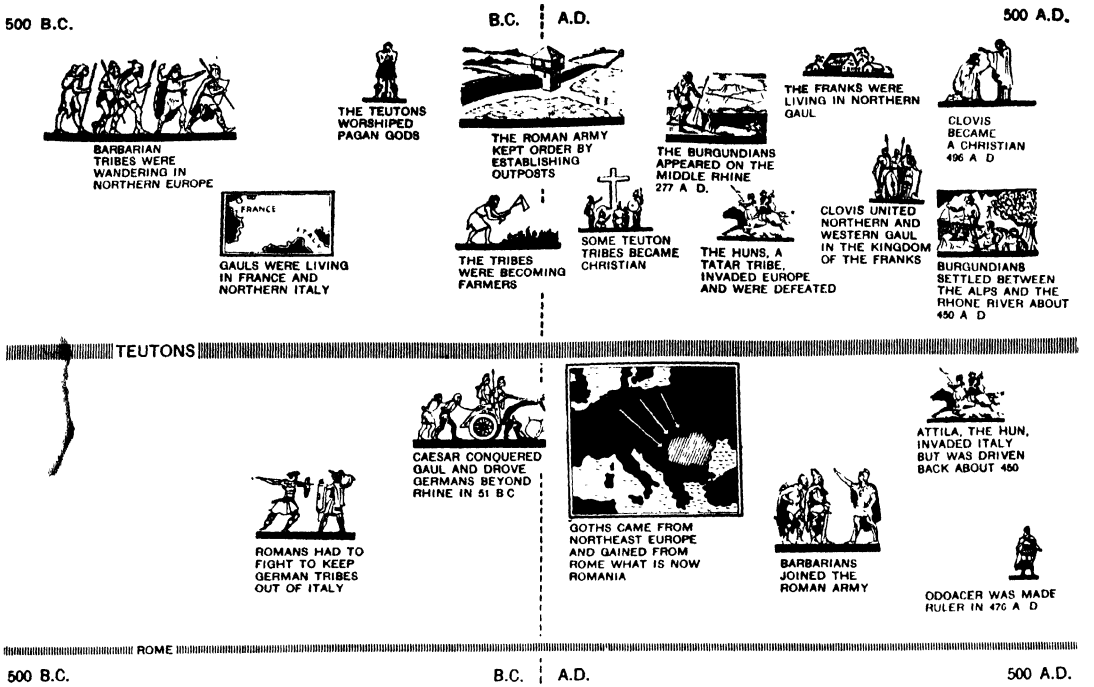
When the Roman government became weak, as you have read, one tribe after another entered Roman lands. Some of them marched on Rome and defeated the Roman armies. Then they moved into different parts of the Roman Empire, particularly in the west, and settled there.

How moving changed the Teutons. The invaders were not civilized enough to appreciate all the good things they found in the Roman cities. But they were wise enough to see that many of the Roman ways were better than their own. Some of these ways they adopted. Although the tribes-people learned much from the civilization of the Mediterranean peoples, they also discovered ways of living that had not been tried. They found out many things for themselves. They worked out new ways of government that were not like the Roman or Greek ways. They even built new kinds of buildings as they learned to live more and more comfortably.

It took a long time for the descendants of the barbarians to become civilized. It was many centuries before the people of Europe became as civilized as the Romans and Greeks had been in most ways.

A new part of history. We call the period of history which is between ancient times and modern times the "Middle Ages." Many important things happened then. Instead of one united government, such as the Romans had, there were many small nations. Kings and nobles led armies against each other. Life was dangerous and full of hardships. Much of the world was unknown.

The Christian Church grew up during this time. Once it had been a small group of persecuted people. You will see how it grew until practically all the people of Europe belonged to it. You will see how it became so power-



PICTURE HISTORY

In this Picture History you can see what several of the tribes of Teutons were doing while Rome was becoming a great empire. Turn back to page 147 and review what happened during these years.

ful that kings and nobles obeyed it. And you will learn how the Church provided schools for the people and preserved the books and learning of ancient times.

At the beginning of the Middle Ages many great cities had been plundered and at least partly destroyed. Later on, the people once more had to learn how to live together in large cities. People had to find out again how to trade goods with each other, as the Phoenicians, Greeks, and Romans had done. They did not do these things in just the same way that the Romans and other ancient peoples did, and they had problems that were new—and so we have a new story to read.

This is the interesting story we are to begin in the next chapter. It is the story of how the barbarian peoples made progress in civilization. Once more let us turn back to the days when the barbarians invaded Roman lands and watch them wreck the Roman civilization. Then we shall see them slowly build up one of their own.

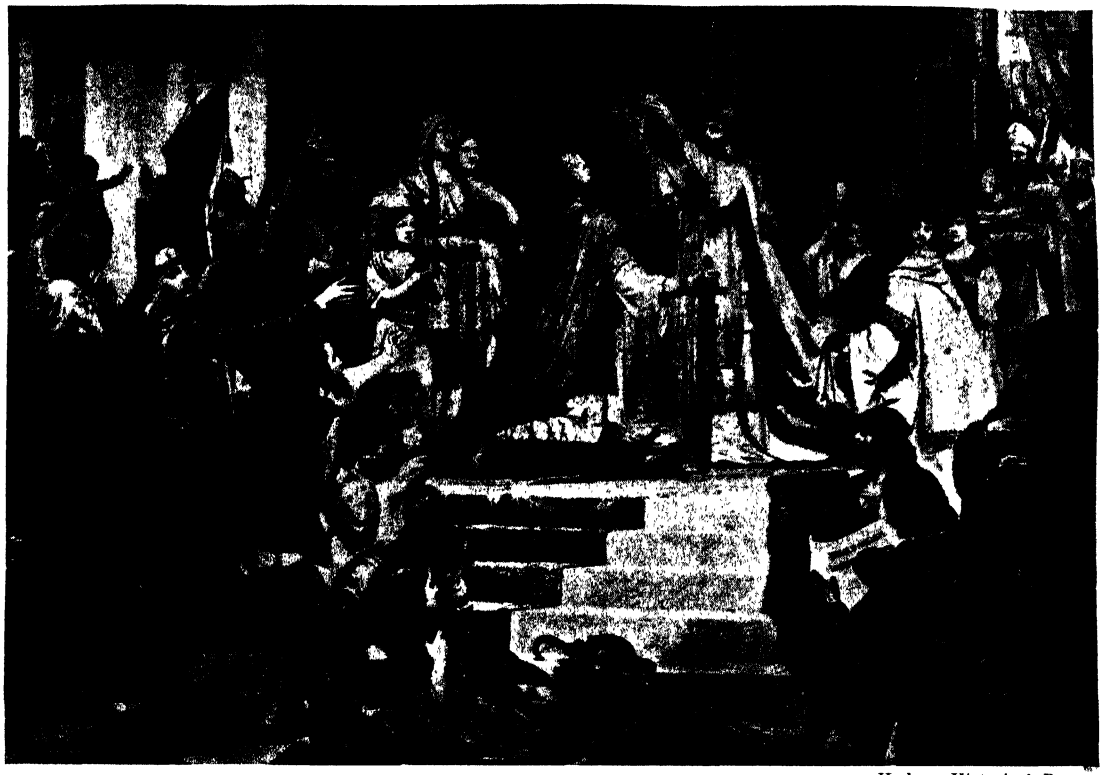
Talking Things Over

1. You have read several times that peoples were crowded out of a country or pushed from place to place. Sometimes they did not realize what was happening and thought they were moving on just to find a better place. This is happening today. We speak of factories or stores crowding out homes, and homes crowding out farms. Do you know of some neighborhood that has changed? Can you find out why it changed?

Doing Things Together

1. In some of your books you can find stories of Thor and other Teutonic gods and goddesses. Prepare a program in which members of the class read or tell these myths. How are these stories like those the Greeks and Romans told about their gods?

2. It would be interesting to hear phonograph records of Wagner's music, or to have someone play a few selections on the piano.



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In 800 A.D. the Pope at Rome crowned King Charles of the Franks and made him emperor of the Holy Roman Empire. Charles, who is also called Karl and Charlemagne, did not have as great an empire as the one the former Roman emperors ruled. He was not a Roman, nor did he rule at Rome.

XIV. THE MIDDLE AGES

The Dark Ages

WHEN the Roman Empire was rich and powerful, it was strong enough to keep out the barbarian tribes that were living in other parts of Europe. But you have read how the empire grew weak. The army of hired soldiers seized the power. People were taxed too much, and the money was not spent on keeping up the roads, aqueducts, and public buildings. Instead, it was wasted on the army. The people had little to say about how they were governed.

The fall of Rome. By the time the barbarians invaded the Roman lands, the great empire was almost falling apart. So it was not hard for a barbarian army to capture Rome in the year 476 A.D. Then, for nearly a thousand years, the story of Europe is the story of the different barbarian peoples. This is the time we call the Middle Ages or the Medieval Period.

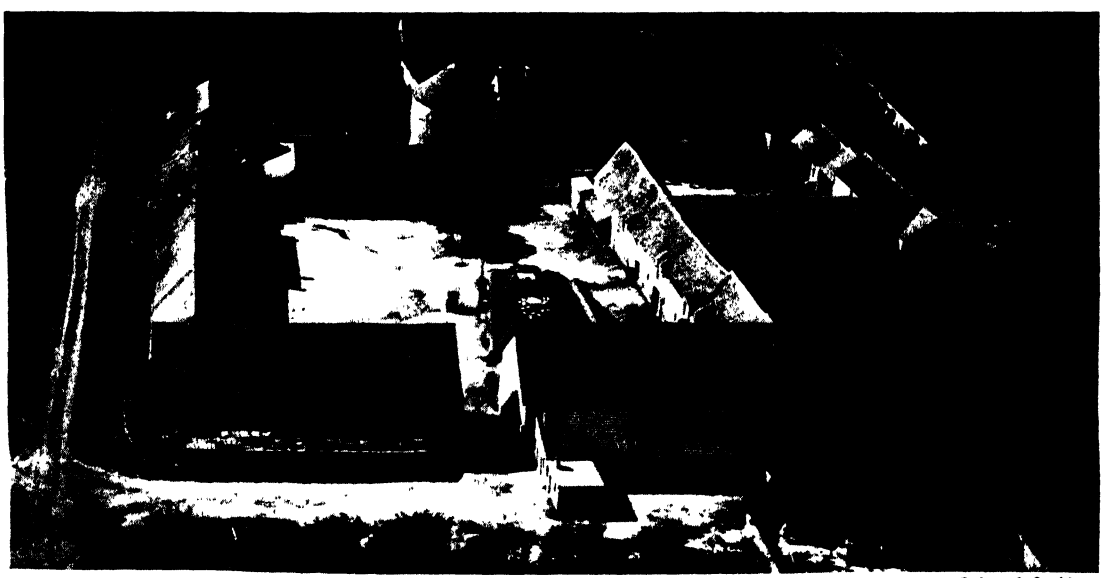
During the first half of the Middle Ages different tribes of barbarians came into western Europe. The Eastern Empire of the Romans still held together, and the barbarians did not invade many of its lands. In the West, though, the barbarians plundered the rich cities of the old Roman Empire. The tribesmen did not know how to live in cities. But they did know good farms, and so they simply seized the best farms and estates.

From that time on, there was no Roman army to keep the peace and enforce the laws. Any band of armed men could take what it wanted. There were dens of robbers in the forests, and the roads were not safe for travelers. Then, of course, merchants stopped sending goods from one place to another, and there was no trade. City people were in danger of having their property stolen, while country people might be driven from their land at any time.

No wonder this first part of the Middle Ages is called the "Dark Ages." It was like an endless night of terror, because everyone was afraid of his neighbor and no one knew what might happen. We can remember the Dark Ages as a time when people almost stopped living in cities.

Why people left the cities. For many hundreds of years before the barbarian tribes came, people in the Roman world had been learning better and better ways of living together in cities. There were laws to make lives and property safe. The Romans had paid special attention to water supplies and sewage systems. Homes and other buildings were finer and more comfortable than ever before. There was trade between the city and the country districts and also between the different cities. People had money and time enough to buy and enjoy such things as fine clothing, comfortable furniture, paintings, statuary, and good books.

But the barbarians came and interrupted this progress. City life wasn't safe, because no one enforced the laws. City life wasn't healthy, because no one repaired the aqueducts and sewers or kept the cities clean. When business stopped, many city people were thrown out of work. Men who made things for merchants to sell and men who worked in shops and stores had to find something else to do for a living. Most of them now had to grow their own food, raise wool, and weave cloth for their clothes. That could be done only in the country, on a farm. For these reasons many people moved to the country and some cities were almost deserted.



Orient & Occident

This is a modern farm in a wheat-growing region of France, but it looks very much like the Roman villas that were scattered through Gaul in Roman times. The Romans did not build pointed roofs, however, but they did arrange their buildings in much the same way. With high walls and stout gates, such an estate could be easily defended against roving bandits. Of course, a troop of soldiers could take it.

You have read how the Vandals and Goths moved across Gaul and into Spain. At the time when this chapter begins, there were many peoples living in Gaul. There were Gauls and Romans, Goths and Burgundians, and even Greeks and Syrians from the far end of the Mediterranean. Notice where two tribes of Franks lived.

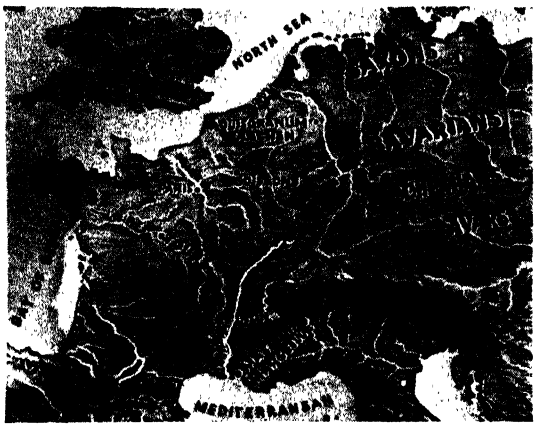
Four important barbarian groups. During this time of the Dark Ages, then, the people had to begin all over again and once more learn how to be civilized. Little by little, though, the barbarians found out civilized ways. We cannot follow the stories of all the barbarian tribes, for there were too many of them. Four of the groups, however, were able to settle down and become nations.

We have already learned how the Vandals settled, first in Spain and then in Africa. We know that the West Goths finally moved into Spain and there became a nation. The East Goths moved into Italy and for a time had a large kingdom. Tribes called Franks made up the fourth group. They built up a great kingdom and gave their name to France. As we trace the story, we shall see what life was like during the Middle Ages and how it gradually changed into the life and customs we know today.

The Kingdom of the Franks

Clovis the boy king. Clovis was only fifteen years old when he became king of one of the tribes of Franks. His people crossed the Rhine River into the country which the Romans called Gaul and helped themselves to the rich farm-lands of the Gauls. When Clovis was twenty years old, he defeated the Roman army that had been sent to drive the Franks out of Gaul. Soon after that the other tribes of Franks met together. Shouting and clashing spears against their shields, the Frankish warriors lifted Clovis high in the air on a shield. That was their way of choosing a war leader and king.

The country of the Franks. At first the Franks had only the northern part of Gaul, but with Clovis for a leader they soon conquered the rest of it. They had to fight the Burgundians and the Goths, two other Teu-



This is the land in which the Franks settled. There were more cities and towns in those early days than are shown here. Find the Central Plateau and the Paris Basin. Notice how the borders of the land were occupied by other tribes who wished to enter this country. Rugged mountains protect the country on the southern and on part of the eastern border.

tonic tribes who had settled there about the same time the Franks had come. Then Clovis ruled over a kingdom that included most of at is now France, Belgium, and the Netherds.

The Franks felt safe in their new land. If you will look at the map on this page, you will see that their kingdom had natural boundaries which were better than the walls of the Romans. One of these boundaries was the ocean on the north and west. Near the southern boundary were the Pyrenees Mountains, a barrier so forbidding that even today no railroad crosses it. Only the eastern boundary needed to be defended, and the Alps protected the southern half of that. The part of this country which is now called France has only this short boundary that must be guarded against invasion by land. Here, for hundreds of years, the river Rhine has been the dividing line. Across this river Caesar had once driven the Teutons out of Gaul, but they came back again and again. The Franks had to fight to keep other Teutonic tribes from coming across the Rhine. Find this river on the map on pages 230-231 and see what countries are now along it.

Let us see what kind of land the Franks had within their boundaries. Then we may understand how the Franks gradually changed from rough, fighting tribesmen into peaceable farmers.

Find Soissons, France, on the map on this page. This is where Clovis defeated the Romans. It is on the edge of a great lowland district called the Paris Basin. In the time of Clovis there was a city, already old, in the center of this lowland. Clovis made it his capital. Find the Garonne River, flowing into the Bay of Biscay. Its wide, fertile valley makes a second lowland region. To the north of this valley is the wide valley of the Loire.

In the northwest corner of France, in the parts called Brittany and Normandy, is a highland. There is another highland, called the Central Plateau. It is really a part of the great central highlands of Europe, but the wide valley of the Rhone River separates it from the Alps. Find these highlands on the map on page 161. Notice the small, fertile lowland around the mouth of the Rhone.

How the new land changed the Franks. When the Franks came into this country, they found Gauls and Romans living there. In the fertile districts the people raised wheat and cattle. In the highlands they raised many sheep, and in one part mined metals and made hardware for the Romans. It was not long before the Franks were making a living by doing the same things.

The conquered people had to follow some of the customs of the Franks, because the Franks were now their rulers. Because the conquerors thought many of the Roman customs were better than their own, they adopted some of the ways of the conquered. In this manner some of the civilized ways of the Romans were saved.

Gradually the Franks learned to speak the kind of Latin which the Gauls were using, but they used many Frankish words, too. As the years passed, the language slowly became a mixture of the two.

The Franks changed in still another way. They gave up their old religion and became Christians. The Teutonic tribesmen called Goths and Burgundians, who had settled in the southern part of the country, were already Christians, for they had been visited by missionaries from the eastern end of the Mediterranean. But when Clovis decided to become a Christian, he was baptized by a churchman from Rome. It was not hard to persuade the other Franks to become Christians. They believed in following their leader, and thousands of them were baptized.

In the next two hundred fifty years the Franks changed in other ways. By that time the people were a mixture of descendants of Franks, Burgundians, Goths, Gauls, and Romans. They may now be called French, but their language was then more like the old Latin than the kind of French that is spoken today.

Christians against Mohammedans. You will remember reading in the story of Spain how the Moors came over from Africa. These fighting Mohammedans crossed the Pyrenees and invaded France. They were met by a French leader who was called Charles the Hammer because he struck such terrific blows with his battle-ax. Charles and his French soldiers defeated the Mohammedans at Tours in the year 732. After that victory the Mohammedans were driven back into Spain, and part of Europe was saved from becoming Mohammedan. That was the first great service the French did for Christian civilization in the West.

The Franks and their kings. The Franks had a custom that had long prevented them from building up a strong kingdom. When a king died, his lands were divided among his sons. You can see that if a king had four sons, his kingdom would be divided into four parts. Suppose each of these sons had four sons. In time the old king's lands would be divided into sixteen parts. But once in a while a strong leader might be able to bring all the small parts together again into one powerful kingdom.

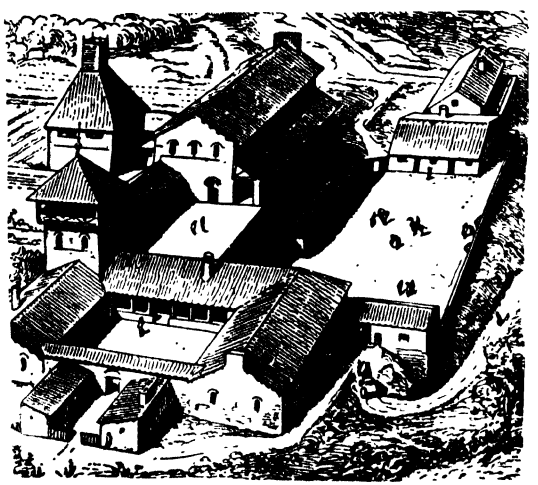
Charles, a grandson of Charles the Hammer, was such a leader. He was not only

There were nobles, common people, and slaves among the Franks, just as there had been among the Romans and other ancient peoples. The common people we call freemen. Some of them were farmers who owned land; others worked for the nobles. Usually the slaves were prisoners of war. There grew up another class of people who were neither freemen nor slaves. They were called serfs, and you will read about them later.

great soldier but a great man in many ways, and for that reason is called Charlemagne, which means Charles the Great. He built up a stronger kingdom than had any other French leader before his time.

How Charlemagne built a strong kingdom. First of all, Charlemagne trained a large army. He made every man who owned property serve as a soldier for part of every year, or else supply food and weapons for another man to take his place. Charlemagne used this army to keep peace in his own kingdom. With peace at home, Charlemagne was able to subdue his warlike neighbors.

Charlemagne next went to the aid of the Pope. At that time the Pope was not only the head of the Christian Church in the West, but also the ruler of much land in Italy. The Pope was having trouble with a tribe of barbarians called Lombards. These people had moved into Italy and set up a kingdom of their own in the northern part of the peninsula. That region is still called Lombardy. When the Pope asked for help, Charlemagne conquered the Lombards and was made king of Lombardy.



The Frankish kings, in the time of Charles Martel, lived in palaces such as this. Visitors had to pass the gate-keeper's lodge to reach the first courtyard. Around this were the rooms of the nobles. The king lived in the tower. Notice the open lookout platform. There are stables and soldiers' quarters at the right.

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The French people think of Roland as one of their great heroes. There is a long poem about this soldier from Brittany which is called the "Song of Roland." It has been made into an English story, and you can now read about this soldier who lived in the time of Charlemagne and died in the battle of Roncesvalles.

Later the Mohammedans in Spain made trouble for Charlemagne. He marched into Spain and took some of the country. After that the Mohammedans did not try to invade France, and Charlemagne did not disturb them.

During all this time Charlemagne was also fighting the Saxons, for he had determined that he would bring all of the Teutonic peoples into one great Christian empire. The Saxons were a tribe of Teutons who lived in the country between the Rhine and the Elbe rivers. Locate their land on the map on page 207. The Saxon country had few towns and almost no roads, and the Saxons retreated into the forests and swamps, where Charlemagne's army could not follow. It took thirty-two years of fighting to bring the Saxons under his rule. Then Charlemagne sent missionaries into their land to convert

them to Christianity, for these people were still worshiping Woden, Thor, and other Teutonic gods.

For the first time, then, most of the Teutonic peoples in northern Europe were under one government. And, for the first time, also, Christianity and civilization were spread throughout northwestern Europe.

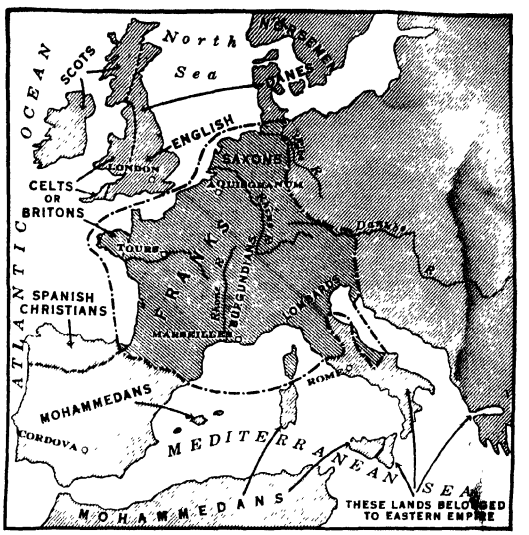
Look at the map on this page and notice how much territory was in the empire of Charlemagne. He ruled most of the country we know as Germany, all of France, Belgium, and the Netherlands, and half of Austria. This was a large part of what had once been the Roman Empire of the West.

In Charlemagne's time there was still an eastern part of the Roman Empire. There was a Roman emperor who ruled in Constantinople, but he had no control over any of the western lands.

The Holy Roman Empire. About the year 800 Charlemagne helped another Pope of Rome to put down his enemies. In return the Pope crowned Charlemagne emperor. His empire was called the Holy Roman Empire—"Holy" because the head of the church crowned him, and "Roman" because he ruled so much territory that had once been part of the old Roman Empire. You see, men still remembered how great Rome had once been. They still hoped that a powerful emperor like one of the great Caesars might once again rule over all the old empire.

Charlemagne did a great deal for civilization because he had a large, well-ruled empire and because he worked with the Church. Later you will learn why the Church was so strong and important in the story of man's progress.

The French were well along the road of civilization, but there was still much to be done. No one realized it more fully than Charlemagne. He knew, for example, that the Church could not educate enough priests to take care of the thousands of people who wanted to learn the lessons of Christianity.



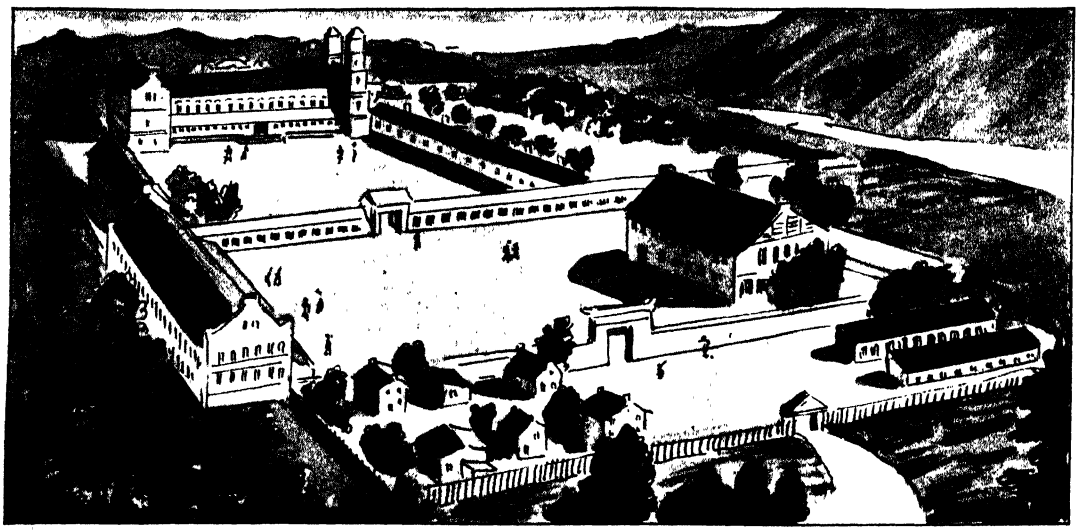
Notice the boundaries of the empire of Charlemagne. Most of his people were Franks, but there were others, such as Burgundians, Lombards, and Saxons. Later you will read about the other peoples whose names you find on this map. You already know about the Spaniards and the Mohammedans.

In those days practically no one except the priests and monks could read or write. Even some of them could not understand Latin. Though Charlemagne could read Latin, he never learned to write much more than his own name.

Charlemagne's schools. Few people cared about books and learning in the Dark Ages. Most of the Roman books had been burned, torn up, or allowed to rot. But the churchmen had managed to save some of them. Only a few people could read these books.

Charlemagne determined that he would have schools where young men could learn to be teachers. He planned to send out these teachers to start other schools in all parts of his empire. He searched all over his empire for teachers and even sent to England for a churchman to be the head of the first school. This was a famous teacher named Alcuin.

In Charlemagne's schools both rich and poor boys studied Latin so that they could read the old Roman books and the books written in Latin by the churchmen. The



Charlemagne's palace at Aquisgranum, or Aachen as the city is now called, was built of wood. A heavy palisade, or wooden fence, surrounded the buildings. The long, low buildings were stables and quarters for soldiers. There was plenty of room in the large courtyards for soldiers to drill. Other buildings were storehouses for food and houses for nobles of the court of Charlemagne. Does this picture remind you of the arrangement of the buildings in the pictures on pages 202 and 206? Can you think of a good reason why the buildings probably were much closer together than this copy of an old picture shows?

students learned to read and to write Latin and to understand a little Greek.

Once more, now, people began to be interested in books. Charlemagne's wise plan allowed people to learn how to read and write. Many young men left the school that Charlemagne had started in his palace and went out to teach others.

Some of these schools became very famous. Alcuin lived in one of them at Tours. This school became known for the beautiful way in which books were copied there. Of course each book had to be copied by hand, since printing had not yet been invented. The style of our printed letters, which we call Roman, was modeled after the lettering used in Alcuin's school.

Holding the empire together. Charlemagne was constantly visiting the different parts of his empire. He built roads and bridges so that his armies could move quickly. He had forts along the frontiers. You remember that the Romans built roads and forts to hold their empire together.

Charlemagne's capital. The place that Charlemagne chose for his capital was an old Roman city called Aquisgranum. There in the midst of a rich district he built his wooden palace, surrounded by barns and granaries stored with grain.

All the French people lived simply in those days. Even the emperor's daughters were taught how to cook, weave, and sew. Charlemagne had fewer comforts and conveniences in his palace than the average family has today. The palace long ago fell into ruin, and today there is a huge stone building where it stood. Look on the map on page 161 and find Charlemagne's capital. Today it is called Aachen by the Germans and Aix-la-Chapelle by the French. It is located in a corner of Germany near the borders of Belgium and the Netherlands.

Are you surprised that the palace of Charlemagne was of wood? Naturally, in a land of forests, where people had metal tools, wood was used for building. Almost all the early buildings in northern Europe were made of

wood. There were some buildings of brick or stone, but most of these were in the old Roman cities. These cities were scattered all through the country, and some of them had fine old buildings. A few are standing even today. You can see one of them in the picture on page 192. The French of the Middle Ages used wood for their buildings, because wood was cheap and easy to get. Very few men in those days knew the mason's trade.

Charlemagne built a stone church in his capital. It was as nearly like a church he had once seen in Italy as his workmen could make it. Stone columns and marble statues were brought from Italy to adorn the church. For many years it was the "show" place of northern Europe. It was the first great building that had been built in Europe since the days of the old Roman Empire.

Charlemagne encouraged travelers and traders from other lands by promising that they would be safe in his empire. Trade and business offered a better way to gain wealth than plundering and looting. So the emperor established trading-posts along the frontier. You can see that this wise ruler wanted his people to learn peaceful occupations, such as building and trading.

Courtesy Book House for Children

This old sculpture shows the Emperor Charlemagne kneeling before the Virgin Mary and the Infant Jesus. In his hands he holds a model of the splendid church he built in Aachen. Part of the church, which has eight sides, is still standing, although it has been repaired many times in the past thousand years.

Courtesy Book House for Children

Once a year all the nobles of Charlemagne's empire assembled at the capital and took part in a ceremony. Each noble knelt before the emperor and took an oath that he would be faithful to the emperor and obey his ruler's commands. Later you will read how this ceremony and the oath of fidelity, as it is called, became very important in feudal times. This old picture was found in a fourteenth-century library.

How Charlemagne governed his empire. This realm of Charlemagne was too great for one man to watch over and guide. Like some of the Frankish kings before his time, Charlemagne used a Roman system of governing. He divided the empire into smaller sections. Sometimes a section would be just a city; sometimes it would be a large district. Each section was ruled by a "companion" of the emperor. The title of "count" comes from the Latin word for companion. Each count had charge of his district and acted as ruler, judge, and tax collector for the emperor.

Charlemagne even improved on this plan. He had men who traveled from one district to another to see how the emperor's "companion" was carrying out the emperor's wishes. Later you will see how these companions, or counts, became very powerful and often took the rule into their own hands.

How the empire was divided. The old custom of dividing a ruler's lands among his sons was not followed by Charlemagne. He left his whole empire to his son Louis, but Louis divided it among his three sons. What do you suppose happened? Would you expect the empire to go to pieces, as great empires seem to do? Yes, that is exactly what occurred.

Charlemagne's empire was divided among his three grandsons. Find the Middle Kingdom, which was chosen by Lothair, one of the three kings. Turn to the map of Europe on pages 230-231 and see what countries occupy the land of these three kingdoms. What languages are spoken in these countries?

The three grandsons of Charlemagne not only fought among themselves, but they had other enemies on all sides.

To the south of the divided empire were the Mohammedans in Spain. To the north were the fierce Danes and Northmen. On the east was a mixture of peoples. Some were Slavs, and others were Magyars. The Magyars were pushing their way into what is now Hungary and forcing the Slavs to move farther to the west and south. It was somewhat like the story of the fall of Rome all over again. An empire was breaking up because barbarian tribes from the north and east kept up a series of invasions and wars all along the borders.

When the great empire of Charlemagne was divided among his grandsons, the people separated mostly according to the language they spoke. As you know, many of them spoke the language which later became French, while others spoke a language more like the German of today. From that time on, the French-speaking people controlled the land west of the river Rhine, while the German-speaking people were east of the Rhine.

If you will look at the map on this page, you will see how the empire was divided. Do you see the Middle Kingdom, as it was called? The other two kingdoms were to fight to see who would own that middle strip. And that fight for the middle strip was to go on and on for more than a thousand years, right down to our own times.

After Charlemagne's empire was divided, a long time passed before any strong nations appeared. But the great emperor had made the people who lived in the central part of his land feel that they belonged together. For many centuries they kept that feeling of being one people until once more they became a powerful nation.

Another important thing that lived on after the time of Charlemagne was the little spark of learning he had started. The Church helped to keep this spark alive. Then, too, the schools that had been established by this great emperor produced many teachers. And so learning and knowledge from books were preserved during the rest of the Dark Ages.

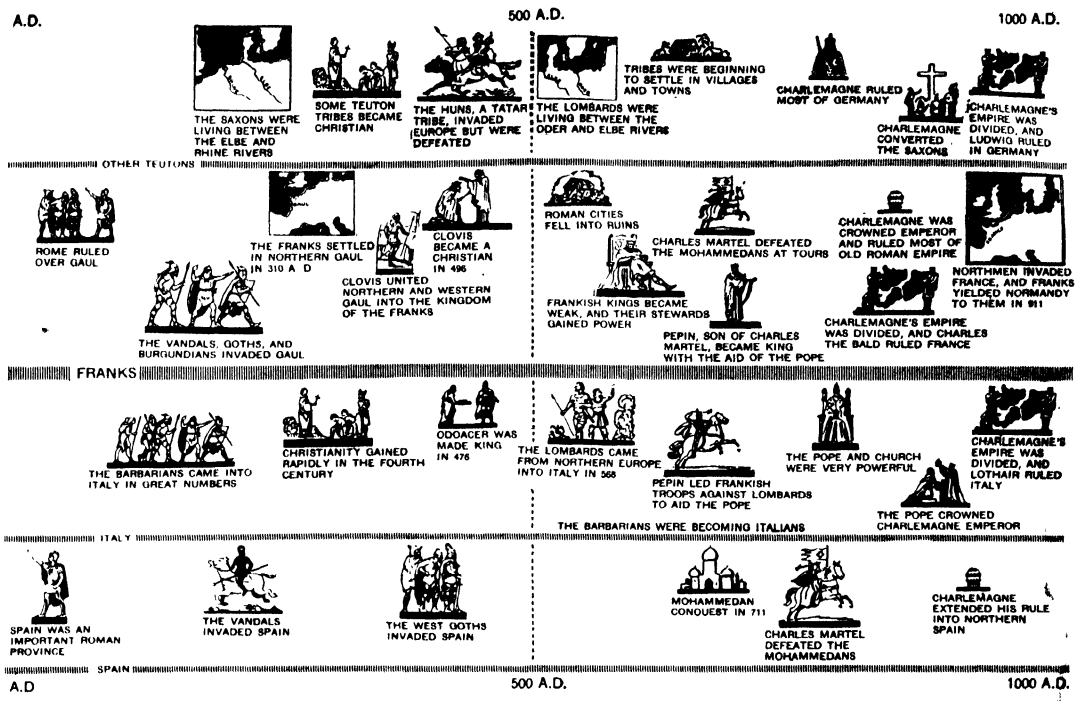
Talking Things Over

1. Do you still have the time-lines you drew for Greece, Rome, and Spain? If so, add one which shows important dates in the story of the Franks. Did Charlemagne's empire last a long or short time in comparison with the Roman Empire?

2. This chapter tells you something of the development of the French and German languages. No one invented either language. Both of them grew very gradually. Talk over the ways in which a language grows when different peoples come together through travel or invasion. Do you think changes are taking place in our language today? Do you know of any differences in the way people talk in various parts of the United States?

3. People themselves are mixtures, just as their languages are. An American might say, "I am part English, part German, and part French." List some of the different countries from which your grandparents and great-grandparents came. Reread page 205 and list the tribes that are ancestors of the French people.

4. The art of writing was saved during the Dark



PICTURE HISTORY

You can follow the story of the Franks in this Picture History and tell what was happening in other countries at the same time. Do you think the Franks suddenly appeared in Gaul from nowhere, or do you know where they had been living? Do you know where the other tribes had lived and why they moved about?

Ages. If a few people hadn't been interested enough to learn to write and to teach others, we would have difficulty in finding out what people thought about and did in the Middle Ages. Will people who live five hundred years from now know much about the way we live? How do you suppose they will find out what our customs are?

Doing Things Together

1. Charlemagne's empire, like others, had a hero, Roderick. His story has come to us through legends. Do you remember other hero stories of ancient peoples? Plan a short program in which members of the class tell the stories of heroes of Greece, Rome, and any others you can find.

2. Have you learned to do manuscript writing? It is being taught to many people. Each of you might select a quotation, perhaps from the Bible, and write it out carefully. The finished copies would make an interesting wall decoration for your room. Do not think that these copies can be made quickly.

3. Work together to make a list of the things that Charlemagne accomplished for which he deserves the title "the Great." Discuss which of these you think most important for our civilization. Perhaps you won't agree, but you can discuss these things.

After the wars with the Danes, King Alfred of England rebuilt the walls of London, for he intended to make that city as great as the city of Rome. But the greatest thing he did was to unite his people. After his reign, the English felt that they belonged to a single nation and not to a number of small kingdoms. Even the Danes who lived in England came to have the same feeling. We call it patriotism.

Courtesy German Railroads Information Office

On the shores of the Lake of Constance, between Germany and Switzerland, German archaeologists have rebuilt a village just as it was four or five thousand years ago. The lake-dwellers, as we call the people who lived in such houses, were not like the Teutonic tribes to the north, nor like the Mediterranean peoples to the south. Some of these people who lived between the barbarians of the north and the civilized people of the south moved westward and settled in Gaul. The map on page 214 shows where others moved.

XV. THE LITTLE ISLAND OF BRITAIN

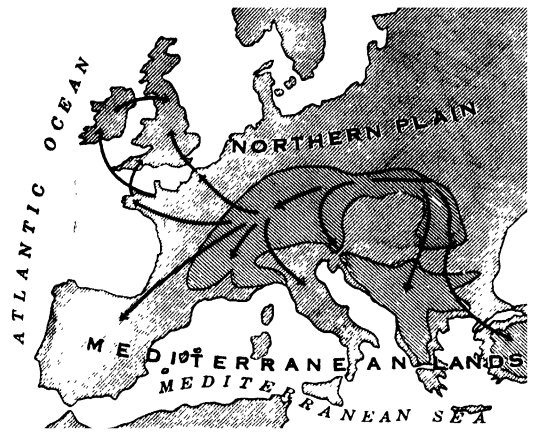
Battle-ground of Invaders

THE Celts and their neighbors. In the story of the barbarians of the north you read about a people called Celts. They lived, you remember, between the northern lands of the barbarians and the Mediterranean lands of the Roman Empire. Suppose we see who these people were and what they have to do with our story.

First, find on the next page a simple map of Europe which shows three great regions of that continent. We know about the widespread Mediterranean region, and we have just finished reading about the great Northern Plain. But we need to learn about the mountainous land that lies between these regions—land that formed a barrier between the barbarians and the civilized peoples of the Mediterranean region. In ancient times these rocky, mountainous regions were inhabited by the people we call Celts.

The Celts were not found everywhere in the mountain districts. Some of the region is too bare and rocky to support anyone. But they managed to live here and there in small groups, keeping herds and flocks. Some of them did a little farming; others were rather expert at metal-working. Perhaps the Mediterranean peoples borrowed their knowledge of metal-working from the Celts. Probably the Celts supplied the northern barbarians with weapons and taught them how to use metals.

As time went on, other tribes kept coming from the plains of central Asia and pushing the Celts westward. Perhaps the Celts would have moved westward anyway, trying to find



The Celts, as we call the people who lived in the mountain regions between the Mediterranean Sea and the Northern Plain of Europe, gradually spread out and settled in other lands. Some of them, you see, settled in France; others, in Spain and in other Mediterranean countries. But some of them, as the arrows show, moved into the island of Britain.

a better place in which to live than the rough mountains. In any event they gradually drifted westward into what is now France.

This was a fine country for them, and the Celtic tribes grew in numbers. Some of these tribesmen pushed their way down into Spain. Others went into Italy. Still others crossed the narrow sea into the islands of Britain and Ireland. All this had happened more than three hundred years before the time of Julius Caesar. The tribes that stayed in France were the people the Romans called Gauls.

The Celts that moved to the island of Britain were called Britons; and the island took its name from these people. People had been living there for many, many centuries, but the warlike Celts seem to have conquered them completely.

The land of the Britons. Much of Britain was then covered with trees. Great woodlands filled the hollows between wide ranges of low hills. Some of the uplands in the southern part of the island are composed of a soft limestone that is often called chalk. This region is called the "downs." Look at the map on page 215 and find three regions of chalk downs in southern Britain. Some of the early people, who had no tools with which to cut down the forests, preferred to live on the downs. This part of the island was treeless, for trees cannot grow in the dry, chalky soil.

The eastern part of Britain is a great, low plain. Across it flow important rivers that rise in the highlands to the west. Parts of this plain are so low that there are wide stretches of marshland. On the map on page 195 trace the course of the river Thames from its source in the Cotswold Hills.

The Pennine Mountains, which stretch southward from the rough Scottish Highlands, have been called "the backbone of England." West of the Pennines and the Cotswolds rise the Welsh highlands. The people who live in the Welsh highlands today are descendants of the early Britons.

Courtesy German Railroads Information Office

This is the inside of one of the houses shown on page 213. A bronze kettle is hanging over a hearth made of stones and dirt. On the wall, over a work-bench, are the tools which the bronze-maker used. Notice the sliding shutter which covers the window. Do you think these lake-dwellers felt safe in their homes? In what way do you think they disposed of their bronze goods to the people living north and south of them?

In addition to the Eastern Plain, Britain has many small plains. Most of them are located along rivers where the streams flow into the sea. Notice the rough regions where the invaders drove the Britons.

The Romans in Britain. People in the Mediterranean countries had known for centuries about the islands in the northern sea where they could obtain tin. The Phoenicians, and later the Carthaginians, made trading trips to Britain and the "Tin Islands" that were close by. Julius Caesar, on one of his campaigns, crossed the channel and made his way into the island of Britain. Although he did not stay, he made the Britons promise to pay tribute to Rome. They promptly forgot the promise when Caesar's back was turned, but the Romans did not forget it. About a century later they returned, and this time they conquered part of the island.

As soon as the Romans moved into Britain, they began to build towns and roads. They made their way northward from the coast of the English Channel toward the Thames. Near the mouth of that river, on the only solid bit of ground among the salt marshes, they found a settlement called Llyndin. "Llyn" meant pool (the Thames spreads out into a pool here), and "din" meant hill or fort.

The Romans captured Llyndin and built a fort and a wall about the town. Then they set to work building roads across the marsh to connect Llyndin with other parts of Britain. As the years went by, more and more people followed these good roads into the town. More and more boats came up the winding river to the landing at Londinium (the Roman name for Llyndin). Trade, you see, was making a city out of a little settlement. Later it was to grow into London, the largest city in the world.

Why the Romans made Britain a colony. Grain and cattle from the island provided food for the Roman army, and the lead, silver, and tin from the mines were highly valued. To keep these supplies flowing into Londinium, where they could be shipped to Rome, the Romans built forts, roads, and towns. The Romans had more than fifty walled cities in Britain and kept garrisons of soldiers in each of them. You can tell which towns of modern England were founded in

The white lines show the chief Roman roads in Britain. There were more cities than the ones shown, and many small towns. The names of the cities given are the names used today. The Romans had different names for most of these British cities.

this way just by their names. Most of them end in -chester or -cester, from the Latin word *castra*, which means "military camp." There are Chester, Winchester, Colchester, Chichester, and many others.

As more peoples were conquered and the Roman Empire grew larger, trade also grew, and increasing trade caused the building of towns. It always does. Trade means towns, and towns mean trade. The Romans did in Britain what they did in many other lands.

Rome had a hard time getting people to settle in Britain. The climate of the island is colder and damper than that of the Italian Peninsula, and neither grape-vines nor olive trees will thrive there. The Roman peasants disliked the idea of leaving their warm, familiar climate for a colder, strange land.

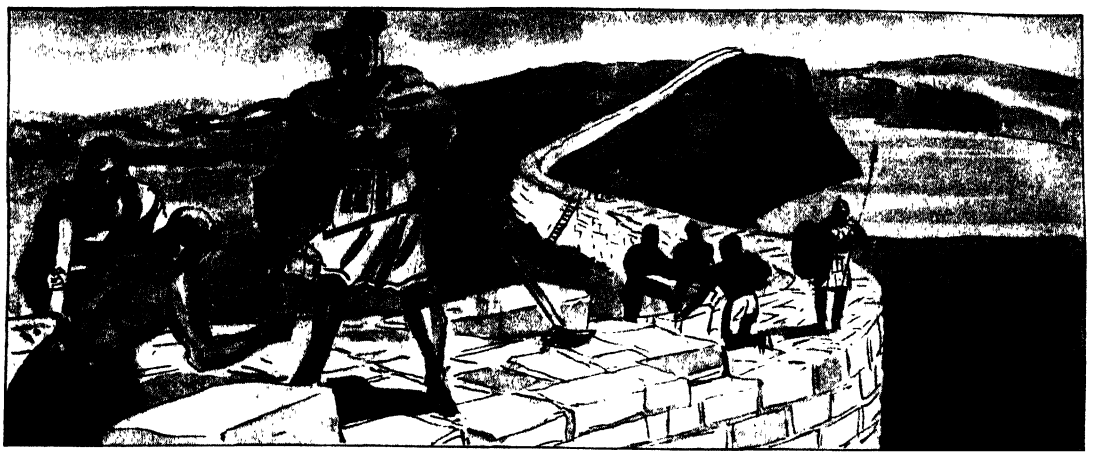
The Romans taught the Britons to raise larger crops of oats, wheat, and barley. They also taught many of their civilized ways to the Britons. Latin, the Roman language, was spoken in many of the towns throughout the island, although the Britons of the country districts continued to use their old language.

Britain remained a part of the Roman Empire for three hundred years. That is about the same length of time the English-speaking people have lived in North America. But in 410 A.D. the Roman army was called back to Italy. Trouble with the barbarian invaders made it necessary to have all the Roman soldiers nearer to Rome. They were needed to protect the Roman frontiers on the continent.

The Britons did not have their island to themselves for long. Their land, as well as Rome, was invaded by tribes of northern barbarians. The Teutonic tribes that invaded Britain were the Angles, the Saxons, and the Jutes, who came from lands across the North Sea. From the map on page 218 find where they lived.

This was not the only trouble of the peace-loving Britons. The Romans had always had difficulties with the fierce Picts and Scots who lived in the northern part of the island. To keep them from raiding the southern part, the Romans had built across Britain a great wall. It was eighteen feet high and eighty miles long, and garrisons of troops were stationed along the border. Now, with the

As the Romans wished to obtain food supplies from Britain, the cities had markets where farmers could sell their grain and other crops. Merchants from Roman lands offered their goods for sale, as you see in the picture. The dress of the pottery merchant shows that he is a Phoenician or a Syrian.



The Romans built two walls across narrow parts of Britain. Locate them on the map on page 218. The first wall built was the northern one. Later the Romans decided that it was not worth the trouble to keep troops so far north, as the land was rough and did not produce much. Another wall was built farther south. There were two garrison cities, where soldiers stayed, located near the wall. Find them on the map on page 215. Troops were always ready to repel invasions of the savage Picts and Scots.

Roman garrisons gone, the Picts and Scots swept down in sudden raids on the settlements and towns in the south.

To make matters worse, pirate bands from Ireland made frequent raids on the western coast of Britain. These pirates sailed out from coves along the shore of the island west of Britain.

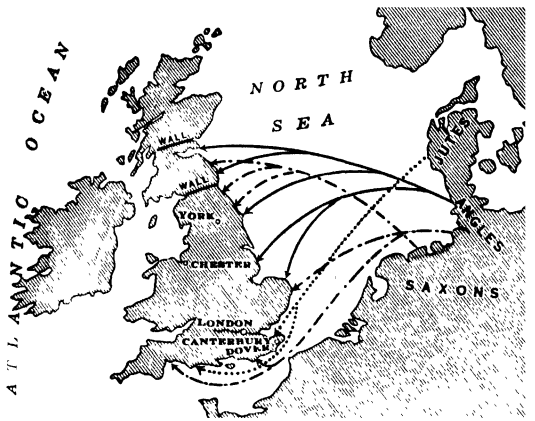
The Romans were too busy fighting the Goths and Vandals at home to give aid to the Britons. The islanders fought bravely to protect their homes, but the fierce Teutonic tribes were too strong for them. The story of the struggle is told in the legends of King Arthur, some of which you may have read.

The green slopes and the mild climate of England seemed very good to the invaders, who had struggled hard for a living on the cold, marshy lands around the Baltic Sea. The Angles and Saxons came not only to plunder villages along the shores, but to settle and to make homes for themselves. Gradually they pushed the Britons back into the depths of the forests or to the barren highlands.

The Angles and Saxons in Britain. In time so many Angles settled in eastern Britain that it became known as Angleland. It is easy to see how the name later became England. The Angles and the Saxons drove out the Picts, who had been attacking the Britons. After years of fighting they also drove most of the Britons from the forest retreats into the highlands in the western part of the island. This part of the island we now call Wales.

The Teutons, as you have read before, cared nothing about city life. They did not know how to live in cities and coöperate with each other as city people must. The cities and towns were gradually deserted. Many of the homes of the Britons were destroyed. As the invaders knew nothing about building with stone and brick, the homes were rebuilt of wood. Other industries that the Britons had learned from the Romans, such as weaving, ship-building, and tool-making, were neglected and forgotten, except by a few of the captured people whom the Teutonic invaders kept as slaves.

The roads and bridges were not repaired, for the Teutons did little traveling. They preferred to swim their horses across a stream rather than trouble about a bridge. As each settlement of the invaders produced all it wanted for itself, there was little trade and



Find the regions where the invaders lived before they settled in Britain. Trace them to the island and find where they settled. For a long time the invaders kept to themselves in little tribes. Gradually the tribes became small kingdoms. It was more than three hundred years before these peoples united.

little use for roads. But the Roman roads had been so well built that many of them lasted for centuries. Some of them may be seen in England today.

The invaders settled down, and you have seen many times that settling down is the first step toward civilization. There was a little trade in salt and in metal for weapons and crude tools. Gradually the trade grew, and people learned to work more with each other. In time the invaders became one people—the Anglo-Saxons. We still call the English people "Anglo-Saxons," but they are really a mixture of Britons with Anglo-Saxons and other invaders who came to Britain later.

The story of how the Anglo-Saxons gradually became a nation is important to us because millions of Americans are descendants of the peoples who helped to form the British nation. Many of their customs have become our own.

Different groups of Saxons gave their names to parts of the country in which they lived. Each of these was a little kingdom with its own king ruling it. The word king is from an Anglo-Saxon word that meant "man of noble birth." None of these kingdoms was very large. In fact, some of them are English counties today and still have the names of the old kingdoms. There are Kent; Essex, which was the home of the East Saxons; and Wessex, the home of the West Saxons. The land of the South Saxons is still called Sussex; and the country in the central part of England is still known as Middlesex.

The Church in Britain. During the time of the Roman rule in Britain, the Britons had been visited by Christian missionaries, probably from Gaul, just across the English Channel. Many Britons adopted the new religion. Soon churches were built, and bishops from Britain attended some of the great church meetings held in Rome. British missionaries, such as St. Patrick, went to Ireland to convert the people there. Many churches and monasteries were built in Ireland.

But when the Angles and Saxons invaded the island, the Britons lost all touch with the Church at Rome. The invaders worshiped Woden, Thor, and other Teutonic gods. The Christian Britons, hiding in the forests and

Hudson Historical Bureau

British legends tell the story of Hengest and Horsa, two fighting brothers who were invited to Britain by the king of Kent to help fight the Picts and Scots. After helping the king, Hengest and Horsa liked the land so well that they took it for themselves and drove the Britons out of Kent.

Saxons landed near London and marched on the walled city. There were no Roman soldiers left in Britain, and the people, who for years had not been able to protect themselves without Roman aid, became panic-stricken. They abandoned the city and fled toward the west. The Saxons captured the city easily and plundered it. Then they took possession of the land.

highlands, did not have any opportunities to convert their enemies.

But in 597 Christianity was again brought to England. The story is told that the Pope once saw two fair-haired slave boys who were offered for sale in Rome. When he asked where they came from, he was told that they were Angles. "Angels, you mean," he answered. The Pope sent a monk named Augustine to England, and the king of Kent was converted to Christianity. This king allowed Augustine to rebuild an old church near Canterbury. Since that date, more than thirteen hundred years ago, Canterbury has been the center of the Church in England.

Because priests and missionaries came from Italy, Britain was again connected with the civilization of Rome. The monks brought with them Roman books and learning, as well as the Christian religion. With Canterbury as a center, monks and priests carried their teachings into all parts of the island.

There came to be more travel between the island and the continent than you might think. Monks from English monasteries went to Europe to copy books. Churchmen from the mainland went to English monasteries to visit their fellow churchmen.

But for a long time Britain remained a frontier land on the outer edge of civilization. It was far from Rome, and everyone still looked on Rome as the center of the civilized world.

How the Anglo-Saxons governed themselves. The kings of the Anglo-Saxon tribes were selected by the people. None of them had very great power. The older or wiser men of each little kingdom met in a council to advise the king about important matters. There were other council meetings, too, attended by the free common people. At these council meetings men were chosen to carry out the laws in the farm districts and to settle disputes among the people.

In this way, you see, the Anglo-Saxons from early times have had the idea of governing themselves. They settled many of their disputes in ways somewhat like those used in our law courts. All the Teuton tribesmen loved freedom and disliked the idea of being governed by a ruler who could make his own laws. And of all the early Teutons, the Anglo-Saxons were the most independent.

For many years the various Anglo-Saxon kings made war against each other. Civilization would have advanced faster if the people

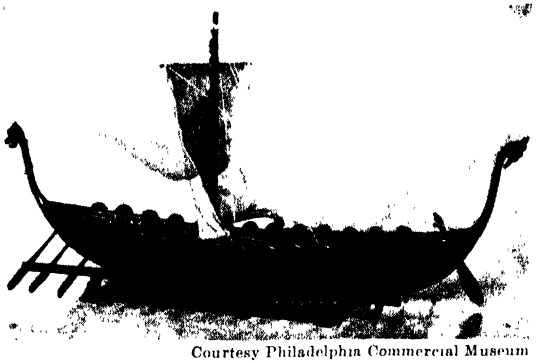
had been allowed more time for peaceful tasks. But the island was small, and every king wanted the lands of his neighbors. At last another invasion compelled these quarrelsome people to unite so that they could save their lands. This was the invasion of the Northmen, or Danes as the English called them. We also call them Vikings, or Norsemen.

Who the Northmen were. The Vikings, or Northmen, were a tall, blue-eyed people, closely related to other Teutonic tribes. In early times they had wandered into lands far to the north—the Scandinavian Peninsula. Find this peninsula on the map on page 300.

The land of the Northmen was covered with mountains for the most part, as you can see on the map. There was little good land for growing crops, and the winters were long and cold. Therefore the Northmen could not do much farming.

Hudson Historical Bureau

This picture of a Viking chief shows us many things about these fierce people. Their weapons were of iron, and they wore ornaments of bronze and gold. They knew how to weave cloth, but the fighting men wore leather garments and skins with the fur left on. Sometimes the leather shirts were covered with metal rings or plates to form armor.



Courtesy Philadelphia Commercial Museum

This is a model of a Viking ship. This kind was used for long sea journeys and was called a "draker." The rowers hung their shields along the sides for protection. Notice the dragon prows and the steering oar. Rudders had not yet been invented.

Like their ancestors, they were hunters; but they soon turned to the sea, for the sea about the Scandinavian Peninsula has always been a good fishing ground. The rocky coasts provided little coves and inlets, like the rugged shores of the Greek Peninsula. The thick forests provided plenty of good timber from which to make ships. And so the Northmen learned the ways of the sea and became good fishermen and daring sailors.

The invasions of the Northmen. But even in these northern seas there were times when the fishing was poor. In such times the Northmen remembered the stories they had heard about the rich treasures and abundance of food in southern lands on the continent and on the island of Britain. These stories were brought by traders who had gone southward to exchange the amber they found along the shores of the Baltic Sea. You can guess what happened. The Northmen set out in their swift boats to gain some of those treasures and that good food for themselves.

The tall, rough Vikings wore coats of mail and horned helmets, and carried shields and huge battle-axes. They were a sight that

struck terror into the hearts of any people whom they attacked. Swooping down on the coasts of England and the mainland in their long, black ships, these Northmen raided western Europe as far south as Spain. Often they sailed up the rivers far inland, fighting and plundering. They often attacked the Christian churches and monasteries, carrying off gold, silver, and fine embroideries.

At first only small groups of Vikings came to the coasts, and they came in the summertime. They made quick raids and returned to their homes before the first storms of winter. As time went on, more and more of them came. They went farther and farther inland, seizing crops, sheep, cattle, and other property. Following the rivers, they plundered, burned the crops that they could not carry away, and set fire to houses, churches, and monasteries. You can imagine the terror that they spread throughout the peaceful valleys of England.

The Vikings built forts at the mouths of the rivers, just as the Angles and Saxons had done before them. Using the forts as headquarters, they stayed through the winters and plundered the country-side. It was not long before they had taken York, London, and Canterbury, the three most important cities on the island. The position of these cities, located on rivers, helped to make them important.

Even when the Anglo-Saxons defeated these Northmen in battles on land, England was not safe. The invaders simply retreated to their ships, sailed away, and attacked some other part of the coast. Only a fleet of fighting ships could have protected the Anglo-Saxons. So greatly did the Anglo-Saxons dread these raids that they had a special prayer for protection against them. It remains in the English prayer-book today, although the raids are now only a memory. It reads: "From the fury of the Northmen, Good Lord, deliver us."

How the people of England united. It happened that several kings of the different English kingdoms died about this time. Many of the people flocked to support a king named Alfred, who was a strong leader. He gathered together enough ships to form a navy and collected men from the different kingdoms to form an army. The Anglo-Saxons, who had spent their time fighting each other,

When King Canute led his Danes up the Thames River to London, he found that he could not capture the city from the east side. Nor could he pass the bridge and the men who guarded it. The Danes then dug a canal in the low, marshy land along the river and were able to reach the upper river without passing by the city. Then they attacked the city from the west and captured it from the English.

When King Alfred recaptured London from the Northmen, he made a treaty with Guthrum, king of the Danes. Both men swore on a sacred ring held by the Bishop of Canterbury to keep the peace. Many of the Northmen had brought their wives and children with them and were settled in England. Alfred could not make them return to their old country across the North Sea, and so the Danes lived on in England and finally became a part of the English people.

were glad to unite under a good leader in order to save their homes.

Finally Alfred defeated the Northmen, although he was not able to drive them out of Britain. They did agree, however, to give the Anglo-Saxons all the southern and western part of England from Chester down to London. The Northmen were allowed to keep the northern and eastern part. As the Northmen were also called Danes, the region ruled by them was known as the Danelaw.

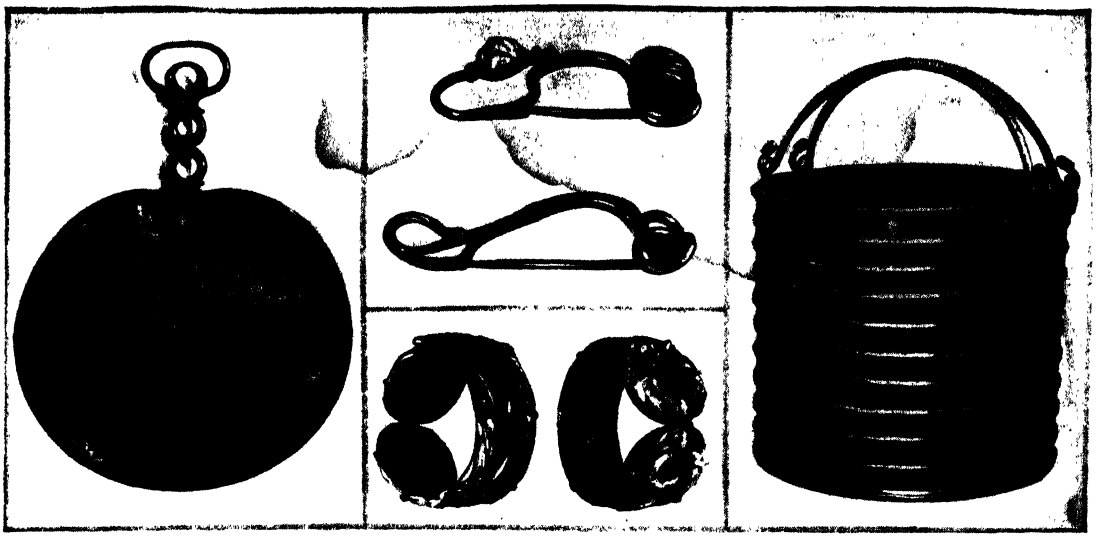
Some of the Danes went back to their own country, but many of them stayed in Britain. In time, these Danes and Anglo-Saxons became one people—the English.

How the king came to be called Alfred the Great. Alfred was more than a good leader of the army; he planned to make his country a prosperous, civilized nation. He did many of the same things to bring this about that Charlemagne had done in France.

Although most Anglo-Saxons did not do much traveling between their island and the continent, there were some who had journeyed as far as Rome. Alfred had made such a trip before he became king. He was only a boy at the time, but he had greatly admired the buildings, temples, theaters, and statues in Rome. When he became king, he made up his mind to make London as great a city as Rome. Now that the war with the Danes was over, he felt that his chance had come.

King Alfred rebuilt London and many of the towns that had been burned in the wars. To protect them against attack, he surrounded them with great walls. In many places he built forts, where he kept garrisons of soldiers. Before this, the Anglo-Saxons, like the early Romans, had been both soldiers and farmers. As soon as the fighting was over, they had gone back to their fields. Alfred wanted fighting men who would always be ready to protect the land from invaders. So he divided all the men into two groups. One group worked in the fields, while the other was fighting, or at least was prepared to fight. From time to time the two groups changed places.

This map shows the part of England where the Danes lived. It was called the Danelaw. The Danes became farmers and fishermen and learned to speak the same language as their English neighbors.



British Museum

The Britons were expert metal-workers, as these articles show. At the left is a bronze mirror with an ornamented back. Notice the design and how it is made. In the center, at the top, are two pins or brooches of bronze. Do they remind you of modern safety-pins? Below are two heavy bronze armlets. They were enameled. At the right you see a bronze pail with a double handle.

Alfred divided his kingdom into districts, with a sheriff over each one. He had all the laws written down, so that people could know what the law was. He sent judges into the country to see that these laws were carried out fairly.

When he had made his country safe and orderly, Alfred invited foreigners to come and sell their goods in England. He encouraged the English to sell their grain and wool to traders on the continent. Alfred made another visit to Rome and urged his people to visit foreign lands and find out how other people lived.

Alfred also invited teachers from other countries to come to England. Like Charlemagne, he set up a school in his court, so that the nobles could learn to read Latin. The Anglo-Saxon king hoped, too, that the common people would learn to read in the Anglo-Saxon language.

Alfred was fond of English songs, and had many of them written down so they would not be forgotten. The king had other books copied and even wrote one himself. He had the early history of Britain written down, going as far back as men could remember. It was the first history of England. After Alfred's day, the monks kept adding to it whenever any special event occurred. This was called the *Anglo-Saxon Chronicle*. As you might expect, it tells mostly about the wars among the Anglo-Saxons, about church affairs, and about the lives of the nobles. The Chronicle was continued for more than two hundred fifty years after Alfred's time.

Alfred is called by the English people "Alfred the Great," and he is the only king they honor by this title. He found England divided into several kingdoms. When he died, after ruling thirty years, he left the tribes nearly united. In the course of time they gradually became one people. King Alfred died about 900 A.D.

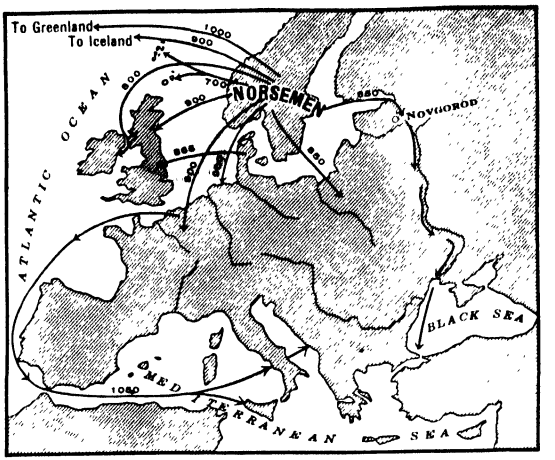
The last invasion of Britain. About one hundred fifty years after the death of Alfred, another band of Northmen invaded the island of Britain. These invaders did not come directly from the Scandinavian home of the Northmen. They came from France,

where they had been living since the earlier Viking raids. To find out how they came to be living in France, let us follow some of those earlier Vikings in their far travels. They were great travelers, these Northmen, as you know. You have probably read how one of them named Leif Ericsson came to America as early as the year 1000.

The travels of the Northmen. During the time that some of the Northmen were invading Britain, others invaded the continent of Europe. They followed the rivers whose mouths were along the Baltic Sea. Turn to the map on page 300 and find some of these rivers. See how easy it was for the Northmen to cross the great plain of Russia. They could go almost all the way by boat. Gliding swiftly up the streams in their stanch craft, using oars when the wind failed them, these Northmen made their way far into Europe. When they came to the Dnieper River, it led them to the Black Sea. There they met traders from the south, from Arabia, and from farther east. The Vikings bartered their amber and furs for silks, spices, and gold, which they traded on their way home.

The Northmen were not content with voyages of trade and adventure. They wanted to rule. Under a chieftain named Rurik, one of their bands settled down in the land east of the Teutons in the city of Novgorod. Rurik's men and their descendants became the ruling class of Russia.

For hundreds of years minstrels in northern lands told the story of the hero Beowulf and his adventures with great giants. About one thousand years ago some scribe wrote down the story-poem in Old English, which is what we call the language spoken in Britain at that time. It is one of the first stories written in the English language. Although you could not read it as it was first written down, you can find the story written in the language of our day, and it is an interesting one to read. This picture shows the hero Beowulf fighting the monster Grendel, which had the people of Denmark in its power.



This map shows the various countries where the Vikings settled. The figures tell you about what date the first settlements were made. At first the Vikings visited many of the lands to trade or to plunder. After a time they built villages and remained to become a part of the country. Notice that the Vikings followed the sea and rivers in seeking new homes.

Other bands of Northmen, sailing southward, found rich plunder in the churches and homes of the Franks. To protect their frontiers, the Franks built forts and castles. They also fortified the bridges over rivers to keep pirate ships from coming up the streams. But even these defenses did not stop the invaders. Northmen forced their way among the Franks and built their own forts, just the way they did in England. One of the Frankish kings who followed Charlemagne was compelled to give rich lands along the northern coast of France to the Northmen.

The Franks called the invaders "Normans," and the part of France where they settled has ever since been called Normandy. After a time these Northmen, or Normans, learned to speak the language of the Franks. Of course they kept many of their older words, and so their kind of French was not just like the French that was spoken in other

parts of the country. The Normans gave up their heathen gods and accepted Christianity.

About one hundred years after the Normans moved into France, they had a powerful leader named William, Duke of Normandy. William was eager to get more land to rule over. Finally he found a good excuse for attacking England.

William the Conqueror. At this time the king of England was Edward, a second cousin of Duke William. Edward had been brought up in Normandy, and he liked Norman ways better than English ones. Duke William once visited England and was bold enough to ask his cousin Edward for the promise of the English throne when Edward died. Edward foolishly gave the promise, though he had no right to promise anyone the English throne. In those days the English kings were elected by the Witan, which was a council of nobles.

Edward made the same promise to another one of his cousins, an English noble named Harold. As Edward lay dying, he said to Harold: "Harold, thou shalt have my kingdom; but little do I know of William and his Normans if thou art not a dead man."

Find the part of France where the Normans lived. The dotted region near by was ruled by nobles who were followers of the Duke of Normandy. The regions in the British Isles marked with lines were not ruled by the English king. The nobles in those parts of the islands still looked upon the king of Denmark as their ruler. The arrow shows where the Normans landed in England in 1066 A.D.

Most of the amusements were outdoor ones, such as hunting. Indoors there was little to do besides feasting. Traveling minstrels and jugglers went from one castle to another and amused the nobles. The common people had to amuse themselves as best they could after toiling from sunrise to sunset.

After Edward's death, Harold was elected and crowned king. At once Duke William, across the narrow sea in Normandy, began to raise an army in order to take the English throne for himself. Since William did not have money enough to pay an army, he promised his men that they might plunder the English if his army was victorious. Many Norman nobles and adventurers joined William's forces.

William landed in England in 1066. As he reached the shore, he stumbled and fell on his hands. Some of his followers feared that this was a bad sign. But the duke laughed and cried out: "By God's grace I have seized England with both hands." And so it seemed he had. For he defeated the English in the battle of Hastings, and Harold was killed.

Then Duke William marched to London, where he made the Witan elect him king. He was crowned King of England on Christmas Day, in the year 1066.

King William spent the next five years in making himself master of England. Many of the Anglo-Saxon nobles shut themselves up in their castles in the northern and western parts of England and defied the Norman conqueror. One by one, the king besieged the castles and defeated the nobles. He allowed some of the nobles to keep part or all of their lands if they would swear loyalty to the new king. But the king took the land of many nobles and gave it to his own followers. At the end of five years almost all the nobles in England had sworn loyalty to the new Norman king. You can see that William earned his title, "William the Conqueror."

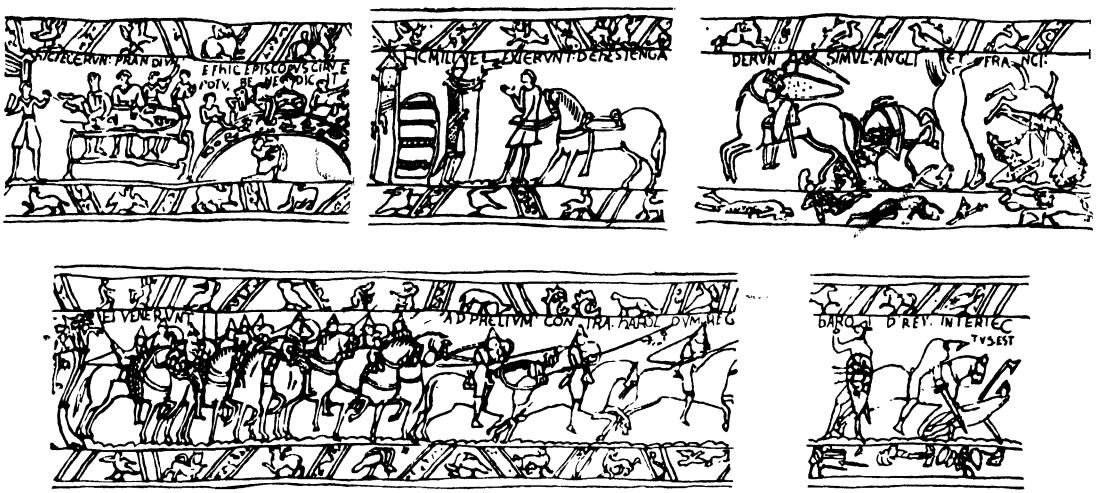
What the Normans did for England. William was a wise conqueror. He kept nearly all the old Anglo-Saxon laws, courts, and customs, and added a few new ones. By these laws each town and county had the right to govern itself—that is, to make the laws for the people in the town or county. We call that local self-government. English-speaking people the world over have local self-government today. It has been an important part of life for English people since early days.

William allowed the local governments of cities and towns to become strong, but he made the power of the king and his council stronger than ever before. One way he did this was by claiming that all the land in England belonged to the king himself. People could have the use of the land only so long as they remained loyal to the king. No noble or follower of the king could keep his land if he did not come to aid the king with soldiers whenever the king called on him.

William made *all* the people, whether they were serfs, freemen, or nobles, swear loyalty to the king.

William kept an army that was much like the one Alfred had established, and he did not permit his nobles to fight among themselves. The king compelled them to go into court and settle matters peaceably, instead of going to war over their disputes.

Norman women embroidered these pictures on a long roll of linen. The scenes show the invasion of England by William, Duke of Normandy. The first picture shows the Normans cutting down trees for lumber, and the second shows the ships being built. The third scene shows men carrying weapons and suits of mail and a cart loaded with provisions. Below, the first picture shows Duke William and his companions. In the second, horses are being unloaded from the ships. In the third, the Normans are seizing food on English farms. One man has just killed a cow. Another is leading a sheep, and a third is carrying a pig. There are dozens of pictures like these on this long roll, called the Bayeux Tapestry.



Here are more scenes from the Bayeux Tapestry which Norman women made to tell the story of William. The first scene at the top shows the meal before the battle of Hastings. In the next, a soldier is bringing William's horse to the leader. Next comes a battle scene. The bottom row shows the Norman knights going into battle. The last picture is the death of Harold, the English king.

The new king continued the laws for collecting taxes. To settle what each man's tax should be, William sent men throughout the kingdom to make a written list of all property owned by each man. According to the old *Anglo-Saxon Chronicle:* "There was not an ox, or a cow, or a pig that was not set down in the accounts." This written record of the people's property was known as the *Doomsday Book* (Judgment Book). William used it to fix the taxes fairly, according to the property that each man owned.

The king also set aside great forests in which only he and his court were allowed to hunt. One of these hunting grounds was the Forest of Arden; another was Sherwood Forest, in which Robin Hood later became famous.

William and the Norman kings who followed him kept order in the land. Merchants and peasants could work in peace and feel that their lives and property were safe. A writer of King William's time said: "Among the good things is not to be forgotten the good peace that he made in this land; so that a man might go with his bosom full of gold, unharmed. No man dared slay another, no matter how great might be the wrong done him." Under such a government England became a strong country.

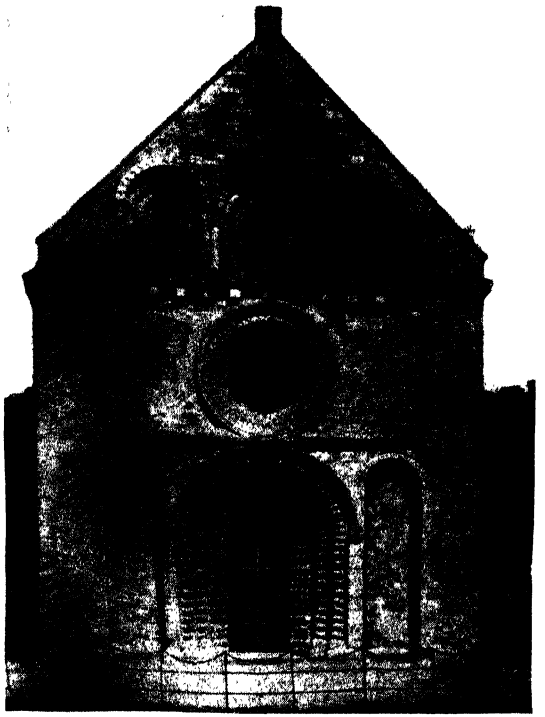
William the Conqueror and the other Norman kings were good rulers with keen wits. They saw that England needed to be brought into closer touch with people on the Continent.

Gradually the Norman nobles and their Norman followers were drawn so closely into the life of the English people that they, too, became Englishmen, proud of their little island kingdom. At first the Normans spoke only their own kind of French, and everyone in the king's court had to know the French language. But in order to deal with the common people, the nobles had to learn to speak the English language. Gradually the Norman-French language disappeared. Yet even today there are many of their words in our English language. The words cow, pig, and sheep are Anglo-Saxon words. The words beef, pork, and mutton are Norman-French words. Who do you suppose took care of the animals; and who ate the meat? Doesn't that tell you something about how words get into our language?

The battle of Hastings was a turning-point in English history. The conquest of England by the Normans was one of the most important events during the Middle Ages. It was the last armed invasion of Britain. No foreign foe ever again took possession of England's soil.

The English people, safe in their snug little island, could now advance rapidly in industry, trade, and all the things that increase civilization and wealth. The peoples on the European continent were troubled by wars for centuries, and could not progress so rapidly. We shall see later how the English people took advantage of the peaceful years that followed to improve their civilization.

The Norman nobles built great castles like forts in order to hold conquered England. Some of them, like this one at Rochester, did not have any moats or outer walls. They were simply great strongholds with stone walls too thick to batter down. The only way to capture such a castle was to starve the defenders until they surrendered.



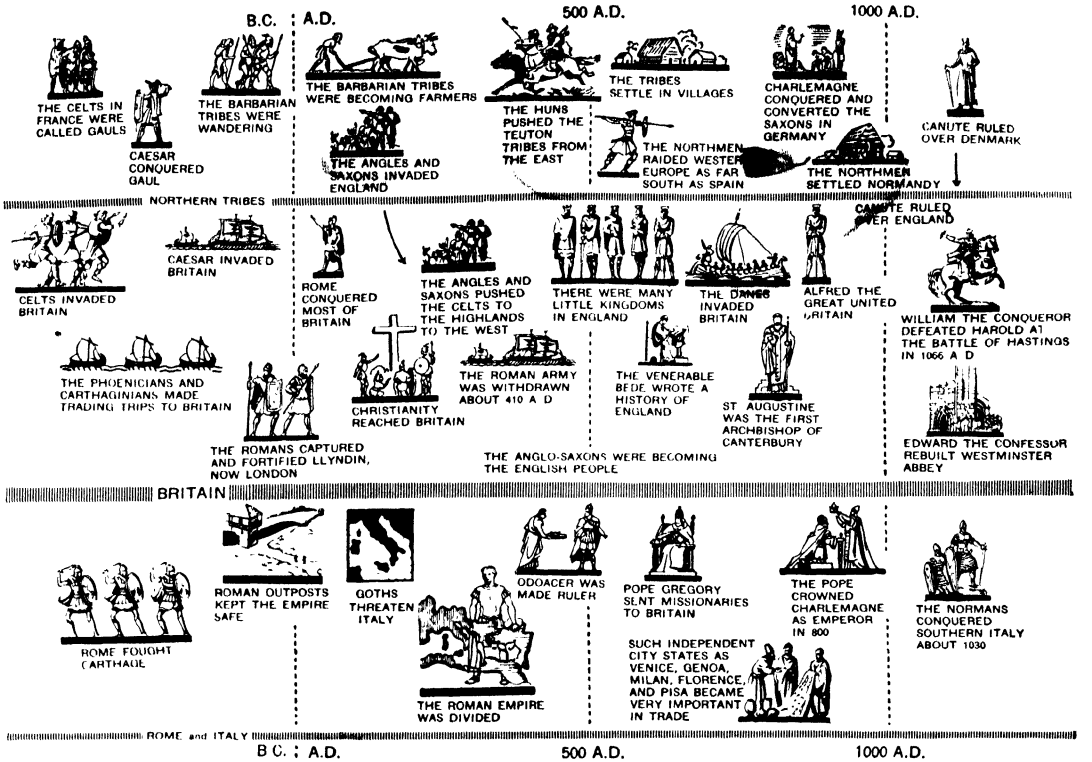
The Normans brought to England their own style of architecture. This old Norman church at Ilsley, not far from London, was built before 1200. Notice the rounded arches of the doors and windows. Now turn to the picture on page 265 and look at the arches on that church. You can see that the Normans erected buildings that looked much like those of the Italians in many ways.

The language and peoples of England. And so ends the story of the early days in the little island of Britain. The characters in the story have marched across the stage. Romans conquered Britons; Angles and Saxons conquered the island, and became known as English. Then came the Danes, and finally the Normans. All made their conquests, and all left their mark on the island and its inhabitants. You can see what a mixture the people were by that time, and you can guess what a mixture the English language became.

Talking Things Over

1. There are many books in which you can find stories of the Norse heroes. Some tell how the Norsemen sailed as far from home as North America. Find some of these stories at home or in the library and bring them to class. These stories make you think of the Norsemen as bold and daring adventurers.

2. Religion and education were taken to Britain together. Can you think why that was? Everywhere in Europe, during the Middle Ages, these two important things were closely connected.



PICTURE HISTORY

Many different peoples visited the island of Britain, and some of them stayed there to make their homes. Follow the story of the island in this Picture History and notice what was happening in other lands.

3. Make a list of things that Alfred the Great accomplished in England. How did his reign compare with the reign of Charlemagne? List in parallel columns the things each of them accomplished. It may surprise you to see how they worked to obtain the same results.

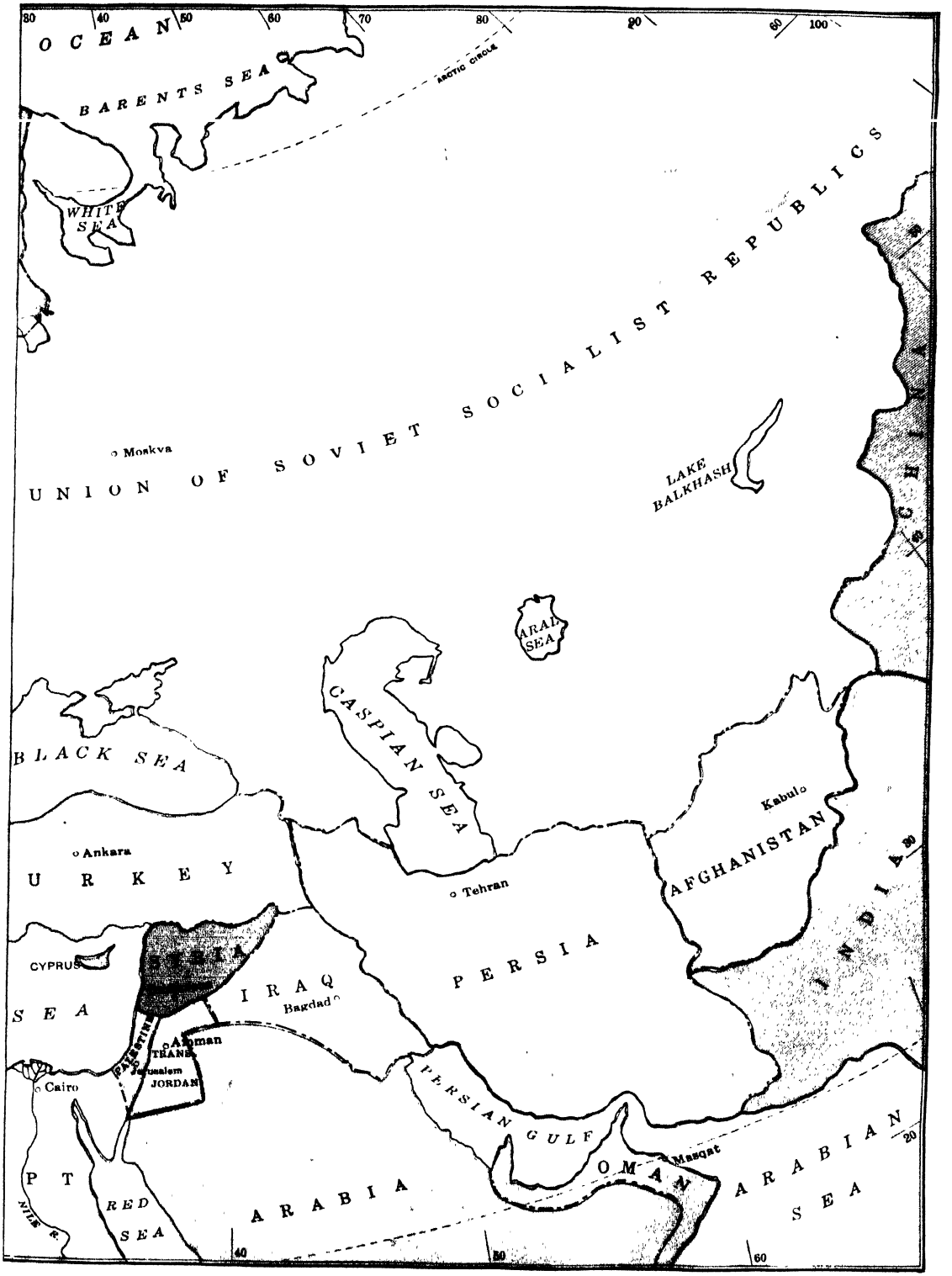
4. In what way was the early history of Britain like the early history of Spain? Think of what happened to the early people of each land.

Doing Things Together

1. Did you ever see a diagram of a family tree? Usually it starts with one name at the top and spreads out below to show all the descendants. It can also start with one name at the bottom and spread out above to show all the ancestors of that person. A family tree of the English people might start with the English people of today and go backwards in time. Work together to make such a diagram. Show how the people of today are descended from many different peoples.

2. Look at the picture on page 216. What do you imagine the people might be saying to one another? Pretend that you are there and make up an interesting conversation. Practice it over as you have practiced other such conversations.

ARCTIC
Reykjavik
ICELAND
NORWEGIAN SEA
ATLANTIC OCEAN
NORWAY
SWEDEN
FINLAND
GULF OF BOTHNIA
Oslo
Stockholm
Helsinki
Tallinn
ESTONIA
NORTH SEA
SCOTLAND
NORTHERN IRELAND
Belfast
Dublin
EIRE
ENGLAND
Amsterdam
NETHERLANDS
Copenhagen
DENMARK
BALTIC SEA
Riga
LATVIA
LITHUANIA
Kaunas
EAST RUSSIA
London
Brussels
BELGIUM
LUXEMBOURG
Paris
GERMANY
Berlin
POLAND
Warsaw
Prague
CZECHOSLOVAKIA
FRANCE
SWITZERLAND
Berne
Vienna
Budapest
HUNGARY
ROMANIA
Bucuresti
Lisbon
PORTUGAL
SPAIN
Madrid
ANDORRA
YUGOSLAVIA
Beograd
ADRIATIC SEA
ITALY
Rome
CORSICA
SARDINIA
BULGARIA
Sofiya
Tirana
ALBANIA
Rabat
MOROCCO
MEDITERRANEAN SEA
Algiers
SICILY
AEGEAN SEA
Athens
CRETE
RIO DE ORO
ALGERIA
Tunis
TUNISIA
Tripoli
FRENCH WEST AFRICA
TROPIC OF CANCER
LIBYA
EGY
0 100 200 300 400 500
Scale of Miles
B.H. FORESTER ENGRAVER


OCEAN
BARENTS SEA
ARCTIC CIRCLE
WHITE SEA
UNION OF SOVIET SOCIALIST REPUBLICS
Moskva
LAKE BALKHASH
ARAL SEA
CASPIAN SEA
BLACK SEA
Ankara
TURKEY
Kabul
AFGHANISTAN
Tehran
PERSIA
INDIA
CYPRUS
SEA
SYRIA
IRAQ
Baghdad
Amman
TRANS-JORDAN
Jerusalem
Cairo
PERSIAN GULF
Masqat
OMAN
ARABIAN SEA
ARABIA
RED SEA
NILE R.

When the Normans invaded England and took possession of the country, the lands were divided among the Norman knights. Many English landowners were forced to give up their property to friends of the conquering king, William of Normandy. Many Normans let the English live on the land but made them pay rent.

Metropolitan Museum of Art

In feudal times there were many wars between the nobles, and people relied on stout walls for their protection. Nobles built larger and stronger castles, and cities were surrounded with high walls. This picture shows just a part of the double wall which surrounded the entire city of Carcassonne, France. On page 251 you will find a picture of the entire city. How did men defend such a walled city?

XVI. THE FEUDAL PERIOD

The Great Drama of the Middle Ages

WE MIGHT think of the story of Greek and Roman civilization as one act of a great play, and the civilization of modern Europe as another act. We know that there is a "wait" between acts of a play while the scenery is being shifted. Perhaps it will help us to think of the Middle Ages, the time between ancient and modern civilization, as a scene-shifting period.

The first act of our play stopped when Roman civilization slowly died out. During the "wait" before the next act, the Teuton tribes moved about Europe. We have read how they wandered until they finally settled down in the northwestern part of the continent and in Britain. This part of Europe is going to be the scene of the next great act.

The actors in the play. It was many years before the scenery was changed and the actors were ready for the next act. Our characters will wear costumes which tell us quite plainly who they are. First of all we shall see men whose robes show that they belong to the Church. We shall read more about them later. Next come men in rich clothing, whom we recognize as nobles. Last of all are some whose plain dress tells us that they work on the land. Suppose we find out why our main characters are churchmen, nobles, and peasants.

In Roman times the nobles were members of old families. Most of them were wealthy landowners. Nobles were often sent out to rule the conquered provinces. When the strong rule of Rome began to fail, these nobles kept on ruling the people who lived near by. The Teutonic tribes also had nobles who ruled their people. We have read about

In the Middle Ages there were men of the Church, called clergy, nobles who owned land, freemen, and serfs. There were a few slaves, too, but not nearly so many as in Roman times. The story tells you the difference between serfs and slaves. Sometimes freemen became serfs in order to have the protection of some powerful lord. The freemen and the serfs were the farmers and workers. The people who worked on the land were also called peasants. The word means country people. Some peasants were free; others were serfs.

Charlemagne and his counts, who ruled sections of the Frankish empire. We can see, then, that for many centuries there had been a ruling class of nobles, who helped to govern the people.

A lawless age. After the death of Charlemagne there was no king strong enough to rule much of Europe. Disorder and fighting became common again. The nobles, scattered about over the country, made war against each other. Some of them fought to gain more lands and power; others fought to keep what they had. Bands of fighting men plundered and oppressed the poor people, too. There was no strong government to keep peace and order.

During the time we call the Dark Ages, there was not much travel in Europe. It was too dangerous to go from place to place without a strong central government to protect travelers. Protection, you know, depends on a strong, orderly government.

In those days, when bands of barbarian tribesmen were wandering about Europe, every traveler was in constant fear of his life. The dense forests offered good hiding-places for bands of robbers. Since Rome had lost her power and could give no help, the people had to find ways of protecting themselves.

Each family had to protect itself. Men who owned land had to find some way to hold on to it. Peasants farming small bits of ground needed protection against bandits who might seize them and sell them as slaves to work in the mines or to row galleys. Finally the people worked out a fairly safe way of living, which we call feudalism.

Feudalism meant protection. If all law and courts and police were to disappear in your community, do you believe that you could protect yourself? Probably you would band together with your neighbors. Your family could not do much by itself, but several families together could keep robbers out of your street.

That is almost exactly the plan that was worked out during this period of the Dark

Ages. Imagine two powerful nobles who lived fifty miles apart and owned much land. Between them lived several lesser nobles, each of them with only a little land. Each of the lesser nobles was afraid that one of the powerful nobles would seize his land. It was a very natural thing for the small landowner to go to one of the stronger nobles and offer to fight on his side. In return for this help, the stronger noble would agree to protect the property of his helper. A powerful noble who was a good leader and had many fighting men under his command could protect a large section of country. If life and property were safe in his part of the country, other landowners wanted to come under his protection.

How the land was divided. Generally the strong nobles refused to protect owners of little farms unless the land were given to them. But the noble would let the former owner use the land just as if it still belonged to him. A regular ceremony was followed when a noble took a small landowner under his protection. The man who wanted protection knelt down in front of the noble and put his hands between those of his protector. He agreed to be the noble's "man" and to be loyal to him and to fight for him. Then the noble handed him a piece of sod to show that he would be allowed to use the land as long as he remained loyal to the noble. This ceremony was called *homage*. The name comes from the Latin word *homo*, which means "man."

The rule of the great lords. It is not hard to see how a powerful noble became ruler over a large region. If the people under him did not obey his commands, he simply refused to protect them. Then their farms might be taken away from them by the first armed band that came along. Perhaps the peasants might be captured by bandits and sold as slaves. So in those dangerous times it was necessary for every man to obey his lord.

In this way some lords came to own and to rule hundreds of pieces of land. Under the great lords were many nobles who were not so powerful. Each of them had sworn to be his lord's "man" and to fight for him. These nobles, in turn, gave parts of their land to others who were still less powerful. All of

The kneeling noble in this picture is going through the ceremony called "homage." He is promising to be the king's "man," which means that he will be loyal and will fight for the king. In return, the king is agreeing to protect the noble and allow him to use certain land in the kingdom.

these men had sworn the same oath to the nobles when they received their land.

At the head of this "feudal" system of government was the king. Under the king were nobles called dukes, and under the dukes were thousands of less powerful nobles called counts and barons.

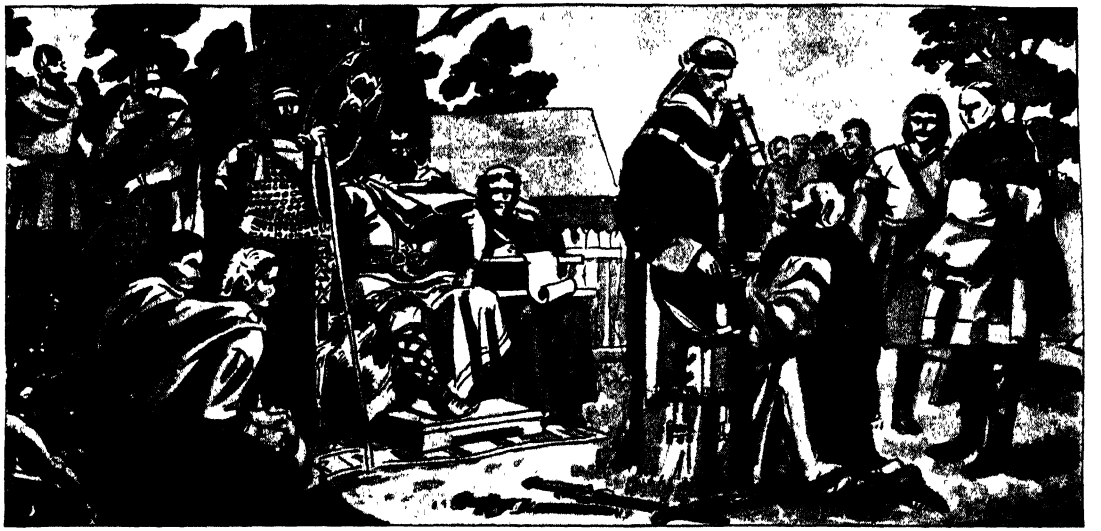
How armies were raised. You can see that this feudal system was something more than just a way to hold land. It was a way to rule the country, to raise armies and wage war, and to protect people. If the king wanted to wage war, he called on his dukes to bring their men. Each duke then called on the lords who had sworn to fight for him and ordered them to bring their men. These lords then ordered the men to whom they had given lands to come with their men, and so on, until every man who held land had been called upon to fight for his lord.

Every man who held land under the protection of a lord had agreed to fight at least forty days every year when the lord called on him. He had to furnish his own armor, horses, and food. He had to bring with him servants to care for his supplies and equipment, too.

How taxes were collected. Fighting for his lord was not the only thing a man had to do in return for his land and protection. He had to pay rent for the land that he had received from the lord. He did not pay in money, but usually in grain and in cattle. He also had to give his lord presents at certain times. He had to help pay the ransom if his lord was captured. He had to give horses, cattle, grain, or other produce when the lord's son was made a knight or when his daughter was married. You can see, then, that the feudal system also provided a way to collect taxes from the people.

Look at the diagram on this page. You can see how this pyramid is formed of groups of men, all of whom are under the protection of other men, clear to the top. A man's lord was called his *suzerain*. A suzerain's man was called his *vassal*. Do you see how a person might be the suzerain of one lord, and at the same time might also be the vassal of another lord?

This picture-chart will help you to understand the feudal system. The lands of the king are held by four men who have promised loyalty to the king. There isn't room to show how all the lands are divided, but you can see that the first noble has divided his land among four other nobles. These nobles have promised loyalty. The land of each smaller noble is used by many common people who have promised loyalty to him. Sometimes a noble would promise loyalty to more than one suzerain in order to gain more land.



In the days of Charlemagne there were courts to see that laws were obeyed. Here you see a noble, sent by the emperor, holding court in a village. A priest is listening to a man who is promising to tell the truth. The noble will listen to everyone who knows anything about the matter and will make a decision. Sometimes men who knew the people helped the noble to decide. Later they were called a jury.

The laws of the land. The rule of the lord was the only government the people knew. The lord not only protected the people on his land, but he made laws for them. He held courts where his officer, the bailiff, punished those who broke the law. Most of the laws, it is true, were in favor of the lord, but even such laws were better than none at all.

The laws of feudal times were not so wise and just as the laws that had been developed under the highly civilized Roman Empire. Yet you must remember that there was no one to enforce the good Roman laws during the time of the barbarian invasions. Gradually these laws were forgotten. In the "lord's law" there was at least a small start toward a better kind of government, even though some of the laws were hard on the people.

The nobles and their business. The feudal system gave the people of the Middle Ages all the protection they had. It was a method of working out the problem of how to live safely. Each lord defended his vassals, and each vassal fought in his lord's army. The lords did not work on their farms or do any trading. They just lived on their estates, collected their rents, fought their enemies, went hunting, and played games.

The chief business of the lords was fighting. Each one of the greatest lords was a vassal of his king and supplied soldiers for the king's army when they were needed. Aside from that, however, the great lords did not pay much attention to the king. The king knew how powerful the great lords were; so he let them rule very much as they pleased.

The feudal domain and castle. In order to protect his vassals, the lord usually lived in the center of his land, which was called the domain. His home was a kind of fort which served as a place of defense. During the early part of the Middle Ages such a building was made of wood.

The lord's house was often built on a hill or high on a cliff beside a river. In time of war it was necessary that the people have a supply of water. As the workmen became more skilled, larger and stronger places were built. Finally the great lords began building enormous castles of stone with high walls and towers. Many of them are still standing.

Courtesy German Railroads Information Office

This German castle is on a rock high above the Rhine. The tower at the right is called a "keep." No moat was needed for this castle because the steep cliff was enough protection. People living on land along the river could flee to this castle for protection if enemies came. At such times they lived in the courtyard.

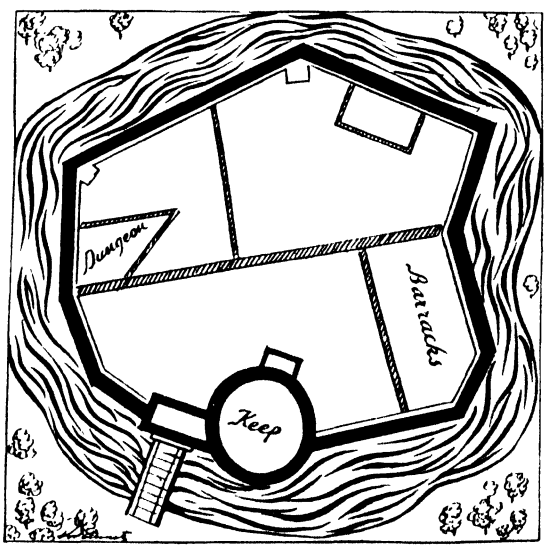
Some very beautiful castles can be seen along the Rhine in Germany and along the Loire River in France. The traveler can also see them in England, Sweden, and many other countries.

Sometimes the castles were built in the midst of wide stretches of country. They commanded a view of the country-side round about, so that an approaching enemy might be seen a long way off. In a flat country the castle was often built within the loop of a river or on an island or where two streams joined. In every case, the lord selected a place that could be defended easily.

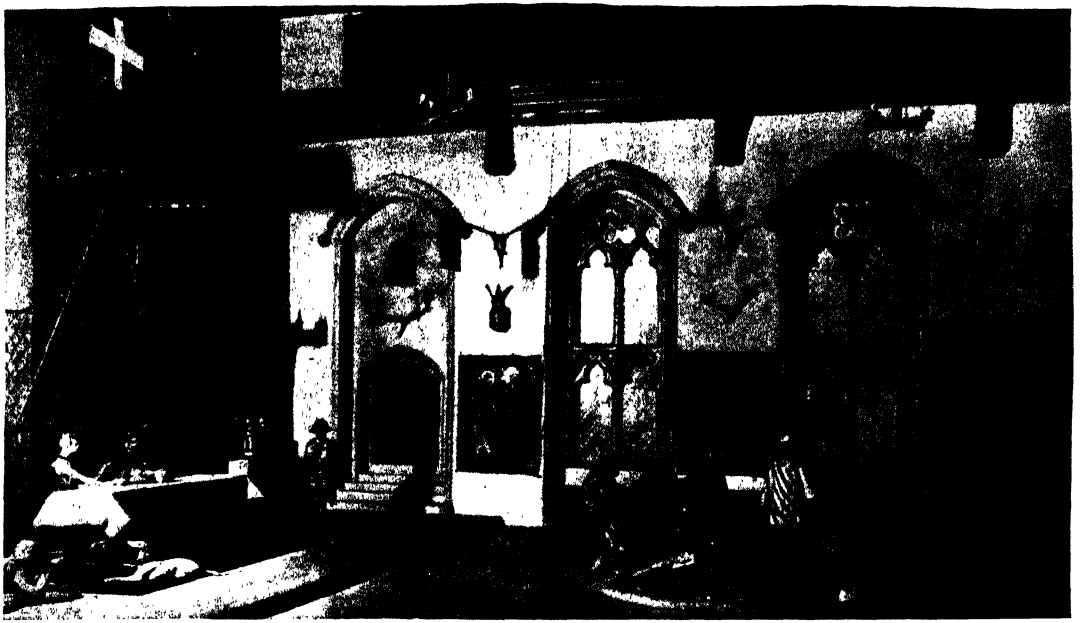
A complete stronghold. Inside the castle walls were several buildings. Besides the main castle, with its great halls and kitchens, there were also barns and storehouses. There were barracks for soldiers, too. The main part of the castle was a great tower called the keep. Generally the different buildings were connected by covered passageways. The whole group of buildings was surrounded by a stockade of thick walls. On top of the walls were stone battlements with regular open spaces. Men armed with bows could stand beside these openings and defend the castle against enemies. The top of the wall was wide enough so that men could go from one part of the battlement to another.

Outside the walls of the castle there was often a wide, deep ditch called a moat. This was filled with water, and it made the walls very hard for an enemy to approach. Over the moat there was usually only one bridge, called a drawbridge. It could be let down and pulled up by means of chains.

When the land of a feudal lord was attacked, the people fled into the courtyard of the castle for protection. If the enemy climbed over the walls or battered them down, the lord and his soldiers retreated to the keep. There they could fight stubbornly against many enemies. When you compare the first wooden homes of the lords with these



This is a simple plan of a castle. The heavy black lines show the outside walls, which were high and very strong. Around them is the moat filled with water. A drawbridge crosses the moat at one place. Part of the large courtyard is used for barracks where the noble's soldiers lived. There are other walls inside the outer walls to make it more difficult for an enemy to break in. In order to enter, enemies had to climb the walls or batter them down.



Courtesy Metropolitan Museum of Art

This model shows the great hall of a fine castle. The lord and his lady are at table, and a page is standing near them. In the center of the room is a hearth on which a log fire is burning. Many castles had no chimneys at first, and the smoke had to find its way out through holes under the eaves.

great stone castles, you can see that the people were making progress.

Life in a feudal castle. These castles look very large and strong, but we should think them uncomfortable places in which to live. The people of those days did not know about running water, furnace heat, electricity, or other conveniences that we have in our homes. The nobleman and his family used candles that flickered in the drafty hall, or huge pine torches that gave off sooty smoke. In winter the family shivered with the cold, huddled about the fireplace, or went to bed to get warm. Many of the great lords did not live in their castles but preferred to spend their time in smaller homes on their farms. The castle was looked on as a fort to be used in time of danger.

The women in the homes of the feudal nobles had plenty to do. They not only made clothes for the family, but embroidered robes for the clergy. There were servants to do most of the hard work, but managing a household took a great deal of time. The household of a great noble was usually large. There were not only guests to look after, but also the lord's officers.

The lords were especially fond of hunting and spent much time in the fields and forests. In fact, they looked on hunting as one of their particular rights. The common people were not permitted to kill any game, not even a small bird or a rabbit. All the nobles had very strict laws to punish people who took game belonging to the lord.

The tournament. The greatest sport of the times was a series of contests called a tournament. These contests were intended to test the skill of the nobles in fighting and riding. Knights from far and near came to take part, and large crowds gathered to see the tournaments. Dressed in armor and riding their best war-horses, knights fought each other with sword and lance. Many of them were killed. Those who proved their skill and courage became the heroes of the day.

Armor and weapons of the knights. In museums we can see armor and weapons used by knights of the Middle Ages. A favorite weapon was the lance. It was a long spear that required expert handling when the owner was on horseback. A knight also carried a heavy sword and a short dagger. A bowman, or archer, usually accompanied each knight.

In early times the knight's armor was only a shirt of mail that reached to his hips. Later this was lengthened so that it came to his knees. At first such armor provided enough protection for the knight in battle. But better weapons were being made all the time, and armor had to be improved. Whole suits of mail, made of iron plates, were invented. There were helmets to protect the face, and iron gauntlets for the hands.

The knights carried shields, generally oval or kite-shaped. Since a knight was covered by his armor, he usually had a design on his shield or on the crest of his helmet to let people know who he was.

Metropolitan Museum of Art

This helmet was worn by a German knight more than five hundred years ago. Notice how a cape of iron rings linked together protects the neck and shoulders. At first the knights wore small rings or plates of iron sewed to leather. But they learned from the Mohammedans how to link rings together and make garments called "chain mail" to protect the whole body.

Metropolitan Museum of Art

The part of the helmet which covered the face is called the "visor." This visor is made to look like a rooster's head. Notice how the crest, or top, is shaped to look like a rooster's comb. Do you see how the helmet is hinged so that it can be put on and taken off?

The horses had to be heavy and strong to carry armored knights. Many of the nobles brought steeds from Africa and Asia. Perhaps you have seen a breed of horse called Percheron. These horses are large and heavy, and are used for the hardest kind of work. Their name comes from the old French province of Perche, where they were raised for use in war. There was need of strong horses, because even horses carried armor as you can see by the picture on the next page.

As all nobles rode horses in battle, they were called *chevalerie*, from a French word that meant "horsemen." From this word we get our word chivalry. Do you understand what it means? To the young man of the Middle Ages it meant leading the life of a brave knight.

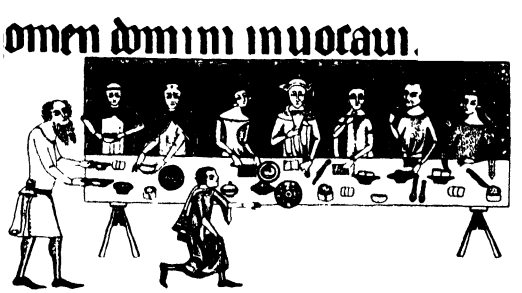
The training for knighthood. Of course, all the young boys of the noble families in that time wanted to become knights. As soon as one of these lads was seven years old, he was sent to serve as page in the house of some friendly lord. There he was taught to ride, to fence, and to handle a shield on horseback. He also learned how to sing, to play chess and other games, and sometimes how to read and write.

While the page was learning these things, he waited on the lords and ladies of the household. This training taught him how to act in the presence of nobles. When he became fourteen, he was made a squire. The squire took care of his lord's horse and aided his lord with his clothing and armor. Perhaps his most important duty was to help his lord mount his horse if he fell in a contest or a battle. A fully armored man could not mount a horse without help.

When the youth reached his twenty-first birthday, he might become a knight. This was a time of great feasting and merrymaking. But it was also a solemn time, for the young man had certain vows and promises to make. In preparation for the ceremony of being knighted, the young man prayed all night long in the church. The next morning he took an oath before his lord to be brave and good, to fight for the Christian religion, to protect the weak, to be humble, to honor women.

After that a leather belt was placed about his waist, and spurs were fastened to his boots. Last of all he knelt, and his lord struck him on the shoulder with a sword, saying, "I dub thee knight."

If you have read the stories of King Arthur and his Round Table, you will understand how solemn this ceremony was. By it the young man pledged himself to live his life in the way called chivalry.



Courtesy Book House for Children

This picture from an old book shows a page waiting on his master at the table. The cook at the left is bringing in the dishes, but the young page serves the family and their guests. Which two people at the table are clergy? This picture was drawn about the year 1340 A.D. Notice the people's clothing. Has every person at the table a knife, fork, and spoon?

Metropolitan Museum of Art

In later times knights wore armor made of plates of metal, like those in this picture. Even the horses wore armor to protect them.

The Age of Chivalry comes to an end. Through a large part of the Middle Ages these knights, sworn to a life of chivalry, were great soldiers and heroes. But changes in methods of fighting finally brought their kind of warfare to an end. The English common soldier began to use the "longbow," which could shoot an arrow through all but the very best armor. The Swiss foot-soldiers learned how to use a kind of spear called a pike. They could rest one end of it on the ground, and even armored horses could not pass such a fence of steel. Then the crossbow was invented. It shot a short iron arrow called a *quarrel*. It was a terrible weapon, particularly when men found out how to make the bow of steel. Finally, gunpowder was used to shoot metal bullets. After that, armor be-

came useless, and the knights lost their power, because in battles they were of no more use than common soldiers.

How feudalism helped the people. So far, it certainly seems as if the feudal system gave most of the good things of life to the nobles. That is true, but the common people did have some advantages. The feudal system helped them in many ways. The soldiers and castles of the lords protected the people against constant attacks. As the people had protection, they could produce more grain, more wool, more flax, more cattle, hogs, and horses.

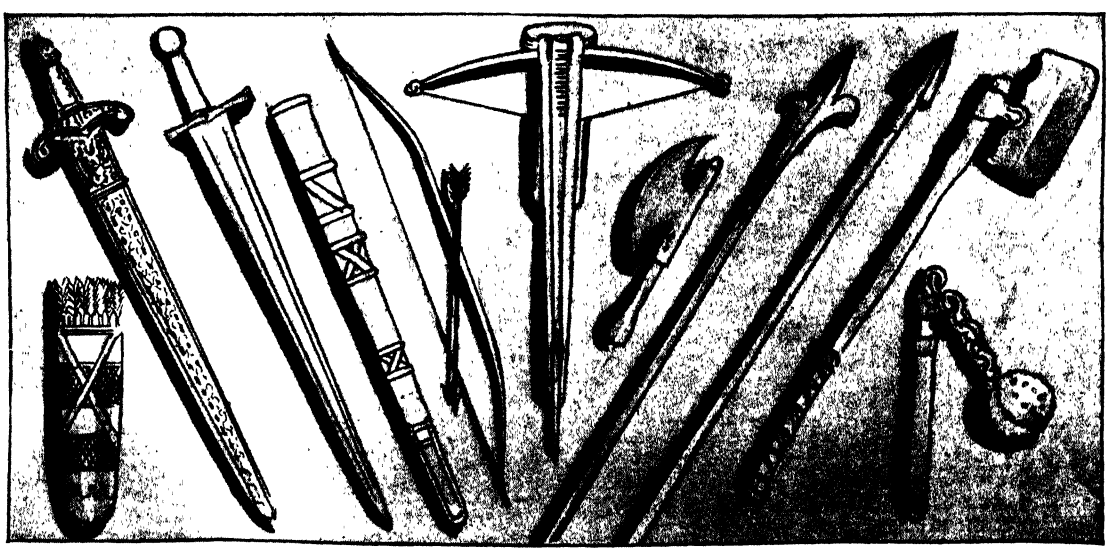
Then, too, there was some real justice in the government by the lords. No lord was allowed to collect more than his vassal had agreed to pay. In our country today we do not believe in being taxed without our consent. That is a feeling that has come down to us from the English of feudal times, when vassals refused to pay their lords more than they had agreed to pay.

In our country, people that are accused of crimes have a right to be tried by a jury. That is another principle of justice that has come down to us from feudal times. Men had the same right then to be tried by a jury of their equals.

Of course somebody had to do the work of the world while the lords were fighting, holding tournaments, or hunting. Someone had to work on the farms and provide food for everybody. There had to be men to raise wool and flax for the lords' clothes, to make weapons, mend the roads, and do other useful things.

Freemen and serfs. During the Middle Ages the common people did the work. There were many kinds of common people. Some were freemen; others were slaves. Then there were people who were not quite free and not quite like slaves. We call these people *serfs*. There were common people of these three kinds among the Romans, and also among the different Teutonic tribes.

Generally the freemen had some trade to follow. They were carpenters or blacksmiths or perhaps traders. Usually the slaves worked at household tasks. The serfs worked on the land. They belonged on the land just as if they were a part of it. A lord could not sell his serfs to another lord, as a Roman citizen



These are the weapons of the feudal period before gunpowder came into use. There were short and long axes and spears, clubs, which were called maces, swords of many kinds, and bows. The crossbow, in the center, had to be cocked by means of a crank. The arrow used in it was called a bolt or quarrel.

At some of the tournaments the knights used blunt lances and swords so that no one would be injured. But sometimes regular weapons were used, and men were severely injured and sometimes killed. People gathered to watch these tournaments just as we watch athletic contests and other games today.

could sell his slaves. But if the lord sold his land, or another lord took it, the serfs went with it to the new owner.

Each serf had a few acres of land which he farmed. This land did not belong to him, but to his lord. The serf had to pay rent for the land. As he never had any money, he paid his rent in two different ways. He paid in labor, and he paid a part of what the land produced.

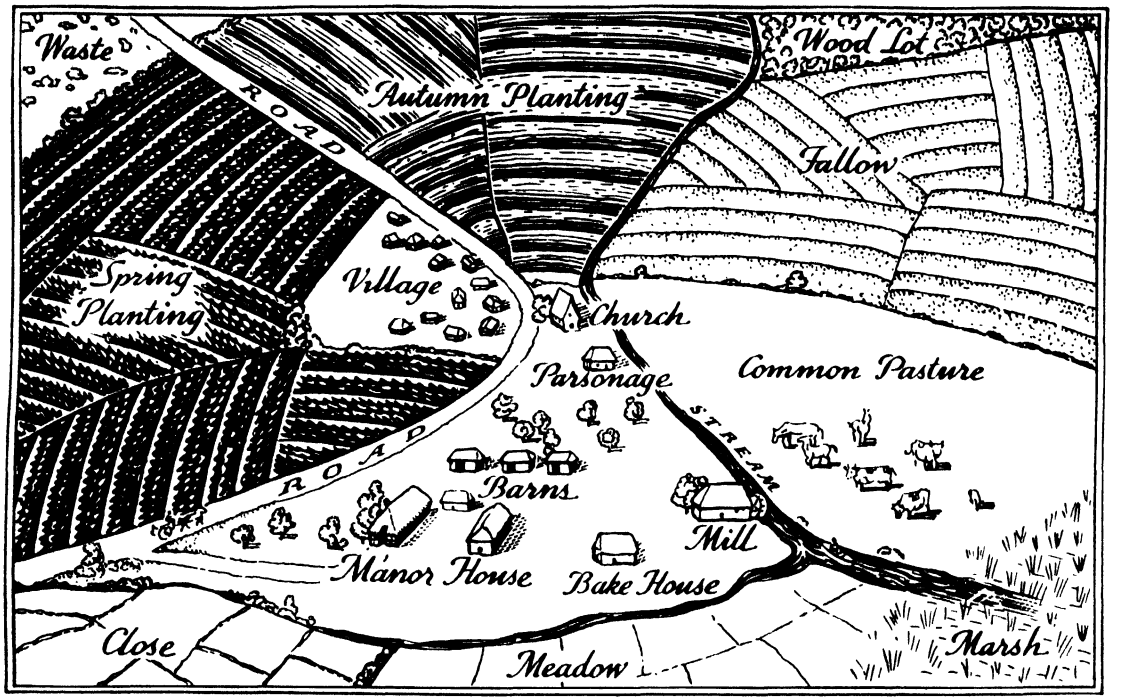
Perhaps you wonder why the serf stayed in one place, almost like a slave to the land. It was because he was better off there than anywhere else. He was sure at least of a place to sleep and enough to eat. He had the protection of his lord and master. If he ran away, he might be captured by robbers and sold as a slave. Then he would have a more miserable life in a mine or on a ship under some cruel taskmaster.

The manor, a center of production. There is a name for this way of managing the land. It is called the manorial system. The name comes from the word *manor*, which means "a place to live." As we read about the manor, we will see how the people in the Middle Ages solved another of their problems. The feudal system helped them protect their lives and property. But they also had another problem, just as important. They had to get enough of such things as food and clothing in order to live.

A large city in any part of the world has to depend on many different regions for its supplies of food and clothing. Go into a grocery store, a clothing store, and a hardware store, and ask where the things they sell were made. The answers will give you some idea of how dependent we are upon people in other places. If it were not for trade and commerce and transportation, we couldn't have these things in our stores.

But in the Middle Ages the commerce of Roman civilization had died away. How do you think the people of Europe managed to live when traders were afraid to go from place to place?

Getting enough of the different necessities of life was a big problem in those times. At first the families living on each estate had to produce everything needed. They had to raise their own meat, grain, and vegetables,



Each serf had land in the three parts of this manor. Land that was left fallow one year was planted in the spring of the next year. The year after that, it was used for crops planted in the fall. The following year it was allowed to lie fallow again. The fields in the "close" were for the use of the lord, but the serfs had to do the work. The meadow, the pasture, and the wood lot were for the use of all. Many years passed before the farmers learned how to drain marshes and make use of the waste land.

spin and weave their own flax and wool, make their own tools—in fact, do everything for themselves. The center of this busy life was the manor.

The manor was an estate belonging to some landowner. It might be a small estate or a large one. Some were large enough to support seventy or eighty families; others were only big enough for eight or ten families of serfs.

How the manor was divided. The manor was divided up into several kinds of land. First of all came the land on which the lord raised his crops. Then came the land on which the serfs raised their crops. There was also the land close to the lord's house. It was called the *close*. Last of all, there was land that was called common land. Let us see what use the lord and his serfs made of each kind of land.

The common land could be used by everybody. Generally there was a wood lot, where the serfs could pick up wood for fuel. Another one of these common sections was a pasture for the animals. It could be used by all the villagers. And there was a common meadow, where hay was grown to feed the animals during the winter. The peasants got together at certain times of the year to gather the hay and to cut wood. At these times everyone worked until the task was done.

Most important, of course, was the land where the crops were raised. Instead of being divided into square fields, this land was marked off into long, narrow strips. Generally these strips included about as much land as a man with a team of oxen could plow in one day. Later they came to be sixty-six feet wide and ten times as long. Such an area of land we call an acre. One reason for divid-

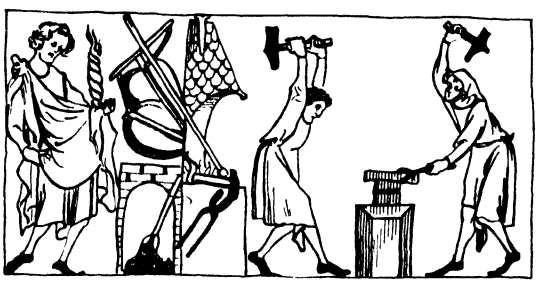
ing the good land into long, narrow strips was to prevent any one man from having the best fields. A long strip would be likely to contain all kinds of soil.

A large farm would have many of these strips of land. A serf and his family might have several strips to work. Other serfs had other strips. Some of the strips were kept by the lord for his own use. Perhaps the lord would set apart other strips and give the crops to the church or to a priest for his support.

Not all the strips of good land were farmed every year, for the landowners learned that certain crops wore out the ground if planted year after year. So, in order to let the soil rest once in a while, they divided all their land into three parts. One part was planted in the spring, one in the fall, and the third was allowed to rest, or to lie fallow. Every three years, then, each field had a rest.

Each serf usually had several of these long, narrow strips, and they were scattered about on different parts of his lord's estate. For this reason he could not live right on the ground he farmed. Instead the serfs lived in small villages, usually located on a stream or by a well near the center of the estate. From these villages they went out every morning to till the soil, like the Mediterranean farmers.

There were thousands and thousands of these little farming villages scattered here and there in Europe during this period. Sometimes there were several on one lord's estate; sometimes only one. Since the villages were fairly near the lord's home, the serfs could hurry to the manor-house when enemies came.



These serfs are not farmers but have learned the trade of blacksmithing. Other serfs learned to be wagon-makers, carpenters, masons, or workers in some other useful trade about the manor and its land.

Bettmann Collection

The serfs had to help each other with the plowing, too, as this old engraving shows. Men teamed their oxen together to make the work lighter. They worked together at harvest time also. All the men, women, and children turned out to help with the work in the fields. The work on the lord's fields had to be done first.

The work of the serfs. In return for the use of the land, the serf paid the lord part of his crops. He also had to work a part of his time on the lord's strips of land. Usually the serfs had to work on the lord's land three days every week. At harvest time some lords made their serfs work for them five days of the week. Other lords were not so hard on their serfs.

The serfs also had to work on the roads that led to the manor-house. They had to bake their bread in the village oven, make their beer in the village brewery, and grind their grain at the village mill. For the use of these things, which belonged to the lord,

the serfs gave a part of their bread, beer, and grain in payment.

How the serfs lived. The homes of the serfs were merely one-room huts with thatched roofs and no windows. The floor was bare ground, on which were heaps of straw. On the ground was built the fire that was used for the family cooking. There was no chimney. A hole in the roof let out the smoke, but also let in the rain. Sometimes the floors would become very muddy. You can imagine what the air was like in these windowless, smoke-filled huts.

For beds the serfs had boxes filled with straw or leaves. A plank was used as a table, and rough stools served as chairs. The family went to bed when it was dark, for the serfs had no candles. They had nothing to do at night, anyway, for none of them could read; and they were so tired that they were glad to go to bed at sundown.

These poor huts that made up the village of that time were grouped together near the manor. Sometimes they were built around a square of ground that later came to be called the village green. Here the serfs once in a while had a chance to play and to dance. Sometimes, too, they were permitted to watch the nobles at their games or to help in the hunting. Occasionally an entertainment for the people was given at the manor-house or at the church.

The serfs were not very skilful farmers. Their tools were poor, and they did not know the best ways to farm. Their crops were small and poor in quality. Even the farm animals were lean and scrawny. It was many centuries before these farmers learned how to breed strong oxen, good cows, fat hogs, and fine sheep.

Day after day, from dawn to dark, the serfs worked and served their lord. They led wretched lives, but at least they had food, shelter, and safety. Very few serfs rebelled against their masters. If a serf refused to work or to pay the taxes to his lord, he was put off the land by the lord's bailiff. Most serfs were afraid of losing their right to farm the lord's land. When that happened, the serf had to wander about until he could find another lord who would let him have the land of some dead serf.

Chicago Aerial Survey

This old castle and village in Hungary show very well what the little village of the Middle Ages was like. The noble's castle is on a well-protected hill. Along the road leading to it is the village. Surrounding the village and the castle are the woodlands, pastures, and fields. Of course, serfs did not have houses such as you can see in this village, and not all the nobles or landowners had fine castles such as this. Can you give a good reason why fields today are much larger than in the days of the manor?

The serfs not only had to give the lord a part of the crops, but the lord's men came regularly to take his share of the farm animals, such as chickens, cows, and pigs. When a serf died, the lord would always collect a tax, often the best animal and sometimes all of them, before he would allow the serf's son to farm the same fields. The artist has shown such a scene. The serf's best cow is being taken. This custom has grown into a law. Today we have a kind of tax called an inheritance tax which must be paid to the government.

It was not safe to wander about the country in the Middle Ages. Bands of slave-traders were constantly on the lookout for defenseless people whom they could capture and sell. And so a wandering serf always tried to find another lord from whom he could get some land.

Sometimes a wandering serf would find a manor where the lord would let him work on some of the waste land. If the serf cleared the trees and stones from this waste land, he paid smaller taxes than the serfs who had good farm land.

Trades at which the serfs worked. There were other kinds of serfs who did not work on the land. As each manor had to raise or make everything it needed, there had to be men to do all kinds of work. Perhaps one serf would learn how to be a carpenter; another would become expert at thatching roofs. Others might learn the trade of blacksmith, and still others learn how to grind grain, tan leather, make ropes, and mend wagons. Often these serfs became so skilful at these trades that their lord would lend them to other lords. Sometimes he even let them go to some near-by city to work. Even then, though, the serf had to pay his lord certain taxes.

Freemen and their occupations. Not all the common people were serfs. There were freemen, also. Some of the freemen might once have been serfs whose masters had freed them. Many of the freemen worked at different trades. Some of them were farmers. The free farmers often rented land from the lord of the manor. Generally the lord rented land near the manor-house to the freemen. Or the freeman might rent some of the waste land and improve it. Can you see now how a strong and ambitious man might come to be a free and independent farmer?

It took centuries for conditions to change for the better. But by the end of the Middle Ages the lords had discovered that freemen worked harder and produced more than serfs. Many serfs had run away to join armies or had gone to some other lord's domain where they could have an easier life. Men found out how to drain swamp lands and make fer-

Courtesy German Railroads Information Office

Notice how the buildings in this old town were built so that their walls formed a wall around the town. In the center of this town is a high rock on which there was once a castle. In the Middle Ages people felt safe in such a town. Even if an enemy came, they could always retreat to the castle and be protected within its walls by the lord's soldiers.

tile farms of them. Thousands of serfs made good bargains with landowners for that kind of work. In this way, you see, conditions slowly improved, and Europe became more civilized.

Life in the old cities. You may be wondering what had happened to the cities of the Romans during this time. In the days of the Roman Empire there had been many large and thriving cities in Italy, France, and Spain, as well as in the lands to the east. To these cities traders had brought food from distant farms, just as merchants bring food to the town where you live. From the cities traders had taken articles made there and had sold them in other parts of the country. You know, by this time, that cities must have trade in order to exist.

But in the early part of the Middle Ages, when there was no one to enforce the good Roman laws, to repair the roads, and to keep down bands of robbers, trade almost stopped. Because it was so hard to make a living in the cities, people began to leave them. Houses and buildings fell down, and no one rebuilt them. Some of the cities disappeared; others grew smaller and smaller as people moved to the country.

During the first part of the Middle Ages most of the cities were what you might call church cities. There would be a great church or monastery in the city, and around it were built the homes of people who could find work there. There would be wood-carvers, stonemasons, carpenters, blacksmiths, and other workers who were needed for the long, long task of building the church and keeping it in repair. Of course storekeepers were needed to keep these people supplied with food and clothing. There was also a little trade with people in the surrounding country.

The craftsman and trader. Everything was made by hand. At first most of the workers sold their own goods. A workman spent the winter making his goods—toys or knives, pots and pans, or shoes. In the cities the workman, or craftsman as he was called, worked in his home. He would use one of the rooms for a store.

In the summer the workman became a peddler and went about the country, stopping at every little village and manor to sell as much as he could. As travel became safer, more

Courtesy German Railroads Information Office

Streets in the towns of the Middle Ages were usually very narrow and crooked. The houses were close together and built every which way, as you see. There was usually a castle near by to protect the people.

Courtesy German Railroads Information Office

Cities in the Middle Ages became crowded with tall buildings, five, six, and seven stories high, like those you see in this picture of Nürnberg. Boats came up the rivers loaded with goods for merchants to sell.

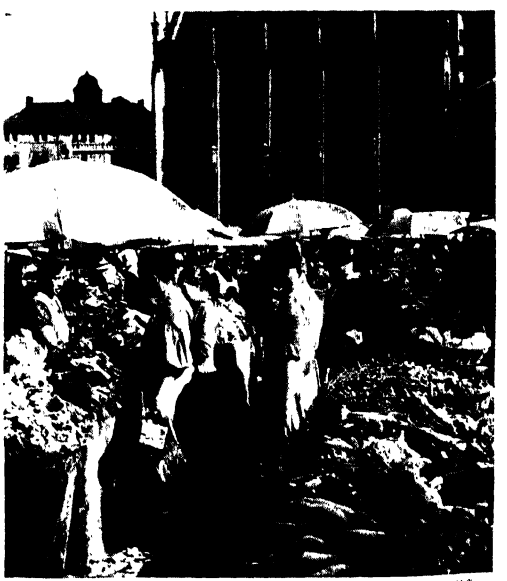
traders appeared. These traders liked to settle in the cities and villages because more people lived there. It was easier to have customers come to a store than to hunt up the customers.

Markets and market days. All through Europe farmers had regular times for meeting together and exchanging their produce. One farmer might have more onions than he needed; while another might have extra chickens or cheese. The farmers would meet in the village square on certain days and trade these things. This trade was done by barter, because in the early part of the Middle Ages the people in northwestern Europe had very little coined money. The convenient money system of the Romans had disappeared, you see, along with many other good features of Roman civilization. Not until about 1200 did these people begin to use coined money again. After that the old habit of barter gradually disappeared.

Peddlers and traders liked to gather in villages on market days. We can tell what such market days were like, because many towns in Europe still have regular market days. A very interesting one is held at Merano in the Austrian Tirol, now belonging to Italy. There you may see row after row of booths with narrow spaces between, like little streets. The booths are filled with many kinds of articles for sale, from exquisite cameos and other jewelry to cabbages, eggs, live ducks, pigs, and hay.

Market days during the Middle Ages were great days for everybody. You see, there were few places where people could gather to exchange news and discuss crops or to buy things they could not make themselves. Everyone was eager to go.

How new towns and cities grew. The villages in the manors did not always remain tiny hamlets. Peddlers and traders stopped to sell their wares and wanted to settle down wherever the people were raising good crops. As the land belonged to the lord of the manor, a trader would have to get the lord's permission to settle there. Usually the lord was perfectly willing because he could collect a tax from the trader. The lord knew that other traders would come. Then people



Courtesy German Railroads Information Office

Market days are still held in the squares of European cities and towns, just as they were in the Middle Ages. This market in a German city shows you what such places are like when farmers bring in their produce to sell to the townspeople who do not raise food.

would come to buy things, and his land would become more valuable.

In time some of the little manor villages grew larger. Often the traders did not wish to live in the village with the serfs. They received permission from the lord to build a walled enclosure near the manor-house or castle. Inside these walls they could keep their goods safe from robbers.

This walled enclosure of the traders was called the *burg*, or *borough*. The traders who lived inside were called *burghers*. Many of the great cities of Europe were once tiny burgs.

There was still another kind of place which attracted people. Here and there stood an old fort that had been built as a protection against the invasion of barbarians. People gathered there for safety. It became a center of trade and so, gradually, grew in population. Leicester, in England, was such a place. It grew up around the old fort that was built when the Angles and Saxons were fighting the Danes.

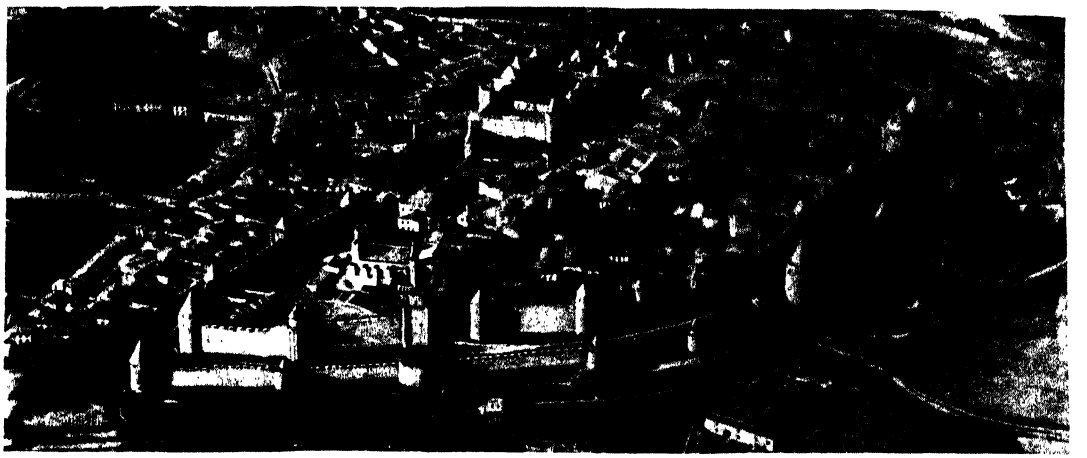
What a medieval town was like. You would have thought a medieval town a poor place in which to live. The streets were so narrow that many of them were like alleys. The houses were huddled close together because land inside the town walls was valuable. Many people were crowded inside the walls that shut in the town. For this reason houses were built five and six stories high. The burghers would have built them even higher if there had not been laws to prevent it. The lords did not want any buildings higher than the castle. In church towns the burghers could not build anything higher than the church. In Reims one of the church officials had to climb up to the eaves of the cathedral every day and look over the town to make sure no building was being raised too high.

The streets of these old towns were not only narrow but dark. To get more room, each story of a house jutted out over the story below. Sometimes the upper stories of houses on opposite sides of the street almost met. This not only made the lower floors very dark, but kept the streets muddy, for they got almost no sunlight. It was not until the end of the Middle Ages that the people paved the market square and some of the much-traveled streets. Instead of the smooth concrete or asphalt that we have today, they used cobblestones.

There were no sidewalks along the narrow streets. A gutter that ran along the side of the street was often the only sewer. People dumped their garbage into the streets, and

Bettmann Collection

More than four hundred years ago an artist made this picture of farmers bringing their produce to the city on market day. This scene shows buildings and costumes of the later part of the Middle Ages.



Metropolitan Museum of Art

You saw a picture showing part of the walls of this city on page 233. Here you can see how double walls protected the inhabitants of Carcassonne from attack. Find the church and the castle. Visigoths built a walled city here almost a thousand years ago. For a part of their wall they used the ruins of walls which the Romans had built. The Franks added to the walls and buildings.

pigs and dogs wandered about, eating what they could find.

At first most of the buildings were made of wood. As the towns became crowded, fires caused so much destruction that the better buildings were made of brick. Although the people did not have many conveniences, they had one device that may surprise you. Some of the brick buildings had revolving doors. We think that these doors in our great office buildings and stores are very modern; but you see how old the idea really is.

The only heat in buildings came from fireplaces. For a long time there were no stoves, and all cooking was done in the fireplace, too. Gradually, though, stoves were used, and people began to burn coal. A few people had long known about "the black stones that would burn." Towns near beds of coal or peat burned these fuels. But there were no railroads to carry coal and peat to other places. Almost everyone used wood for building and for fuel. So many trees were cut down to supply these needs that the forests gradually disappeared.

How the towns grew. Many of the towns grew very fast. If people could not find room inside the walls of the burg, they settled outside. After a time the old walls were torn down, and streets were laid out in their place. For this reason you will often find, in European cities, a street that makes a ring around the central part of the town. Vienna has such a street, called Ring Street.

There were many reasons why the towns grew. The burghers were glad to have new inhabitants settle in the town or outside the walls. More people brought more business. Runaway serfs were welcomed, particularly if they knew some trade. The burghers could hire them at low wages. In some countries if a serf could remain away from his lord for a year and a day, he was considered free. No wonder many serfs escaped to the towns, where it was easy to hide.

What it meant to be a burgher. The burghers were not so anxious, though, to let new people become real citizens of their towns. The burghers had to pay taxes to the lord for the use of his land and for his protection. They did not want any new citizens who would not be able to pay their share. An outsider had to prove to the burghers that he would be a good citizen. The burghers might

Bettmann Collection

This old picture shows a peasant bringing his taxes to the lord's house. He is not paying in money, as you see, but in produce. As long as the peasant paid his taxes to the lord, and the lord protected him, the peasant could keep the land and farm it. Besides such taxes, the peasant also had to work for the lord and to pay for using the village oven, mill, wine-press, and brewery. All these were owned by the lord who took part of the peasant's bread or grain as payment.

insist that he buy some property, and prove that he had money and was willing to obey the laws of the city. You see, the cities had to have their laws, too, just as the manors had laws for the villagers.

A citizen of a burg had several duties. He had to be willing to help defend the city when it was attacked. He had to agree to serve on a jury or as a policeman whenever that was necessary. But he also had many privileges. He could use the town pasture and the town water supply. He could always buy food and clothing at fair prices. If he was accused of breaking some law, he could have a just trial in the town court before his fellow-citizens. Best of all, he did not have to do any work for the lord of the manor. Instead, he paid his share of the tax in money.

How the people gained more independence. When the people began to pay taxes in money, they took an important step forward. The old way of paying the lord for his protection and for the use of his land by work and by shares of the crop slowly died out. Everyone liked the new way better. The lord always thought that he did not receive a good day's work when the serfs and peasants worked on his land. The peasants never liked the plan, either. The hard-working man who raised ten bushels of grain on his acre of land had to pay the lord twice as much in grain as some lazy farmer who raised only five bushels on his acre.

As the use of money increased, more and more of these taxes and rents were paid in money. Peasants and workers who could save money were able to buy their freedom or their land and so become independent. Then they could work all the time for themselves.

The merchants coöperate. As the towns grew larger, the merchants found it necessary to coöperate. At first they banded together in order to deal with the lords. If the lord tried to increase the rent or taxes, he found that he had to deal with all the burghers, instead of with only one or two. The merchants could get better treatment that way.

Then the merchants began to make rules about trade that was carried on inside their own towns. They often decided what the correct weights and measures should be. Sometimes they decided what the quality of certain kinds of goods should be. Today our city and state governments do that for us.

If the merchants decided that only five dealers in cloth goods could make a comfortable living in the town, they did not permit more than five cloth merchants to live in the city. These associations of merchants were called *guilds*, from a word that meant "payment." A guild made its members pay a fee for belonging to it.

At first these guilds were for merchants only. They were associations of traders and storekeepers. The merchant guild of one city might meet with the merchant guild of an-

Before a man could be a master workman in one of the many guilds of craftsmen, he had to satisfy expert members of the guild that he could do fine work. A weaver, for example, had to make a piece of cloth without a flaw in it and show it to the master workmen. If they decided that it was a "masterpiece," he was allowed to call himself a master workman.

other city to settle some dispute. In time these guilds came to be very important.

Guilds for craftsmen. It was not long before the workers imitated the merchants and formed their own associations. Many different guilds sprang up. There were guilds for each kind of workers: weavers, dyers, carpenters, potters, blacksmiths, goldsmiths, silversmiths, coppersmiths, tailors, butchers, bakers, candle-makers, locksmiths, harness-makers, druggists, stone-masons, oil dealers, and many others.

Each guild had very strict rules. There were three kinds of members. The young man who wanted to learn a craft and join a guild had to go through a long period of training. First he paid a fee in order to belong to the guild. He then went to work for an expert craftsman called a master. The young man was called an apprentice while he was learning the trade. The apprentice lived in the house of the master until he became skilled in the craft. The master supplied the apprentice with food, clothes, and lodging, but did not pay any wages. In some guilds the young man had to spend two years as an apprentice before he could earn wages. In other guilds he might have to spend seven years just learning the trade.

After the time of apprenticeship was over, the worker was called a journeyman. He could work for wages, then, and was supposed to journey about from city to city in order to learn more about his craft. When he became really expert and could prove his skill to the guild, he was called a master. Then, if he had saved enough money, he could start in business for himself.

The craft guilds became very important. They were able to decide what wages should be paid and what prices should be charged for their work. Guild members liked to live near each other, because it was easier to get work. After a time one town would become important for cloth-making, another for glass, another for jewelry, and so on. These towns traded with each other.

How commerce developed. As it became easier to earn a living, people began to want more things. There had to be some commerce

In this picture you can find some of the reasons why trade was slow in developing during the Middle Ages. They are poor roads and slow transportation, lack of protection against theft, too many ways of measuring and weighing things, and lack of money which people were willing to take. Can you explain what each of these things has to do with trade? Two of these problems have been solved and do not trouble people very much today. But there are still many different weights, measures, and kinds of money.

to supply them with articles that could not be found in their home markets. Ghent, Antwerp, and other towns in what is now Belgium were famous for their fine woolen goods. Venice and other Italian cities were known for their silk goods, glass, and metal wares. Besides her own manufactured articles, Venice carried fine goods from the East to trade with the northern towns.

A noted trade route. The road between Venice and the north was long and hard to travel. The way was too narrow and rough for carts or wagons, and so most of the traders loaded their goods into packs. Small traders carried their own packs; wealthier ones used packhorses or mules. Suppose we follow one of these traders and trace his journey by the map on page 255. This trader drove his packhorses from Venice up the Po Valley to Verona. There he sold some of his goods and bought supplies for the hard climb over the Alps through the Brenner Pass. He came down the northern slope of the mountains into Innsbruck, a city in the foothills. There he sold some more articles, as well as one of his horses. But most of his stock he carried over narrow, winding roads into the central highlands of Europe.

This was a dangerous part of his trip. To be safe, he stopped at night in monasteries, for he knew the monks were honest while many of the innkeepers were not. At the city of Augsburg he stayed for several days, while he traded. The trip to the near-by city of Nürnberg was a safe one, because merchants of the two cities had paid the nobles who owned land along the road to keep robbers away.

At Nürnberg our trader met many other merchants, for this city, as well as Augsburg, was a very important town of central Europe. These towns were midway between the north and the south, and the east and the west, as you can see by the map. Many important trade routes met in them. On the map follow the trails that led into them.

Why travel was expensive. Now our trader waited for several merchants to join

him. The road to the next town was through dangerous country. In addition to ordinary robbers, there was a lord who charged a toll just for the privilege of passing his land. Often he collected this toll by taking as much as he pleased of a trader's goods. Sometimes he took everything the trader had.

When a dozen traders had gathered, they hired a few armed men to go with them. Then they armed themselves and set out for the next city. Every time they crossed a bridge, the soldiers of some lord were waiting to collect toll from them. Whenever they passed through a town, the burghers were waiting to tax them. Sometimes they had to pay toll just to use a road through some great lord's estate. But there were a good many men in the group of traders, and they were not attacked by robbers.

At the end of the hilly country our trader came to Cologne, a large and important trading town of Germany. By this time he had sold more than half his wares. But he had also bought other goods which he hoped to sell on the final stage of his journey. He left the Rhine Valley and set out across the great plain of northern Europe. When he reached Ghent, he exchanged the last of his Venetian goods for woolen cloth made by the weavers there.

This map shows the principal trading cities of the Middle Ages and the routes which connected them. You can locate the cities by means of this list: 1, Venice; 2, Verona; 3, Rome; 4, Genoa; 5, Milan; 6, Marseilles; 7, Barcelona; 8, Toledo; 9, Cadiz; 10, Bordeaux; 11, Lyon; 12, Basel; 13, Augsburg; 14, Vienna; 15, Beograd; 16, Salonika (Thessalonike); 17, Constantinople; 18, Kiev; 19, Novgorod; 20, Riga; 21, Stockholm; 22, Danzig; 23, Lübeck; 24, Hamburg; 25, Magdeburg; 26, Leipzig; 27, Nürnberg; 28, Cologne; 29, Ghent; 30, London; 31, Paris; 32, Kairwan; 33, Innsbruck; 34, Florence; 35, Kraków.

How many kinds of country has our trader of the Middle Ages passed through on his way from Venice to Ghent? Look at the maps and pictures on pages 255, 300, 405, 417, and describe some of the country he would have seen.

Other important trade routes by land and sea. This route over the Brenner Pass from Venice to the cities of the north became a much-traveled road. Traders carrying goods from all parts of the world used it. Other routes led across the Alps, too. Trace the route from Milan, Italy, in the Po Valley, over the Mt. Cenis Pass to Lyon, France, in the Rhone Valley. From Lyon trace it north to Paris.

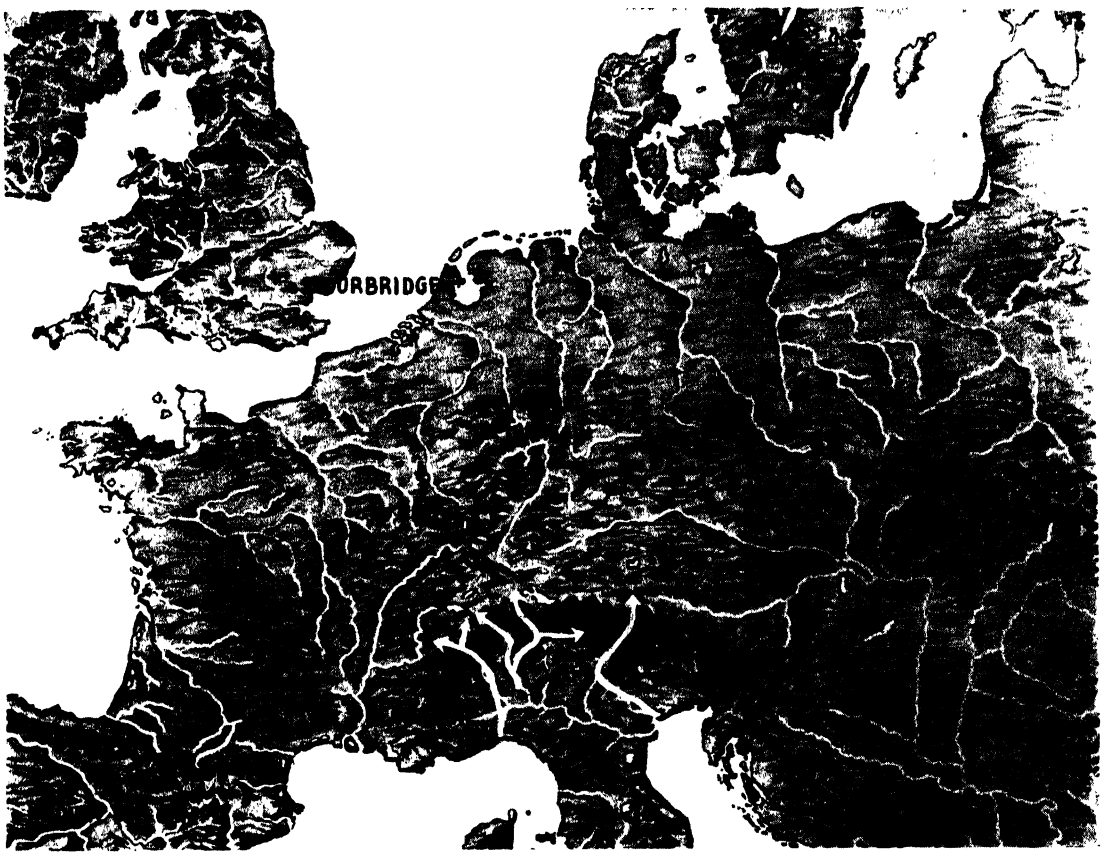
Another important route from Venice led into Austria, around the eastern end of the Alps. From Vienna, routes went to northern cities in three directions—by way of Nürnberg, Leipzig, or Kraków. Trace them on the map.

If you were a peddler going from Bordeaux in France to Hamburg in Germany, through what kinds of country would you pass? If you were going from Lyon in France to Vienna in Austria, through what sort of country would you travel? Describe the kind of country on the route from Vienna to Constantinople, now called Istanbul. You see, traders in the Middle Ages had a chance to learn a great deal about geography.

Of course, there was trade by sea, too. Venice and Genoa, the two chief ports on the Mediterranean, sent their ships to many distant harbors. Ghent, in the north, sent its woolens by sea as well as by land. So did Hamburg and Lübeck in Germany, and Danzig on the Baltic Sea, at the mouth of the Vistula River.

Trade and the growth of towns. Much of the trade was carried on between towns. The merchants of one town would make an agreement with the merchants of another town about the kind of goods to be traded. Today matters of this kind are settled among nations by treaties. But in early feudal times there were no real nations to make commercial treaties. A man was thought to be a foreigner by everyone outside his own town. A

Traders had to band together in order to pass safely through some regions. Even then, they were likely to be attacked by the soldiers of a robber baron. If the traders' guards were defeated, the baron simply stole the merchandise. Complaining was of little use, as there was no government to keep order. Each baron was master on his own land and made his own laws.



The locations of only six of the great fairs are shown on this map. Find the white arrows in the Alps. They show where the passes are. Do you see how traders could follow the river valleys?

merchant of Paris, for instance, was considered just as much a foreigner in the French town of Lyon as if he had come from London or from Hamburg.

Many towns grew up along rivers. Some were at the point where the tide brought sea-going vessels. Here traders gathered to get the ships' cargoes. Little by little, settlements at these river ports grew into towns and cities. Chester and Stirling in Britain developed in this way.

On the map on page 255 you will see the more important towns of Europe and England at this time. In Italy the leading towns were Venice, Genoa, Pisa, Florence, and Milan. On European rivers that led to the North Sea and the Baltic Sea were Hamburg, Bremen, Lübeck, Cologne, Danzig, Antwerp, Augsburg, Nürnberg, Bruges, Ghent, and others. In England the leading towns were London, York, Lincoln, Winchester, and Bristol. Everywhere it was chiefly the chances for trade that led to the growth of towns. People settled where business was good.

Wherever trade routes crossed, a large town grew up. Leipzig, in the midst of a plain that was crossed by many routes, became a famous market town. Vienna, on the Danube River, and Constantinople were the cross-roads of routes to the East. Lyon grew up at the meeting place of two rivers. Cologne developed at a place where the Rhine became so shallow that even small ocean-going vessels had to stop and unload.

German Railroads Information Office

This row of houses was built in a German city in the days of the guilds. On the ground floor were shops where the men worked and where customers came to buy goods. The families lived upstairs.

Cities grew fast at the deep, wide river mouths called *estuaries*. Large ocean vessels used such places as ports. Locate Hamburg on the Elbe, Rotterdam on the Rhine, London on the Thames, Cadiz by the mouth of the Guadalquiver, Marseilles by the Rhone.

River shipping. Travel up the rivers in boats was often much easier than by a train of pack-animals on land. A single good-sized boat could carry as much as three or four hundred pack-animals. Merchants shipped many of their wares by boat. But they also had to pay tolls on the rivers. Nobles collected money or goods from them for the privilege of passing. Some of the merchant guilds raised money to pay the lords not to collect this toll. Then the guild charged a toll and used the money to keep the river open and to build harbors and docks.

How commerce helped to spread civilization. Do you see what was happening all over northwestern Europe? Cities were growing up, and trade was becoming very active. You might say that cities died out at the end of Roman times, and then new cities came to life toward the end of the Middle Ages. The people of one land were becoming acquainted with the people and products of other lands. Weavers in Ghent made cloth out of wool from England and sold the cloth to merchants in Venice. Silk from Venice was sold in London. Furs from Russia found their way to Paris.

The fairs. One of the reasons for the spread of goods from one part of the continent to another was the fairs. These fairs were simply large markets, generally in towns where trade routes crossed. The fairs were held for several weeks in the spring and fall of each year. People came from long distances to attend them.

Traders came to the fairs with spices from the far-away Spice Islands of the Orient, or with bits of carved coral or silks from Mediterranean towns. From the Spanish Peninsula came merchants with swords and wines. From villages in France came laces and silks. Pitch and tar were brought from settlements in the great peninsula to the north now called Scandinavia. Amber and furs came from other lands along the Baltic.

If you will look at the map on page 257, you will see where the most famous fairs were held: at Troves and Beaucaire in

Paul's Photos

The old buildings along one side of the Great Square in Brussels, Belgium, are guild houses. They were built at the time when the guilds were very powerful. The guilds of the merchants were rich and fixed the prices at which goods were sold. Workmen belonged to the craft guilds, which were rich, too, and set the wages of the workers who were members.

France; at Frankfort-on-the-Main and Leipzig in Germany; at Stourbridge in England; and at Medina-del-Campo in Spain. Some of these great fairs are still held. One of the most famous was at Nizhni Novgorod, now called Gorki, in Russia.

What a fair was like. Suppose we see what one of these fairs was like. We will select a fair held in Troyes, France. For many days before the fair was to open, merchants arrived in the town with their goods. They needed time to arrange their wares in booths and to get permission from the Count of Champagne to do business.

A bell was rung to open the fair, and every day when the evening bell rang, all business had to stop. For the first ten days, only woolen goods were sold. The next ten days were given to the buying and selling of furs, hides, and leather goods. Then came days for buying and selling things that were weighed and measured. After the fair closed, the merchants were given five days to settle up with each other and to pay the Count of Champagne his taxes. By this time another fair in some near-by town was ready to open, and the merchants would journey there.

The beginnings of commercial law. There were often disputes at these fairs. A merchant from Italy might think that the French measure for cloth was wrong. A German merchant might complain that he did not understand how heavy a certain weight was supposed to be. Other disputes might be about what the money from far-off places was really worth. Merchants who did not fully understand each other's language might get into an argument. Many of the fairs had courts to decide just such disputes. That was the beginning of what we now call commercial law —the law that controls the buying and selling of things.

Courtesy Book House for Children

A medieval artist drew this picture of a merchant's booth at one of the great fairs. He made the people in front of the booth small so as to show what the merchant had for sale. At the back of the booth you can see armor and a chain-mail shirt.

The Bettmann Collection

At the left of this old market scene is a spectacles merchant. His customer is trying on different pairs and is hoping to find one that will help his eyesight. Spectacles were invented about the last of the fourteenth century, but many years passed before they were improved much. At the right of the picture you see a public scribe ready to write letters for anyone who is able to pay him a fee.

How trade helped people to progress. Let us look back for a moment over the things that have been happening since we began this story about the little villages of the lord's manor. At first, we know, families had to make and raise everything for themselves. Then traders came and settled down, and the village became a small town. The town grew up, if it was located on a good trade route, and became a city. The traders became wealthy and important men, and business became better and better. People began to work at one kind of work, instead of doing everything for themselves. Many men remained

Milo Winter

In medieval times there were no theaters in England. But during the Corpus Christi Festivals, which were usually in June, some of the working people acted in religious plays. The best players sometimes traveled to different towns to give these plays. The plays were acted on a stage built on a large wagon so that it could be hauled to different parts of the town and the plays repeated to other audiences. From such plays and pageants the theater slowly developed.

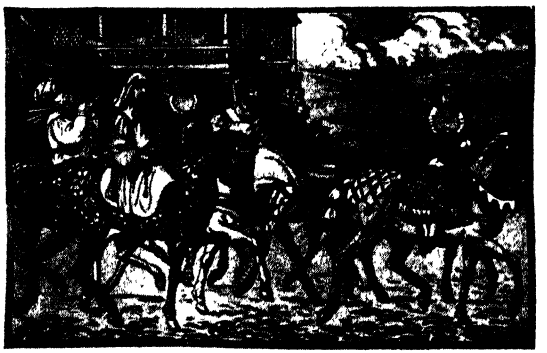
farmers, but others learned trades like those of weaving, building, or metal-working.

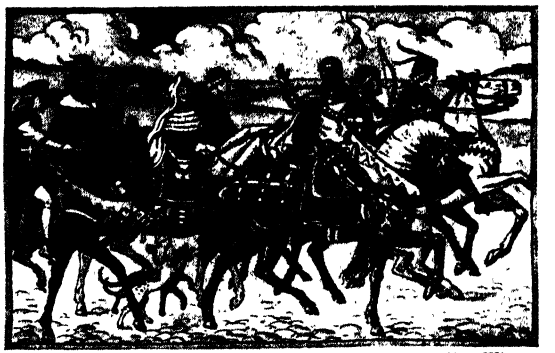
This is what we call progress. But it did not happen all at once. It took many centuries for things to work out in this way. This is only a part of the story of the Middle Ages. Other things that helped civilization along were happening at the same time.

This story of how the towns grew up and how trade grew better is important for several reasons. One reason is that people were getting wealthy. We remember that in Egypt, in Greece, and in Rome, when people became wealthy, they had leisure to do more than just get enough to eat and to wear. They had time to think about such things as art and education.

Why trade needed strong governments. There is another reason why the story of the cities and their busy trade is important. The cities helped to bring the people together into strong nations. They did this by overcoming the power of the great feudal lords. It is easy to see why. You have read about the tolls and taxes which the lords collected from the city merchants. These men began to feel that they would be better off if one strong lord were made chief over all the others. For if there were one very strong lord, instead of many weaker ones, there would be fewer tolls and taxes to pay.

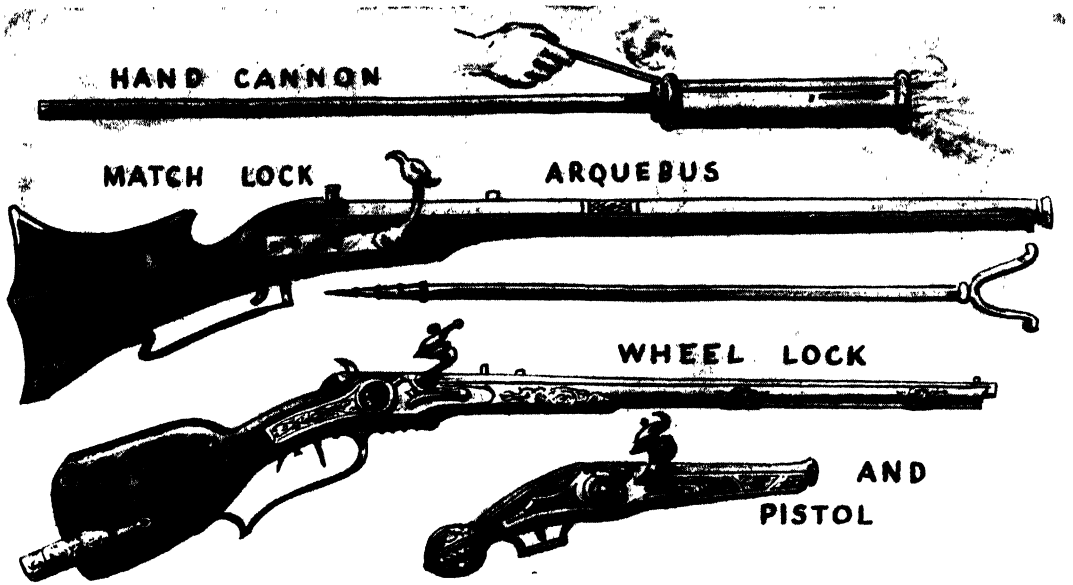
The merchants knew that a strong government would bring them many other things to help trade. Good roads are necessary to good government. Darius in ancient Persia knew that. The Romans knew it, too. Good roads would help the trade of the merchants of the Middle Ages just as it helped the commerce of the Romans.





Milo Winter

More than five hundred years ago, before 1400 A.D., the English poet Geoffrey Chaucer wrote The Canterbury Tales. There are twenty-four stories in this long poem about a company of pilgrims who journeyed from London to the cathedral at Canterbury. Before the time of Chaucer there were three kinds of English spoken. Chaucer wrote his poems in the kind of English spoken in the Midlands, or central part of England. Following him, other men wrote in the same English, and in that way the English language came to be used for books in place of the French of the Normans or the Latin of the scholars.



Courtesy Compton's Pictured Encyclopedia

These are some of the weapons that helped to kill feudalism. The hand cannon was a metal tube about three feet long, fastened to a straight stick. One man held it firmly braced under his arm or with the stick against the ground, and another man touched a fuse to a little hole in the rear end. Next came the arquebus or hackbut. It had a trigger which brought a burning fuse against the priming powder. After that, the wheel-lock was invented. It used a flint and steel to make a spark. None of these weapons used cartridges. All of them had to be loaded with loose powder, wads, and shot.

A strong government could also coin honest money that everybody would be willing to accept for goods. How would you like it if you never knew what kind of money you would get in change? When you bought something, suppose the storekeeper would give you a British coin, a French coin, a German one, and perhaps an Italian one for your change? It would be very hard for you to figure out whether you had the right change or not. Good money helps trade. But for many years any one of the lords could coin money if he wanted to, and a great many of them did. It took an expert to know what each of the different coins was worth, and to tell if some coins were counterfeit.

A strong government would also drive the bandits and robbers from the roads. Some of the lords actually allowed bandits to rob merchants and travelers who passed their estates and shared the bandits' spoil. Some of the lords were called "robber barons" because they took merchandise from the traders and held men for ransom.

The merchants, you see, had many reasons for wanting one strong government instead of many weak ones. But the kings had not been very strong during the feudal period. So the merchants began to help certain strong lords to become much stronger and to overcome their weaker rivals. The merchants could do this because they were wealthy and could supply money and pay men from the cities and towns to be soldiers.

The slow death of feudalism. In time many of the feudal lords lost their power. Gradually the system of feudalism grew weaker and weaker. There were other reasons for the fall of feudalism, but the action of the merchants and the cities had a great deal to do with it.

We can go back in our story and find other reasons why feudalism died out. You read that the forests were being cut down for fuel

Courtesy Art Institute of Chicago

An artist in Flanders painted this picture of Saint Elegius for a rich member of the goldsmiths' guild. Almost every guild had a patron saint. Patron means a person who guards, protects, and helps. Elegius was the patron saint of the goldsmiths. The saint is shown in a goldsmith's shop, holding a pair of scales in his hand. A bride and groom have come in to purchase a wedding ring from the master craftsman.

and for building purposes. The forests had always sheltered robbers, and when the forests were cut down, life became safer. Then the common people did not have so much need to ask the nobles for protection.

Another reason was that men found new ways of fighting in war. Soldiers began to use gunpowder about 1300. Cannon-balls could batter down the castles; and even the thickest walls could be blown up with gunpowder. The knights lost many battles because they did not know how to fight without armor. Armor could not protect them against the longbow, the steel crossbow, and bullets.

How the Church helped. There was another important reason for the downfall of feudalism. You will learn about it in the next part of the story. We shall see how the Church had been growing everywhere in Europe. It grew stronger and stronger until it gained great influence over the people.

Violence and fighting were evils which the Church opposed. It was hard for the Church to make men stop fighting when that was the chief business of the nobles. But the Church was able to make some of the lords agree to do no fighting between Wednesday evening and Monday morning of each week. This period was called the Truce of God. Then the Church made many of the lords agree that farmers and anybody who worked for the Church should not be forced to fight. This freedom from war was called the Peace of God. This was a long step forward in civilization.

And so you can see that the influence of the Church gave people more time to work in peace. Cutting down the fighting time to less than half a week meant a great deal. This change was not easy to bring about, for the old Teuton warriors loved fighting more than anything else. To them Heaven was a place where a warrior had the joy of endless battles.

Talking Things Over

1. You learned in this chapter that travel was dangerous in the Middle Ages because there were no strong governments to protect travelers. Talk over together some of the ways in which our government makes it safe for us to travel. Do you know of laws which protect us on the highways? On the railroads? On the streets of our towns and cities?

2. Why was an army important to a feudal lord? How did a king raise an army in time of war? Do you know how the United States raised an army for the World War? Discuss the differences in the methods used in the Middle Ages and at the time of the World War.

3. Did you ever go to a market where farmers meet to sell their farm products? There are such markets in many of our cities and towns. Discuss the foods that would be on sale in your community and in others. Do you suppose the farmers of the Middle Ages had as many products to sell?

4. In the Dark Ages most of the cooking was done over fireplaces. That was the method used in the early days of America, too. Have you ever been on a camping trip and tried to cook over an open

fire? What are some of the difficulties of cooking in this way?

5. Do you know anything about the Chamber of Commerce in your community? Find out some of the things your Chamber of Commerce does. Is it like a medieval guild in any way?

6. Do you have any other organizations in your town similar to the Chamber of Commerce? What are they? Sometimes the business men of a town form their own clubs to try to make conditions of their city better. Do you think it is still true that people can improve their condition by forming an organization?

Doing Things Together

1. You have probably read stories about the tournaments that were held at King Arthur's court. Find books of stories about King Arthur in the library and bring them to class. Read some of them to one another. See if you can find out more information about tournaments and about the ways in which boys were trained to be knights.

2. Many of the most popular stories and rhymes that are told to very little children tell of going to the fair, or going to market. Can you name some of them? One of the best known starts out, "This little piggy went to market." Some of these stories and rhymes are very old, going back to the Middle Ages. Make a collection of books with these old tales in them. Try to find books that have attractive illustrations.

3. What differences are there between tournaments and the Olympic Games of the Greeks? In which do you suppose a larger part of the people of the country took part? Divide your class into two groups, one to find pictures of tournaments, the other to find pictures of Olympic Games, both ancient and modern. Select the best pictures of each group to put on the bulletin-board, where all can enjoy them.

4. This chapter tells us that as it became easier for people to make a living, they began to want more things. Is it still true that the more money people have the more things they want to buy? List some modern conveniences that people of earlier days did not have, but which they now consider necessities.

English archers made longer and heavier bows out of wood from the yew tree until they were using bows as tall as a man. The arrows were a yard long, with steel tips, and could be shot through armor. Soldiers, hunters, and outlaws like the famous Robin Hood became so expert with these longbows, that no other soldiers could defeat them.

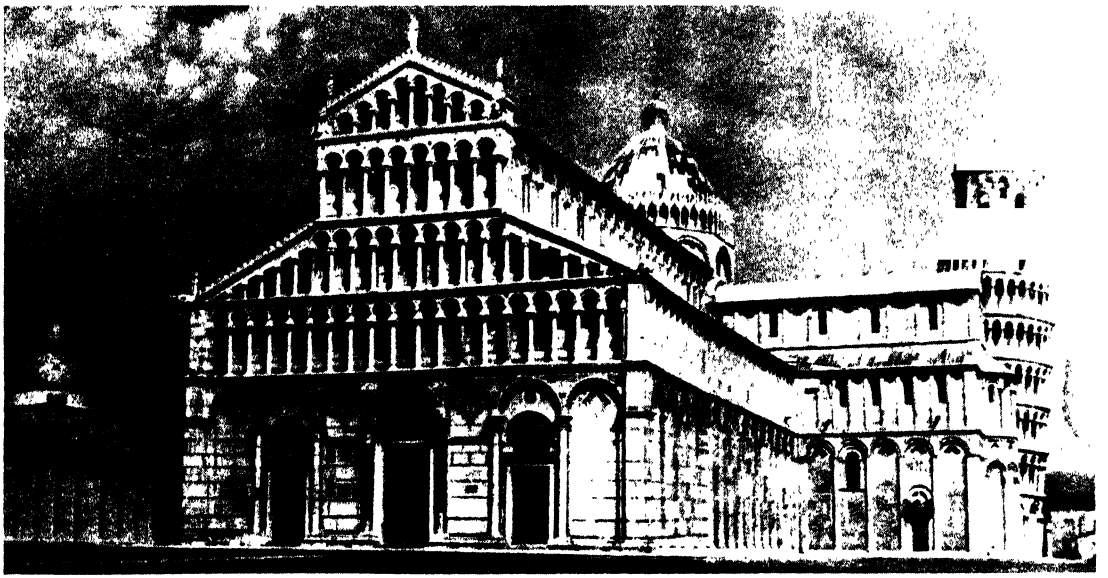
The telephone and electric lights are examples, but there are many more.

5. Make a list of things that your mother buys at the grocery. Compare your lists and write down the countries from which these foods come. See if you can decide in class which foods the people on a medieval manor were able to get.

6. In magazines and newspapers you will often find pictures taken in old cities of Europe. Try to find a number of such pictures and make an exhibit of them on the bulletin-board.

7. In this chapter you are told a number of the problems which medieval merchants had. The merchants felt that a strong government would help them out of their difficulties. If you make a list of these problems, it will help you to understand how our government helps business men. You might make an exhibit that shows many of these ways. For example, a policeman's star would represent one way, a road sign would represent another. Can you think of others? You may have to draw pictures of some objects you will want in your collection.

Crusaders from Italy, France, Spain, Germany, and England journeyed to Palestine. There they found a civilization that was farther advanced, in many ways, than the civilization of their own countries. Many European soldiers found living very comfortable in Arabian lands and settled there.



James Sawders

The cathedral at Pisa, Italy, is a fine example of the kind of churches built by the Italians during the Middle Ages. Notice the pillars and the arches. This style of architecture is called "Romanesque," because it is like the architecture of the Romans. Behind the cathedral you can see the celebrated Leaning Tower of Pisa.

XVII. THE CHURCH AND THE CRUSADES

A Great Power Grows in Europe

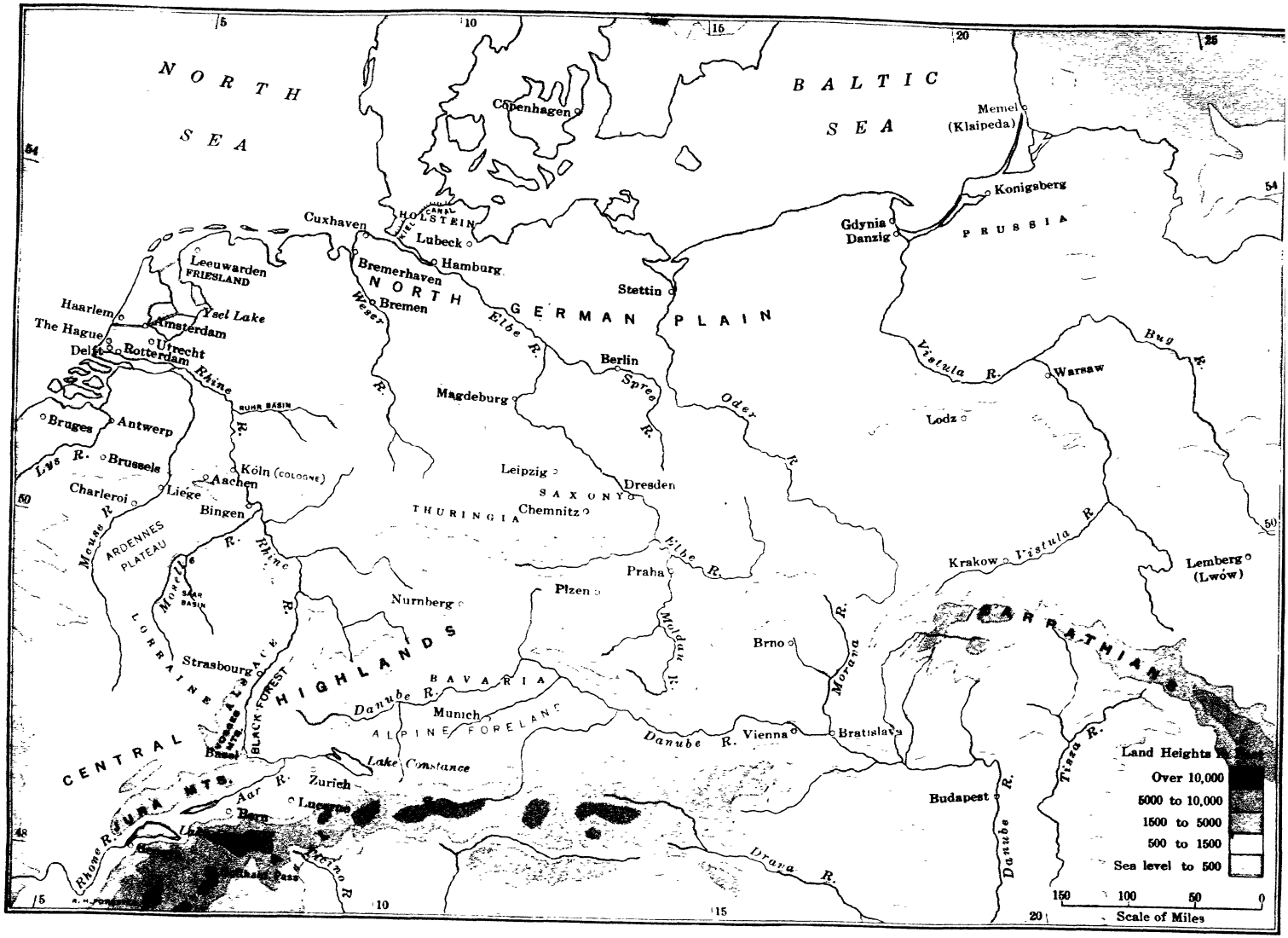
THE beginning of the Christian Church. Several times in the stories of France and England you have read something about how the Christian Church helped the people. The story of the Church makes another interesting part of the whole story of civilization. It is the tale of how the Christian religion grew until it became a powerful influence on the lives of the people of Europe.

In the first century A.D. the Christians in Rome were so cruelly persecuted that they had to worship in underground caverns. There were only a few Christians then. But before long thousands of other people joined them.

People of the wealthy class as well as those who had a hard time in life, such as slaves and poor farmers and workers, gladly joined the Christian Church. These people learned that there was a God who loved them all and would watch over them. They listened eagerly when they were told that all men were really brothers. More and more people around the shores of the Mediterranean became Christians.

The work of missionaries. Missionaries from the churches in Rome, Antioch, and other places traveled for hundreds of miles into the barbarian lands. Many of these courageous missionaries lost their lives. Others were successful, for they gradually converted the barbarians to the new religion. But this took many, many years. Sometimes a missionary would be able to convert a barbarian chief such as Clovis, the Frank king. Then the chief's whole tribe would follow him and be baptized in the new faith.

During all the violence and confusion of the Dark Ages the work of the Church went on. By the year 1000, about the middle of the feudal period, almost everybody in western Europe had joined the Church. We have


NORTH SEA
BALTIC SEA
Copenhagen
Memel (Klaipeda)
Konigsberg
PRUSSIA
Gdynia
Danzig
Cuxhaven
KIEL CANAL
HOLSTEIN
Lubeck
Hamburg
Bremerhaven
Bremen
Weser R.
Elbe R.
NORTH GERMAN PLAIN
Stettin
Berlin
Spree R.
Oder R.
Magdeburg
Vistula R.
Warsaw
Bug R.
Lodz
Leeuwarden
FRIESLAND
Haarlem
Ysel Lake
Amsterdam
The Hague
Utrecht
Delft
Rotterdam
Rhine R.
RUHR BASIN
Bruges
Antwerp
Lys R.
Brussels
Köln (COLOGNE)
Aachen
Liege
Charleroi
Bingen
Meuse R.
ARDENNES PLATEAU
Mosel R.
SAAR BASIN
LORRAINE
Strasbourg
ALSACE
Rhine R.
BLACK FOREST
Leipzig
Dresden
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Elbe R.
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Plzen
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Moldau R.
Brno
Morava R.
Krakow
Vistula R.
Lemberg (Lwów)
CARPATHIAN
HIGHLANDS
BAVARIA
Danube R.
Munich
ALPINE FORELAND
Vienna
Bratislava
Budapest
Tisza R.
Drava R.
Danube R.
CENTRAL
Basel
Lake Constance
Zurich
Aar R.
Bern
Lucerne
JURA MTS.
Rhone R.
Ticino R.
Land Heights
Over 10,000
5000 to 10,000
1500 to 5000
500 to 1500
Sea level to 500
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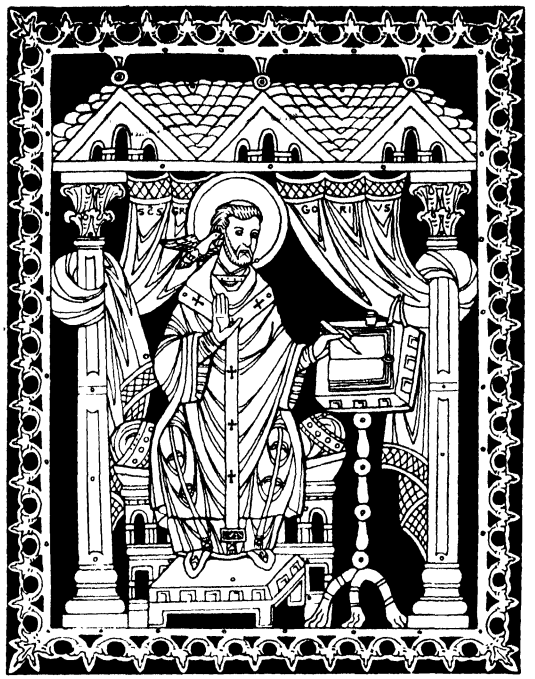
Scale of Miles



Courtesy Book House for Children

A monk who lived in the time of Pope Gregory the Great made this silver book cover. The Pope is listening to the Holy Spirit, represented by the dove, and is writing instructions to the Church in a book. The Pope has a beard such as the Franks wore. Beards were not fashionable in Roman times.

seen how the powerful Franks became Christians, how Charlemagne converted the Saxons, and how St. Augustine with his monks established Christianity in England.

In the troubled period of feudal days, when people despaired of ever finding peace, the missionaries carried their message of love and peace through Europe. At a time when the people were miserable and the serfs were treated so badly that they had lost all hope, the Church showed them how to lead a good life on earth and promised them happiness in heaven.

Nearly all the peoples of western Europe were held together by this bond of the Christian religion. Do you remember how the common religion of the Greeks helped to unite the different Greek cities, even though they fought each other at times? The Christian religion helped to hold the people of Europe together in the same way.

How the Church was organized. The Pope in Rome was the head of the Church. Under him were cardinals, archbishops, and bishops, each of them having the churches in a certain region under his care. Under the bishops were the priests, who looked after the people. All of these men who worked for the Church were called clergy or "the religious."

The clergy were divided into two groups. One group, including the bishops and priests, looked after the churches and the services for the people. The other group was made up of monks and friars, who lived a religious life under strict rules.

The Church and the feudal system. The Church gradually acquired a great deal of property. There were churches, of course, and other property such as lands and houses. Many people gave the Church gifts of prop-

Courtesy German Railroads Information Office

Towns gathered around the churches in the Middle Ages, just as you see the houses of this little town clustered about the church. Most of the towns were of small size. Until after 1000 A.D. there were very few cities or towns in Europe that contained more than seven or eight thousand people.

A medieval monastery was self-supporting, just like the manor. The artist here shows a walled monastery with its abbey, or church, storehouses, workshops, guest houses for visitors, and buildings where the monks ate and slept. Surrounding the monastery were fields and orchards where the monks raised food for themselves. Usually the monks themselves did the work, but some monasteries owned land where there were serfs to till the soil. A village would then spring up around the buildings of the monastery. On page 465 is a photograph of a monastery in Austria and the village which grew up around it.

erty. As time went on, the church officials became like other feudal lords who owned estates. The feudal lords could not farm all their property themselves, and so they granted portions of it to vassals. The churchmen could not use all their property, and so they, too, granted parts of their estates to vassals. Some of the bishops had as much land and as many vassals as a wealthy noble.

Turn back to the map of the manor on page 244. Notice that a part of the land was for the use of the Church. Sometimes the lord of the manor gave the Church only the crops from that land. But often the lord would grant the land to the Church just as he would to any vassal. Do you see how a bishop, who accepted the land for the Church, might be a vassal of some lord? And do you see how some lord might be the vassal of a bishop who let him use the land of the Church? In this way the Church became a part of the feudal system.

The religious orders. Monks are men who live apart from other people and devote themselves to a holy life. Groups of monks band together and live in places called monasteries. The head of such a group is called an abbot.

Women who want to lead the religious life become nuns, now also called sisters. They, too, live in groups by themselves. The religious centers for nuns are called convents.

Many of the groups were followers of some one great religious leader. For example, the monks who carried Christianity to Britain belonged to the Benedictine group, or "order," as it is called. This order was made up of followers of St. Benedict, who established many monasteries near Rome early in the sixth century.

Another famous leader was a Spanish priest and soldier, St. Ignatius Loyola, who founded the Society of Jesus. The members of this order are known as Jesuits. Another order was that of St. Francis of Assisi, who founded the Franciscan brotherhood.

Life in the monasteries. Monks of some orders were not allowed outside the monasteries without permission. St. Benedict said

it was "not good for their souls." Each monastery had halls where the monks ate, and tiny cells where they slept on hard beds. Each monastery had its own flour mill, its own bakery, and its own workshops, where the monks made everything they needed.

A large monastery consisted of a group of buildings surrounding a courtyard. Bordering the courtyard was a covered walk called the cloister. Within the court stood the church. Surrounding the monastery were vegetable gardens. Beyond these were grain fields, orchards, woodlands where the swine were herded, and pasture lands for the cattle and sheep.

In time, monasteries and convents dotted western Europe. Almost every great noble gave land to some group of monks or nuns. These hard-working religious groups supported themselves and were able to help others.

How the monks and nuns helped the people. In those days the monks and nuns were the only groups of people who helped the sick and those in trouble. They fed and clothed the poor and homeless. In each monastery or convent was a hospital, where the sick were cared for, as there were no public hospitals in those days. Weary travelers could find both food and shelter inside the walls of the monasteries, for there were no hotels and inns.

Like the churches, the monasteries became wealthy and powerful during the feudal period. Some of them owned much land and ruled many people. Each monk, however, had to promise to remain poor all his life. The monks lived on simple food, wore long, woolen garments, and shaved part of their heads. They spent their time in prayer or in hard work. Their only pleasure was in worshiping God and in serving Him.

This simple way of living made a great impression on the people. Ever since Roman times it had been thought rather disgraceful to work. Work was something for slaves and only the poorest people to do. But when people saw these men of God working hard in their fields or in their workshops, they could understand that honest work did not disgrace a man.

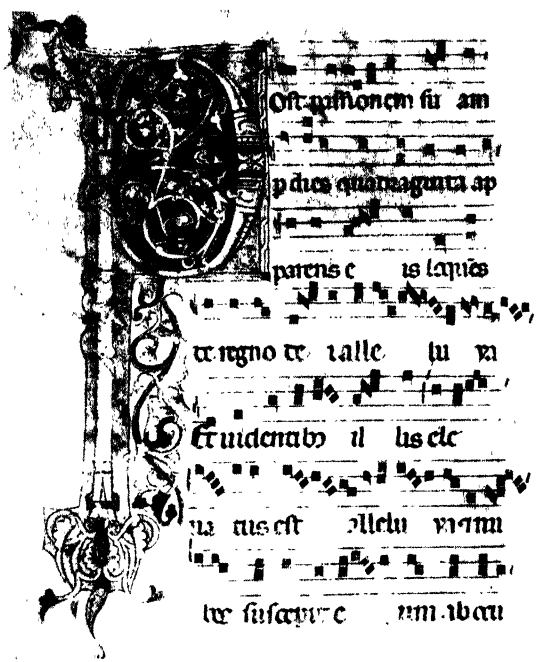
The monks as farmers and craftsmen. The monks were skilled in many kinds of work, especially in farming. They found out many ways to improve crops and to raise better cattle, horses, hogs, and sheep. All over Europe the best farms were those that belonged to the monasteries. Their crops were

Courtesy Book House for Children

A monk drew this picture in an old manuscript written before the year 1000 A.D. It shows serfs working on the lands belonging to the monastery. The monks studied agriculture and discovered improved ways of farming, which they taught to their serfs and the peasants on the surrounding farms.

so plentiful that the monks held their own market days and fairs.

None worked harder than the monks. They drained the swamps about their monasteries and cut down the forests to provide space for orchards and vineyards. In their workshops the monks made tools, wove cloth, and even manufactured things to sell, such as tapestries, laces, furniture, and other articles.

The libraries of the monks. Since printing had not yet been invented, the monks copied by hand all the books for their libraries. One monastery would borrow the books of another monastery and copy them for its own library. In this way many of the old Roman writings were preserved so that they have come down to us. The monks also were authors of books. Some of them were about growing better crops and raising finer animals.

Metropolitan Museum of Art

Italian monks copied this church music in the fifteenth century. There were only four lines on a staff of music then. How many are there now? People were singing "do, re, mi," when this music was written, because an Italian monk, Guido, had given the notes the names of letters in the Italian alphabet.

Metropolitan Museum of Art

This model of a scriptorium, or writing room, in a monastery shows a monk seated in front of his desk, copying a manuscript. The monks took great pride in this work and did beautiful, regular lettering.

Some of the monasteries kept a record of events, called a chronicle. These were the only histories of the time. One of the most important of these was the *Anglo-Saxon Chronicle*.

How the monks copied books. Making a book in those days was a long, hard job. It began with raising sheep, queer as that may seem. The skins of sheep were used for books because paper was unknown. The sheepskin was rubbed smooth with pumice-stone and then cut into pieces the size of a page. When finished, it was a light cream color and very strong. It was called parchment. Another kind of animal skin used for books was called vellum.

The monks wrote on sheets of this parchment or vellum with pens made from goose quills or swamp reeds. The ink was made of soot, mixed with thin glue or acid. The patient monks copied each book, letter by letter, all by hand. At the beginning of a chapter they often made a very large letter, decorated with little pictures in bright colors. For this

work the monks had to make their own paintbrushes and paints.

So important was the copying of books that each monastery had a special writing room called the *scriptorium*, from a Latin word meaning "write." There were strict rules about copying, to prevent making mistakes or changing the meaning of the words.

You can see what a tremendous amount of work was necessary for the making of one book. In this painstaking, patient labor the monks did a great service to the world. They preserved many valuable books during those centuries when learning had almost died out.

Education in the Dark Ages. Throughout the Dark Ages almost the only schools in Europe were those conducted by the Church, in which the monks taught boys how to read and write Latin. The Church wished to be sure that there would always be learned men to carry on its work. In many of these schools the boys also studied grammar, rhetoric, logic, geometry, arithmetic, music, and astronomy.

The schools of those times must have been rather gloomy. The small, dark rooms had no such furniture and pictures as you have in school today. Did you notice that only boys went to school? The girls were trained at home or in the convents. Daughters of nobles learned to do the work of the household, to direct servants, to do fine needlework, and to make beautiful embroideries and tapestries. In the convents of Britain a few of the girls were taught English and Latin.

If you stop to think over the things that the Church did, you will see how much it helped civilization with its monasteries and convents, its schools and hospitals. The Church saved much of the civilization that had been developed in the ancient world. The monks not only kept schools going, but showed people how to lead peaceful and useful lives.

Pope Gregory, the great leader. During the centuries of the barbarian invasions the people came to rely on the Pope as their leader. People knew that Rome had been the capital of the ancient world, and now Rome was the capital of Christianity.

The monks and nuns of the Middle Ages were expert in many crafts and taught the people many useful things. This copy of an old picture shows a nun teaching a noblewoman how to weave cloth. Why did the artist draw a spider in the picture? Where do you think the nun learned the craft of weaving?

One of the strong leaders of the Church was Gregory the Great. He became Pope in 590 and did much to establish the power and influence of the Church. Gregory was a wise leader in more than a religious way.

In Gregory's time the emperor of the Roman Empire was living in far-away Constantinople. When a tribe of barbarians called Lombards began to invade Italy, the emperor did not send any help. Pope Gregory had to defend the city of Rome and keep it supplied with food and water. He did his work so skilfully that people began to look upon the Pope as a kind of king or emperor as well as the head of the Church.

Gregory established several monasteries and sent out many missionaries among the barbarians. He urged his bishops and priests to teach the people how to lead Christian lives. He encouraged them to build churches. He took a great interest in music. This great Pope was one of the finest characters of the Middle Ages.

For a long time after Gregory, people in western Europe looked to the Pope for leadership, not only in religion but also in government. In this way, you see, the Pope practically took the place of emperor over the western part of the old Roman Empire. This made the Church very powerful, of course. That is an important thing to remember as we read this part of our story.

The great cathedrals. Castles were not the only large buildings that were erected during these centuries. Do you remember that Charlemagne put up the first large building in Europe after Roman times, and that it was a church? Many churches and cathedrals were built throughout northwestern Europe and in England during the Middle Ages.

The ancient peoples, the Egyptians, the Greeks, and the Romans, built their finest structures to honor their gods. The Christians devoted their best art and skill to the great cathedrals. One of the French poets called the cathedrals "Bibles in stone."

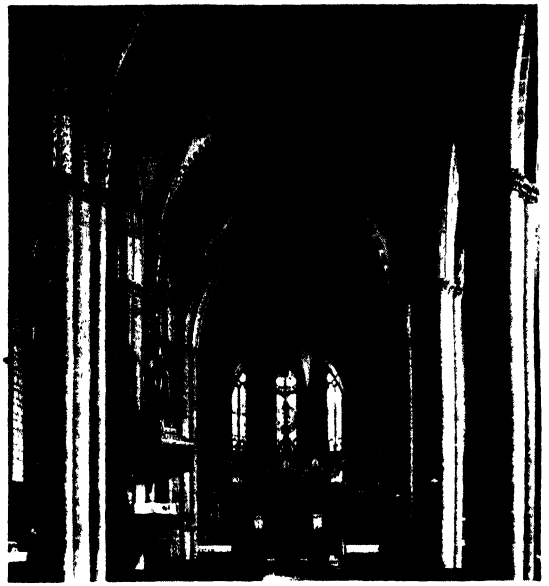
At first the churches or cathedrals were like the Roman buildings. They had heavy walls, windows with round arches, and domes. We speak of that style of architecture as *Romanesque*. But by the thirteenth century the window arches were pointed and the roofs steeper and more lofty. The builders learned how to make strong walls that were not thick, and so the cathedrals became more graceful in appearance.

This later style of architecture is called *Gothic*. It is a style that is used today, not only for churches, but for other buildings. You can see Gothic churches and college buildings in our country.

It took many years to build some of these great cathedrals. Some of them were so magnificent that builders worked on them for centuries. The cathedral at Cologne (Köln) in Germany took nearly five hundred years to build. Some of the buildings fell down before they were completed because the workmen made mistakes.

Courtesy Book House for Children

In this old picture of a monastery school the pupils are seated on the floor before the master's chair. Perhaps the bird, perched on the branch of a flowering shrub or tree, is supposed to show that this school was held outdoors. Holding up a hand when the teacher asks a question seems to be a very old custom. Find the boy who can't answer the teacher's question.



German Railroads Information Office

This picture shows the interior of a Gothic cathedral at Mainz, Germany. The pillars are slender and graceful, while the arches are high and pointed. The windows at the end have the same shape. At first this new style seemed queer, and people called it Gothic, which meant barbarous. Now people like it.

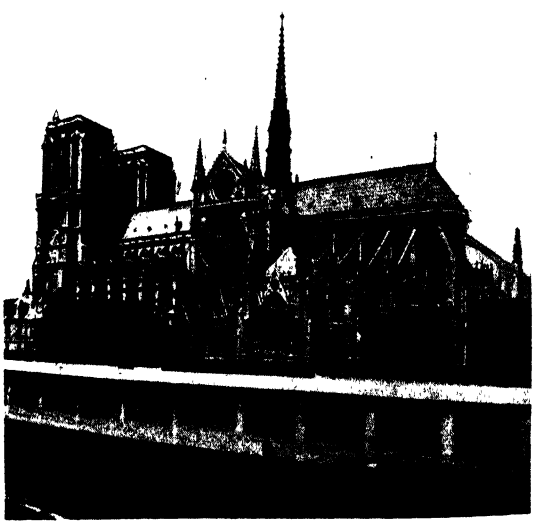
How the building of cathedrals helped arts and crafts. For many centuries there was great activity erecting these huge churches. Thousands of workmen were employed on them. Workers in marble and stone, in wood, in metal, and in stained glass gave their best efforts to the task. Every skilled craftsman was proud to have a part in building these places of worship because the Church meant a great deal to every person.

Architects and artists went from country to country to work on these glorious buildings. German workers found out how French masons cut stone, and French craftsmen discovered how Italians made colored glass. In this way ideas were exchanged between distant parts of Europe. That is how culture and learning spread.

Today, if you travel through England, Spain, France, Belgium, Holland, and Germany, you will see many of these Gothic cathedrals. Every bit of carving, every exquisitely colored window, every sculptured column was the painstaking, loving work of those Christian workmen of the Middle Ages. Everything was done by hand, for they did not have any machinery. They did have a kind of derrick to raise heavy stones, but had none of the other devices that we see in our cities where big buildings are being erected.

In this way, you see, the Church encouraged art and science. Builders of great cathedrals had to know something about engineering. Sculptors and wood-carvers were in demand to decorate the buildings. Other artists made beautiful stained-glass windows which are as fine as any that have ever been designed.

The Road of God. Religion came to be very important in the life of people all over the western world. The lords who ruled over small parts of Europe were interested only in their own particular sections. But the Church was interested in all of Europe and in all the people. Many times the Church was powerful enough to compel lords to treat



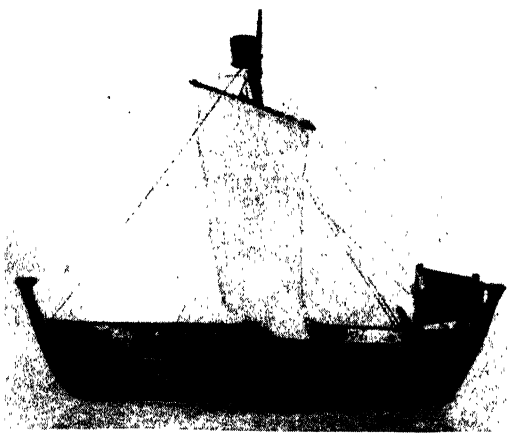
Art Institute of Chicago

Compare this Gothic cathedral of Notre Dame, in Paris, with the building you see on page 265. Which seems the more graceful to you? Which one has the larger windows? In this picture, notice the supports which help to hold up the walls. They are called buttresses. One kind was called a "flying" buttress.

their vassals justly. The laws of the land were different in almost every lord's realm, but the law of the Christian Church was the same everywhere.

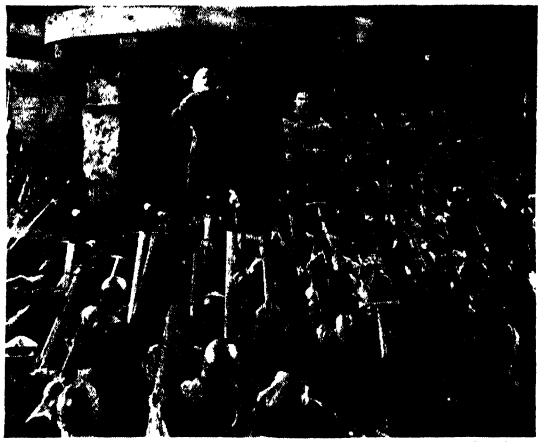
With people so much interested in religion, it is not surprising that they became interested in the place where Christianity began. From all over Europe, Christians made journeys, called pilgrimages, to the Holy Land. Look on the map on page 128 and decide what routes they took. They wanted to walk on the same paths where Jesus had walked and preached, and worship in the same places. Particularly they wanted to worship at the Holy Sepulcher, as they called the tomb where Jesus was buried. When Christians made these pilgrimages, they were said to be following the Road of God.

Pilgrimages to the Holy Land. The Road of God was long and hard in those days. Rich pilgrims could take a ship at Genoa, Venice, or Marseilles. But the little merchant ships were often tossed about in storms or set upon by pirates before they reached the harbor of Acre in the Holy Land. Many pilgrims had to go by land, and the trip took many months. Usually they walked, perhaps leading a pack-horse with supplies. The pilgrim followed pleasant valleys when he could, and climbed rough mountains when he had to. If you were a pilgrim starting out from Paris to go to Jerusalem, how would you select your route? Through what kind of country would you have to pass?



Courtesy Philadelphia Commercial Museum

When the First Crusade began, English soldiers were sent to the Mediterranean in little ships like this model. There were no decks to protect the men or the cargo. Notice the row of holes through which oars were thrust when there was no wind for sailing.



Courtesy Paramount Productions

A monk called Peter the Hermit preached sermons to the people of France, urging them to follow him to the Holy Land. Thousands of soldiers, workmen, and serfs left their homes to go on the First Crusade to free Jerusalem from the Turks. But Peter was not an experienced leader, and many of his followers died on the long overland trip. This scene, from the motion-picture "The Crusades," shows Peter addressing a large company of Crusaders.

Palestine at that time was held by Mohammedans. At first they treated the pilgrims fairly because the Christians brought good trade to Jerusalem. For nearly four hundred years things went on in this way. Then a band of barbarian Turks called Seljuks captured Jerusalem. These Turks were Mohammedans, too, but they were not like the Arab and Egyptian Mohammedans who had allowed the Christians to enter Jerusalem.

How the Crusades began. At once these Turks began to treat the Christians very cruelly. They drove out the pilgrims and started to persecute the Christians living in Syria and Asia Minor. The emperor at Constantinople was afraid that the Turks would capture his city. So he wrote to the Pope at Rome, asking his aid. He thought it would

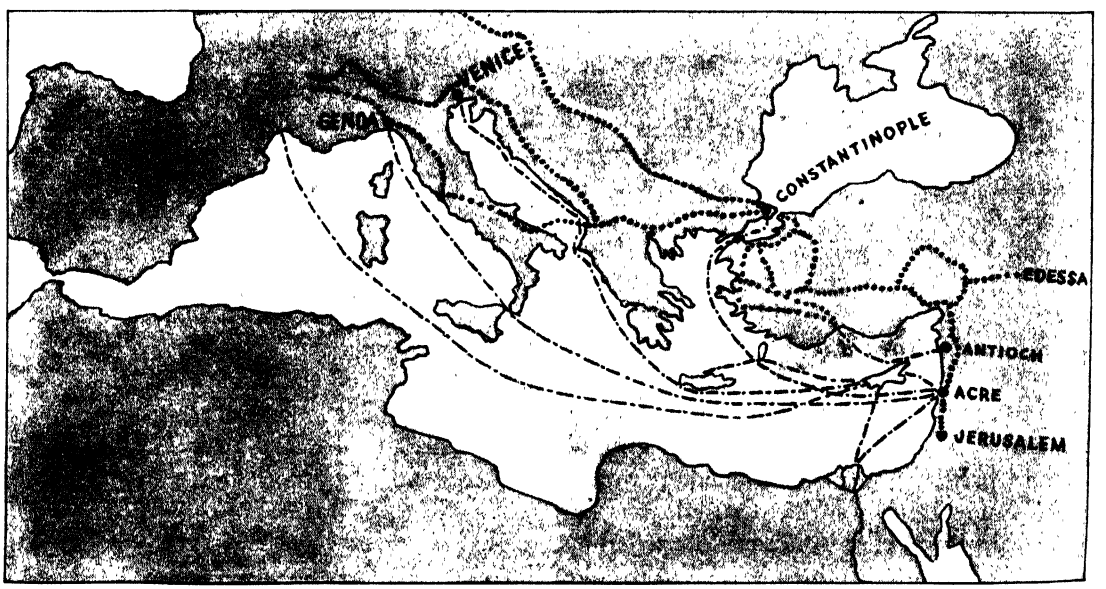
be a good time for the old Roman Empire to be united again and drive out this new foe.

The Pope felt that if the knights united to battle against the Turks, they would stop fighting among themselves. He then urged all the Christian warriors of Europe to march to the Holy Land and free it from the Turks. Monks traveled all over Europe, preaching war against the cruel Turks who were oppressing the Holy City of Jerusalem.

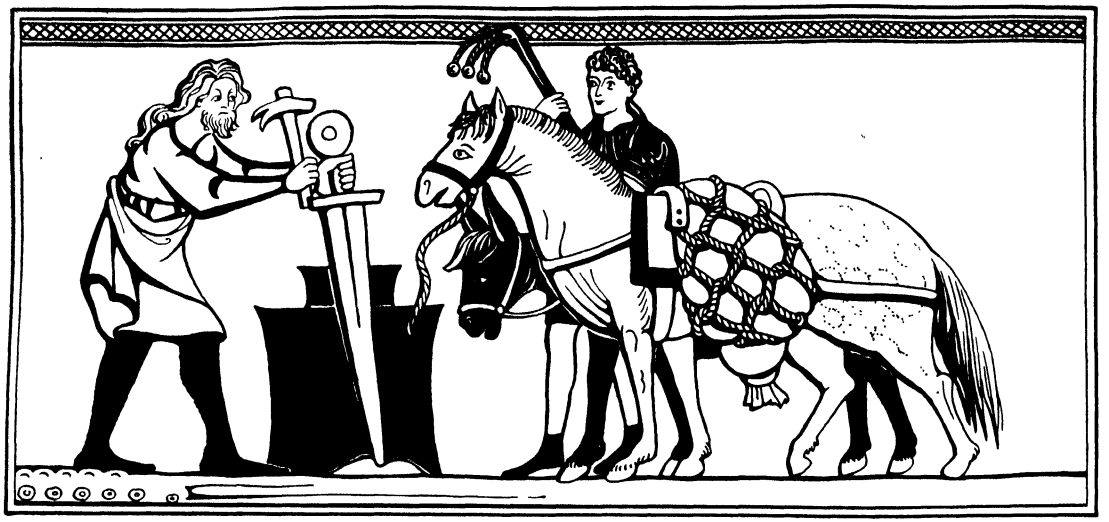
The Crusaders. People everywhere were eager to join in this religious war. It was the first of several such wars which were called Crusades. The people who joined were called Crusaders, a word which means "marked with the cross." Each soldier was told to wear a red cross on his breast while journeying to the Holy Land. When he returned victorious, he wore the cross on his back.

Some of the people were so impatient to go that they did not wait for an army to be formed. They listened to the men who told them that every Christian ought to go on the Crusade, and started off at once. Serfs and common people, who had nothing to lose, thought about the tales of beautiful green fields and valleys in the Holy Land and ran away to join. From central Europe thousands of Crusaders started down the Danube Valley toward Constantinople and the Holy Land. Many of them died on the way because they were not prepared for such a long, hard journey. Most of those left were killed by the Turks as soon as they crossed from Constantinople into the Mohammedans' country.

Two centuries of crusading. Later expeditions were better organized. Nobles from all over Europe brought their trained fighting men to various cities on the Mediterranean. One army went southward through Italy and sailed from Brindisi across the narrow Adriatic Sea into the territory of the eastern emperor. Another army marched around the Adriatic and down its eastern shore. Then it crossed the ridges and valleys of the Balkan Peninsula to Constantinople. There both



The heavy dotted lines on this map show the routes taken by the men who went to the Holy Land on the first two Crusades. The dot-and-dash lines show how the later Crusaders sailed to the kingdom of Jerusalem. Notice how the first Crusaders wandered about Asia Minor and the different routes they took over that rough land. Can you name the three islands at the eastern end of the Mediterranean where many of the Crusaders had their headquarters? Look for them on other maps.



Courtesy Book House for Children

The smith in this old picture is shown forging a sword for a Crusader. A packhorse and a mule, with their driver, seem to be waiting, perhaps to be shod by the smith. Large expeditions, like the Crusades, had to take with them many men besides soldiers. What kinds of workers would be needed?

armies united and crossed the Bosporus. They then had a long, hard march over the dry plateau of Anatolia and the Taurus Mountains south to Jerusalem.

After a long struggle Jerusalem was captured from the Turks. The Crusaders established a Christian kingdom in the Holy Land and called it the kingdom of Jerusalem. The Crusaders took the land and divided it up among different nobles, just as the land in Europe was divided.

Eight Crusades took place between 1096 and 1291. You see, there were almost two hundred years of crusading. Follow the routes of the Crusaders on the map on page 275.

Richard the Lion-hearted. Less than a hundred years after Jerusalem was captured by the Christians, the Mohammedans won it back. Immediately another Crusade was organized in Europe. This Crusade was led by **three kings.** One of them was Richard the Lion-hearted, king of England.

Many fascinating tales are told of Richard's deeds. One time some Mohammedan warriors set out at night to steal into Richard's camp. They wanted to capture Richard alive and earn the great reward that was promised by their leader Saladin. Just as they entered the camp, Richard was warned. He seized his great sword and, with only ten men to help him, rushed out to attack the Mohammedans. The Saracens, as the Mohammedan warriors were called, let the Crusaders ride into their midst, and then surrounded them.

Instead of surrendering, Richard fought on with great sweeps of his sword. One blow from the mighty Richard was enough to cut through the mail and armor of any Saracen. None dared to approach within reach of that terrible weapon. In a short time the army was aroused, and the Saracens fled.

Saladin and Richard. Saladin was not a barbarian, but a knightly warrior, and stories are told of him, too. Once after a battle when Richard's horse was killed, Saladin sent a flag of truce to the Christian camp. With it came an Arab leading a beautiful white horse. It was a present to Richard from Saladin, who sent a message saying that he did not like to see the English king mounted on a poor horse.

This war lasted a long time, and both Saladin and Richard grew weary of fighting. Richard found he was needed in England, and Saladin had his empire to govern, too. The two leaders, therefore, agreed to end the war for three years and eight months. During this time the Christians were to be free to go to Jerusalem without being troubled and without having to pay taxes.

Richard's adventurous journey home. On the way home, when going through Germany, Richard was captured and put into prison by a noble whom he had offended during the Crusade. The English people did not know where their king was or how to find him. A story is told of how he was found. In Richard's court was a minstrel named Blondel, who had written a song of which Richard was very fond. Blondel tramped through Germany, singing Richard's song near every castle he came to. One day as he was singing, he heard a voice inside the castle walls catch up the chorus of the song, and he knew it was Richard's voice. He hurried back home, and soon Richard's friends in England had bought back the freedom of their king. But it had taken two years for Richard to reach home.

Courtesy Paramount Productions

Richard the Lion-hearted probably looked much like this as he led his men on the Crusade against the Turks. On his shield and on the horse were three lions. Even when his helmet covered his face, Richard's men could tell him by the lions.

Courtesy Philadelphia Commercial Museum

Before the Crusades were over, the English were using better ships than the one on page 274, as this model shows. Sailors had found out how to handle a second sail, and now the ships had decks. Notice the "castles" at each end of the ship.

The Christians of the Middle Ages never again regained Jerusalem from the Mohammedans. In 1291 they were defeated, and most of them were driven from the Holy Land. One by one the Saracens captured the castles that the Christians had built to help them hold the land. Not until 1918, during the World War, did Christian people recapture Jerusalem.

The Crusaders meet an Eastern civilization. Most of the Crusaders who were not killed returned to their homes in Europe. Some, however, liked the country along the eastern shore of the Mediterranean and remained there. To them this part of the world seemed more civilized than Europe, for the Mohammedans had made a great deal of progress in many ways.

Most of the Crusaders expected to find a wild land inhabited by barbarians when they left Europe to go to the Holy Land. Imagine their surprise when they saw the paved streets and great churches of Constantinople, and the beautiful palaces throughout the Eastern lands. In the shops and stores of the Arab bazaars they found new foods. They soon discovered that the Saracens went to war with doctors and nurses to care for those who were wounded in battle.

The Crusaders found that the Mohammedans were better educated than the Europeans. The Mohammedans had many books —some in their own language of Arabic, some in the Greek language, and some in Latin. For several centuries, when there were few schools in western Europe, the Mohammedans had been learning from the books of the ancient Greeks and Romans. There were teachers in every Mohammedan mosque, and boys could go to school if they wished. Mohammedan schools taught law, medicine, astronomy, chemistry, algebra, and some other subjects which we study today.

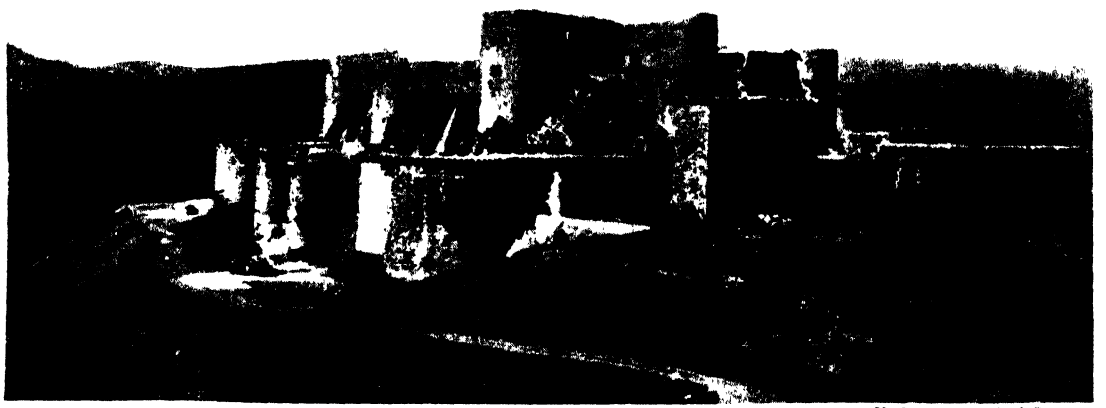
How Europe borrowed from another civilization. The Crusaders were quick to take advantage of what they found in the country of the Saracens. They took many of these discoveries back to Europe with them. When they brought samples of sugar home with them, it was not long before people throughout Europe wanted this new, sweet food. Several new fruits were brought back, too, and soon the orchards and gardens of Europe were blossoming with apricots, peaches, cherries, and melons.

The Crusaders found the Mohammedans using cotton cloth and paper made from the fibers of cotton. They also saw many new silken fabrics, and beautiful rugs and carpets. Perfumes were common in the East, as well as cosmetics with which women made themselves more beautiful. The Arabs bathed frequently, and many Crusaders came home and astonished their neighbors by doing the same.

In the irrigated fields of the Arab farmers the Crusaders saw their first windmills, and that idea was taken back to Europe. On captured Arab ships they found compasses to help the sailor.

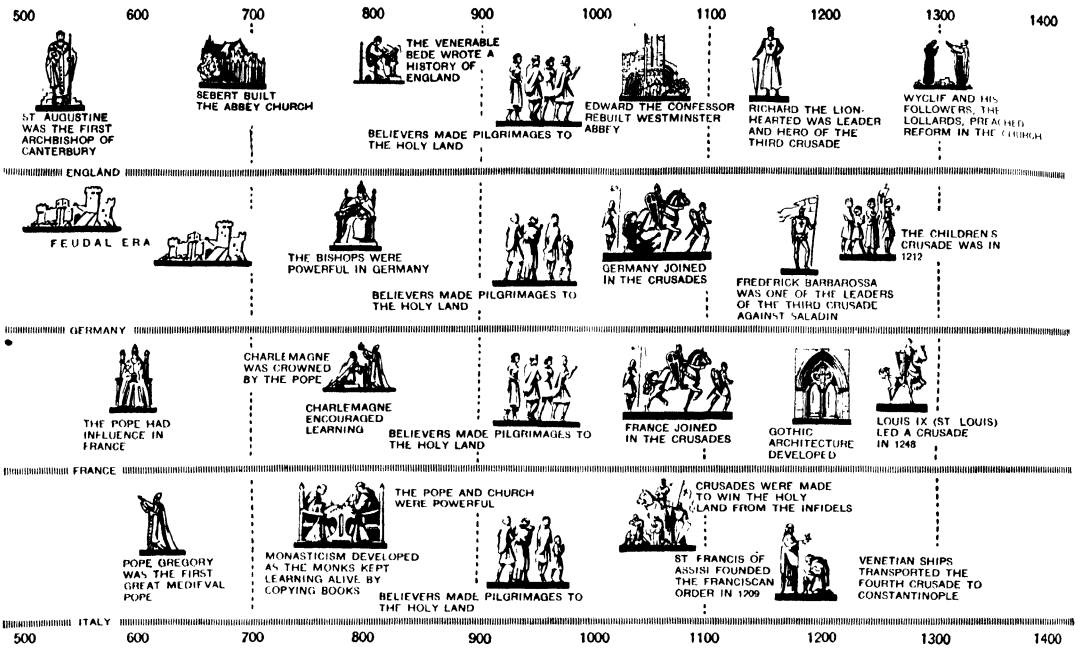
Upon their return from the Crusades the soldiers told such wonderful stories about their experiences that hundreds of their friends wished to travel and have adventures of their own. Merchants and traders were quick to see that they could have a good business bringing some of the new things to Europe.

You see, then, that the Crusades did several things for Europe. They brought new ideas and new products from the East to the West. They made people want to see more of the rest of the world and to have some of the things that other parts of the world produced. And last of all, the Crusades made trade better.



Hudson Historical Bureau

Crusading knights, with the help of pilgrims from France, built this great fortress in Syria during the Crusades. It is called the Krac de Chevaliers and is one of the largest castles ever built. The government of France, which now controls Syria, is rebuilding this fortress so that travelers may see how the Crusaders defended it against the Mohammedans for one hundred fifty years. Many such castles were built by the Crusaders in the Holy Land during the time they held that land.



PICTURE HISTORY

These four countries were not the only ones which took part in the Crusades. Do you know of others? In each of these countries the people were living under the feudal system.

A busy trade with the East. With more and more people wanting sugar, cotton cloth, rugs, perfumes, and other things from the East, the merchants of Europe grew busier and wealthier. Loads of merchandise from Bagdad in Arabia, and from India and China came by caravan to the West. When the caravans reached cities along the eastern end of the Mediterranean, Italian ships from Venice or Genoa loaded the goods and brought them to Europe. Can you trace the route the ships took? Do you know how the goods reached the cities of northern and western Europe after being unloaded from the ships at Venice and Genoa?

Why traders turned from the land to the sea. Suddenly this commerce was interrupted. The Turks captured Constantinople and began to lay a heavy tax on all the merchants and traders. It became very expensive for merchants to pay the tax demanded by the Turks for permission to use their harbors on the eastern shores of the Mediterranean. To make matters worse, pirates and robbers were common, and many ships were captured and plundered. All this made merchandise from the East very costly in Europe.

The shrewd merchants of Italy began to search for a cheaper way to bring goods from India and China. The best way, of course, would be by water, because a ship can carry a great deal of merchandise, with only a few men needed to sail it. Daring explorers then went out to search for an all-water route to India and China. Columbus was looking for such a route when he discovered America.

This time of exploration and discovery is another part of our story. For many reasons it is an exciting period of history. We can say that the Middle Ages were over and feudalism almost dead when this time of exploration and discovery began.

But before we read the story of the explorers, we should know something about the

nations of Europe and their kings. Then we will understand why the different peoples of Europe quarreled and fought over distant lands and colonies. And we shall see how some of today's customs and ways became a part of our lives.

Talking Things Over

1. This chapter tells you of the many different kinds of work which were done by men and women in religious orders. Make a list of the kinds of work done, and after each write the name of some institution that does such work today. Also write down names to show who is in charge. There may be several of such names. For example, modern hospitals may be run by the state, the city, a church, or a group of doctors.

2. The work of different institutions changes as time passes. Ask your parents to tell you how their schools were different from yours. Ask them what part of your school work would have seemed strange to them. For example, did their teachers ask about their weight? Or help them to take care of their pets? Did they have as much opportunity to hear good music as you have?

3. Do you remember reading that the barbarian tribes were pushed or crowded to the west? In this chapter you read how Europeans sent expeditions to the East, at first for religious reasons, and later for trade. Discuss some differences in these two movements of peoples.

4. The Europeans were surprised at the arts and crafts, the skills, and the knowledge of Eastern peoples. They learned a great deal from seeing how the Mohammedans lived, and brought back this new knowledge to the people at home. Make lists showing the things that were learned and the places where you think they were learned. Do you think, for example, that Crusaders saw bathrooms in the houses of poor Mohammedan farmers? Talk over the importance today of the things in your list.

5. The early explorers looked for new routes which would help them to establish trade with countries in the East. Today explorers go on expeditions to learn about conditions along new air routes. What is some recent news of such expeditions?

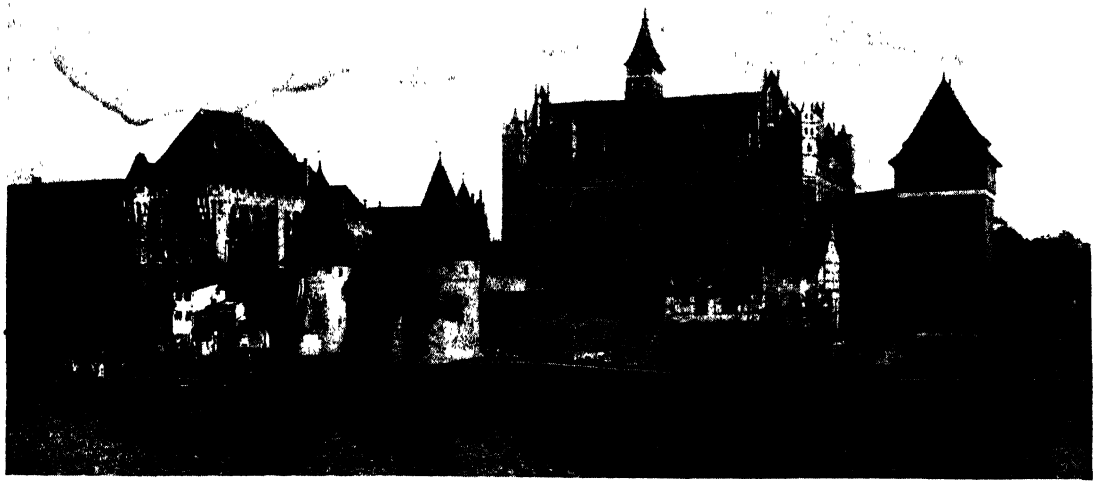
Doing Things Together

1. Do you live near a museum or a large library? If so, see if you can find any exhibits that will help you in studying the Middle Ages. You might find an interesting tapestry or a hand-copied manuscript. If you can't find anything of this kind, look for pictures in books and encyclopedias. You might have an exhibit of your own if you find some attractive pictures.

2. This chapter tells you some interesting things about churches and cathedrals and how they were built. Travel folders and magazines often have pictures of interesting historic buildings in them. Why don't you make an exhibit of such pictures for the class? You might collect some pictures which will show that these buildings were carefully built by hand labor.

3. You might enjoy trying to imitate the designs of some famous stained-glass windows with pieces of colored cellophane. You would need a good picture to copy. You could also make up your own designs.

4. If you have a time-line, measure off the length of time it took to build some of the large cathedrals. If you do not have one, draw two lines on the blackboard in order to compare the length of time it took to build some cathedral with the length of time covered by the history of the United States.



Courtesy German Railroads Information Office

During the Crusades many knights banded together in societies, some of which became rich and powerful. One society, the Teutonic Knights, secured land along the Baltic Sea after the Crusades were over. Here the society ruled as a king would rule. The knights made laws and saw that the laws were obeyed. At Marienburg, Germany, they built this huge castle where their members lived almost as monks in a monastery.

XVIII. THE GROWTH OF NATIONS UNDER STRONG KINGS

How Nations Began in Feudal Europe

WHEN we think of Europe today, the names of nations like Germany, France, Belgium, England, Spain, and Italy come to mind. As we have followed the story of that continent, we have seen that these great nations did not always exist. In fact, several of the present European nations are not much older than you are!

Turn to page 289 and look at the map of Europe in the year 1360. See how many of today's nations you can find. Here and there you will see a familiar name, but the boundaries will seem strange when you compare them with those on the map of Europe today on page 230. You will see that the beginnings of some modern nations go back to this time, and you already know that the beginnings of others go back even farther. For example, Clovis and Charlemagne, you remember, began to make the Franks into a nation at the very beginning of the Middle Ages. By the end of the Middle Ages France, England, Spain, Portugal, Norway, Sweden, and Denmark had become nations with strong governments. The rest of Europe, however, was still in a state of confusion. It was split up into many little kingdoms and dukedoms.

One of the reasons for this confusion was that the people were trying to work out a better form of government than the feudal system. During the feudal period each lord had ruled his own estate. Later, as some of the lords became more powerful and had larger areas to govern, laws had to be worked out for a much greater population. The rules that managed a feudal estate had to be replaced by laws that could govern a whole nation.

You see, then, that in countries where one lord could become very powerful and rule a great area, a nation could be born. But in regions where several lords were always fighting, the people could not unite under one strong rule and one set of good laws.

How the English Became a Nation

When we left the story of England, the country had been invaded by the Normans under William the Conqueror. The Conqueror was a good king for the English people. He wisely allowed the people to keep their county courts and to take part in their local government. But he kept control of affairs by appointing sheriffs who had authority over both the lords and the common people.

Loyalty to the king. William did another thing that made him a strong king. In the story of the feudal system you read how the people swore loyalty to their lord, and the lord swore loyalty to the lord above him, and so on up to the king. When it worked, the system kept the country in order. But suppose a king called his lords, and one of them decided that he wouldn't keep his oath of loyalty. All the men under that lord would stay at home and refuse to fight for their king. Why should they fight? They had not sworn to be loyal to the king, but only to their feudal lord.

William solved that problem by making everyone swear an oath of loyalty to the king. This was a very clever thing to do, because after that the common people would support the king instead of their lord.

New laws and justice for the people. William's grandson, Henry II, was also a strong king. He was freckle-faced and bow-legged, and he had a terrific temper, but he ruled according to the law. When the lords fought with one another, Henry took away their castles and put an end to their warfare. He compelled everybody to obey the laws, lords as well as common people. The greatest thing he did was to make a regular system of law and justice for the English people.

The king's judges presided over courts which Henry established in every county of England. In the cases that came up before them these judges decided what the law was. These laws and decisions of the judges came to be called the English common law. Many of our laws are taken from the English law.

We have juries in our courts, too, like the juries that decided cases in the English

This picture shows how the dress of the English people changed. At the time of William the Conqueror men wore cloaks and tunics like those on the man at the left. Women dressed like the second figure. Notice the cloth, called a wimple, wound about her head. The third figure is a Crusader wearing a surcoat over his mail. It protected the armor from the scorching sun. Next are a woman and man of the days of King John. The man is wearing a surcoat over his long gown.

county courts. You will remember that this idea of a jury was even older than feudal times. Charlemagne had something like a jury in his courts.

Henry spread his power from England to the Continent, for he was not only king of England but also feudal lord of many great estates in France. At this time it looked as if the English king might become ruler over most of France.

A king disobeys the law. Henry's son Richard was the famous leader of the Third Crusade. After Richard died, his brother John became king. John was quarrelsome and a bad ruler. He was one of the most unpopular kings who ever ruled England.

John quarreled with the Pope because each wanted a different man to be Archbishop of Canterbury. The king lost. He quarreled with the French and lost Normandy, which had belonged to William the Conqueror. He also lost many of the other French estates that the English king had owned. Worst of all, he quarreled constantly with his own nobles.

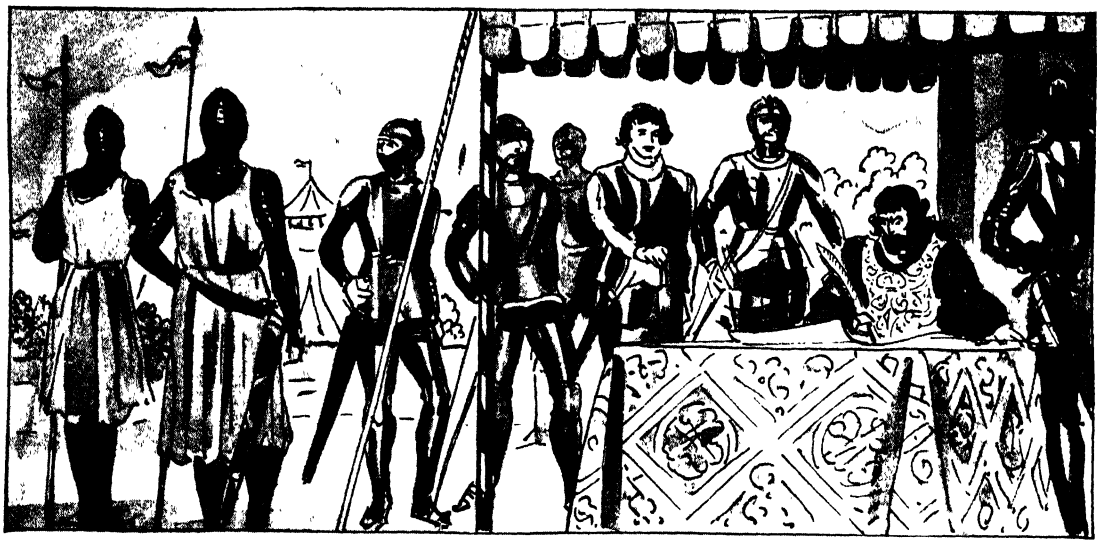
John did not want to rule according to the law. Anyone who objected to his tyranny was thrown into prison without a trial. The nobles began to fear that they would lose all their rights, and so they revolted.

Magna Carta and the people's rights. In 1215 the nobles wanted John to sign a pledge that he would rule justly and according to law. This pledge contained a list of rights that the king promised he would respect. John was very angry, you may be sure. "Why do you not ask me for my kingdom?" he screamed in a great rage. But King John was not strong enough to hold out against all the nobles. Finally he signed.

The pledge that King John signed was an agreement to give prompt justice to every man. He promised that no freeman would be imprisoned or outlawed unless a jury declared him guilty. And he agreed not to collect any new taxes unless the lords consented.

This agreement is known as Magna Carta, or the Great Charter. It is perhaps the most important statement of the people's rights in the history of English government. It is im-

About 1300, men wore clothes like those at the left. The overcoat had wide sleeves and a hood. Under it was a belted gown. Women wore cloaks, and gowns with tight waists and sleeves. The seated man is a peasant. He wears a leather hood, a cloak lined with leather, and a woolen tunic. By 1500 the English were wearing quite elaborate clothes, as you can see by the last two figures. Women wore jeweled caps, and over them a wire framework covered with very thin linen.



The army of the rebellious nobles met King John at Runnymede. The king realized that he would be defeated if there was a battle; so he agreed to the demands of the nobles. They wrote out what they wanted, and John signed his name to the paper which has since been called the Great Charter. In Latin it is "Magna Carta." In this way the English people insisted that their king keep the law.

portant because in it the king admitted that he had to obey the law, just as his subjects obeyed it. In many countries the kings made all the laws and felt that they could break any of the laws whenever they pleased. They thought they were *above* the law; while the English people insisted that their king was *under* the law.

John tried several times to avoid keeping his promises, and so did other English kings. But the English people insisted on the rights that were in the Great Charter and were ready to fight for them if necessary. After 1215 no English king was able to deprive the English people of these rights for any long period of time. Later the people gained still more rights, but the Great Charter was the beginning of liberty for English people everywhere. Some of the rights written into the charter are also in the Constitution of the United States.

The beginning of Parliament. John's son, Henry III, also wanted to rule as he pleased, although he was a much wiser man than John. Like his father, he had constant trouble with the nobles. Out of this trouble grew something very important—something that was a long step forward in the struggle of the people to have a real share in their government.

Do you remember that in Anglo-Saxon times the English king had a council of wise men? This council had a good deal of power, for it selected the king and advised him about important matters. William the Conqueror thought the council a good idea and kept it. The council was made up of nobles and king's officers from all parts of the country.

While Henry III was at war against some of his nobles, a great English leader named Simon de Montfort decided to call a meeting of this council. Simon wanted all classes of people to take part in this meeting. So he not only called the nobles together, but asked people from the country and towns to come also. Each county sent two knights, and each town sent two citizens.

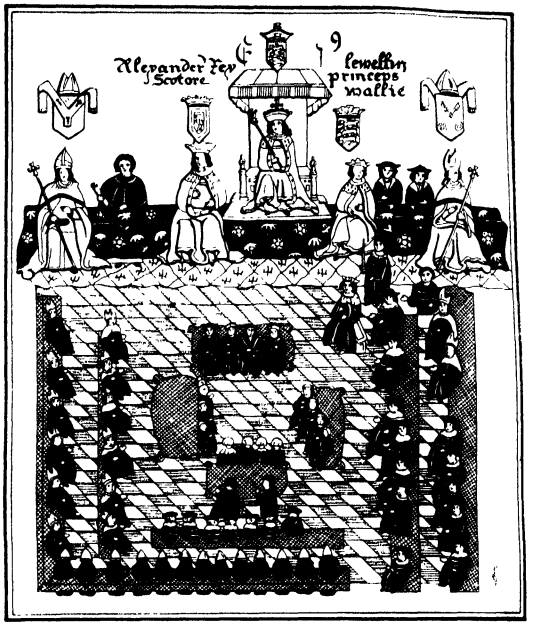
This group of men demanded the right to help make the laws. They became known as the Parliament. The knights from the country and the citizens from the towns were not

rich men like the nobles who owned vast estates. They were what we should call "middle-class" people, neither very poor nor very rich. In this way the English people began to have a share in making their laws, for the people themselves selected the knights and citizens who belonged to Parliament.

At first Parliament decided only what taxes the people should pay and whether or not it would accept the laws that the king made. But later Parliament made all the laws that governed England.

How Parliament became divided. The knights from the country and the men from the towns soon found out that their ideas were not the same as those of the lords and

When William the Conqueror became king of England he owned much land in France. Nobles in other parts of France besides Normandy acknowledged him as their feudal lord. You see, then, how the English kings governed land in both France and England.



Courtesy Book House for Children

This old picture shows a meeting of Parliament at the time of Edward I in the year 1295. The Saxons called such a meeting the "Witenagemot." The Normans first called it a Parliament. Seated with the King of England, but on lower seats, are the Prince of Wales, the King of Scotland, and two bishops.

bishops, who were also members of Parliament. It was not long before the men representing the people decided to meet by themselves. From then on Parliament was divided into two "houses." The nobles and bishops, who were made members of Parliament by the king, sat in the House of Lords. The knights and citizens of the towns, who were elected by the people, sat in the House of Commons.

By this time, as you know, the feudal system was slowly dying out. A system in which the nobles did all the ruling no longer met the needs of the people. When the English people began to select representatives to make the laws, another blow was struck at feudalism.

This idea of letting the people elect men to represent them and to help make laws was something new. The Romans had not thought of it. The Greeks had never tried it. It

Metropolitan Museum of Art

A French artist carved this hunting scene on an ivory mirror cover about the year 1350. A knight and a lady are riding along, followed by an attendant blowing his horn. Hawks, or falcons, are perched on the gloved hands of the hunters. Hawks were used to hunt small birds and rabbits.

worked very well for the English, and many countries have copied the idea.

We use the same system in our country, but we elect all the law-makers. Our Congress, which makes laws for the whole country, is composed of two parts, like the English Parliament. One part is called the Senate, and the other is called the House of Representatives. Both parts represent all the people, for we have no lords in the United States. Our states also have groups of men to make laws. These law-making bodies are generally separated into two groups, too. You see, we use the same idea as the English, of electing representatives to make laws for us. Then, if we do not like the laws, we can elect other men who will give us the right kind of laws.

How Edward III tried to be king of France. You have read that King John lost some of the French estates that had belonged to his father and other English kings ever since the days of William of Normandy. At one time the English kings held more than half of France. From your reading about the feudal system, do you remember how it would be possible for a man to be king of England and yet be a vassal of the king of France? To own land in France, the English king had to swear loyalty to the French king.

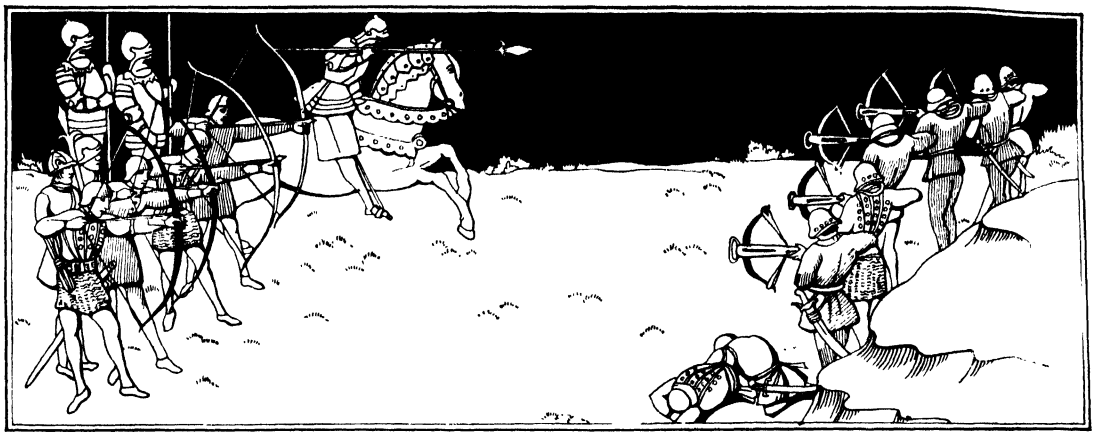
When Edward III became king of England, he did not want to be a vassal of the French king. He wanted to get back the lands that John had lost and win some new sections, too. Edward even claimed that he had a right to the throne of France. Of course, the French would not allow him to become their king without a struggle, and so the two countries were plunged into a long war. It was simply another case of feudal lords fighting against each other. The fighting would go on for years, die out, then start again. It was called the Hundred Years' War.

How France Became a Nation

From barbarism to feudalism. Suppose for a moment we run back through the centuries to refresh our memories about France.

Metropolitan Museum of Art

This scene is carved in ivory on a mirror cover made by a French artist about the year 1350. It shows a nobleman's son playing chess with a lady. At that time it was thought more important for a rich young man to be able to play games and to be a good fighter than to know how to read or write.



Courtesy Book House for Children

The crossbows, which the French soldiers at the right are using, could be shot somewhat like guns, but it took too much time to pull the string back and fit an arrow into the slot. The English archers used very stout bows, called "longbows," and could shoot much faster with them than with crossbows. An arrow from a longbow could be shot through a suit of armor.

It was one of the first of the European nations to become established. When Julius Caesar conquered the barbarians who lived in the region we now call France, the country was known as Gaul. Gaul became a province of the Roman Empire. After the invasions by the Teutonic tribes, Gaul was divided into many little kingdoms ruled over by barbarian chiefs. One of the Teutonic tribes was the Franks, and their leader was a chief named Clovis. He conquered many of the other rulers and became the first great man among the Frankish kings.

Then came the empire of Charlemagne, the first strong government that followed the Romans in this region. During the reign of the kings who came after Charlemagne, feudalism developed. For hundreds of years there were no kings strong enough to hold a large empire together.

By about the year 1000 there were many powerful lords ruling vast feudal estates in Normandy, Flanders, Brittany, Burgundy, and France. You may see by the map on page 293 where those great feudal estates were located. At that time France included only the region about Paris. Notice the many other little kingdoms that surrounded it.

French kings become powerful. One of the strong lords was Hugh Capet, Duke of France. In 987 Hugh Capet was elected king of the Gauls, Bretons, Normans, Aquitanians, Goths, Gascons, and Spaniards. All of these peoples, except the Spaniards, lived in the land we now call France. Capet and later members of his family kept the rule of this region for three hundred years.

Gradually the king of France became the most powerful ruler in this part of Europe. He subdued the other lords, one by one, and made them his vassals. At last the king of France governed most of the land within the boundaries of modern France.

But the English king, Edward III, was Duke of Gascony in France, and claimed other French lands, too. He was unwilling to be a vassal of the French king, and made up his mind to conquer more French land.

The Hundred Years' War. The fighting began in 1336. It did not go on continuously for a hundred years, but during this long time neither country could gain a final victory. At last, in 1429, it looked as if the English would win. Their armies held northern and western France, including Paris. They also held Reims, the city where the French kings were

usually crowned. At the same time they were besieging the city of Orleans. If Orleans should fall, the French would be badly defeated.

The unhappy French people were in a desperate position. They did not have any strong leader. The old king had died, and his young son Charles, the Dauphin (as young French princes were called), had not yet been crowned king. The French lords were quarreling among themselves. Some wanted Charles to be king; others wanted to put on the throne one of the powerful feudal lords from another part of the country.

A peasant girl and her vision. Then something happened that seemed like a miracle. In the little village of Domremy, near the Vosges Mountains in eastern France, lived a peasant girl—Joan of Arc. She was only eighteen years old, but she had heard her father talk with other villagers about the troubles of France. She had seen men go to war and had seen some of them come back wounded, and she knew that many others never came back. She had heard how the English soldiers were taking French property; and in the village church she had heard the people praying for France.

One day as she was spinning, she thought she heard a voice that said: "You, Joan, are the maid who is to save France." At first she was frightened. But the voice seemed to call her again and again: "Joan, go to the King of France and ask him for an army. With this army you shall free Orleans."

When she told her parents about the voice, they were angry. They told her she had been dreaming. But Joan felt that she had not been dreaming. At last she was taken to see Charles, the Dauphin.

Now the young maid had never seen the Dauphin, and he stood among the crowd of his followers without any mark to show that he was the king's son. But Joan went directly to Charles and knelt before him, saying: "You and you only are the Dauphin."

Joan, savior of France. The French decided that Joan should lead the army. The Dauphin gave her a white horse, a suit of bright armor, and a white banner. So great was the young girl's faith in her mission to save her country that all the French soldiers

Joan of Arc led the army of the French prince against the English who occupied a large part of France. Other leaders had failed against the English soldiers, but Joan gave the French new courage, and the English were driven away from the city of Orleans, which they had been besieging.

believed she had been sent to them as a heavenly leader. They were willing to follow her anywhere.

With banner flying, Joan led the army to Orleans, where she attacked the English troops. Once Joan was wounded and fell from her horse. But she plucked the arrow from her wound, remounted, and led her troops to victory. Three more times Joan led her men against the English. In the fourth battle the English invaders were driven from Orleans.

Joan then led her soldiers to Reims, and there the Dauphin was crowned Charles VII of France. After that, Joan wanted to return to her home, for she felt that her work was done. But so great was the enthusiasm of the French for their brave leader that Charles would not let her go.

A tragic betrayal. When Joan led the troops into battle again, she was badly wounded. Later she was captured by a French duke who was jealous of her great influence over the soldiers. This duke sold his prisoner to the English for ten thousand dollars.

The brave girl was taken to Rouen, where she was tried as a witch and condemned to be burned at the stake. The King of France was so ungrateful and so cowardly that he would do nothing to help the young maid who had saved his kingdom. When Joan was put to death, many of the English soldiers cried out: "We have burned a saint!"

What victory did for France. Although Joan of Arc did not drive the English army out of France, she had given the French people new courage. A few years later the English were driven out, and the long struggle ended in a complete French victory.

It was the Hundred Years' War that finally made the French people into a nation. Fighting together, side by side, had made the men from the different parts of France realize that they all belonged together. In rallying together to save their country from invasion, they showed their loyalty to their whole country. The French king, Charles VII, became ruler of all France. The map on page 290 shows you the lands of his kingdom at this time (1453).

In the year 1360 the French king made a treaty with the English king, who gave up his claim to the French throne. At that time the map of Europe looked like this. Turn to the map on pages 230-231 and see where the boundaries of the countries are today? Notice the lands along the Baltic which were held by a society of German knights. Do you see any kingdoms that do not exist today?

The Golden Age of France. The reign of Charles VII was known as the Golden Age of France. Charles became so proud of his power that he tried to conquer Italy. He failed in that attempt, but the invasion of Italy did a great deal to help French civilization.

For a long time Italy had been the home of many famous artists and scholars, just as Athens and ancient Rome had previously been. When the French invaded the peninsula, they were much impressed by what they found. Some of the Italian artists, builders, and scholars went with the army when it returned to France. Others were later hired to come and work in France. Paris became not only the largest city in the world, but one of the most beautiful.

Royal courts and families of Europe. As the kings of Europe became richer and more powerful, they built great palaces where they

French Tourist Information Offic

This great chateau, or castle, of Chambord, France, was built in the fifteenth century. It contains over four hundred rooms. Can you see how building had improved when you compare this with pictures of earlier castles, such as those on pages 228 and 238?

held their courts and lived in splendor. These courts became famous for the lords and ladies who dressed in silks and laces and who shared the festivities of the royal families. They went hunting with the king, danced at his stately balls, and feasted with him at great banquets. At first the common people were rather proud of this rich display, but later they came to realize that all the people paid for it with heavy taxes.

You will notice that from this time on, the rulers in Europe are often called by the names of their families or "houses." In France the family of Hugh Capet ruled, and after that the Valois family. Then came the Bourbon family. We speak of these families as the "House of Valois" and the "House of Bourbon." In England the families who ruled were the Plantagenets, the Lancasters, the Yorks, the Tudors, and the Stuarts.

While these royal families were dazzling the people with their splendid courts, other families in different parts of Europe were becoming important, too. Royal "houses" were growing up in Spain, Portugal, Germany, Austria, and Hungary, as well as in the northern countries.

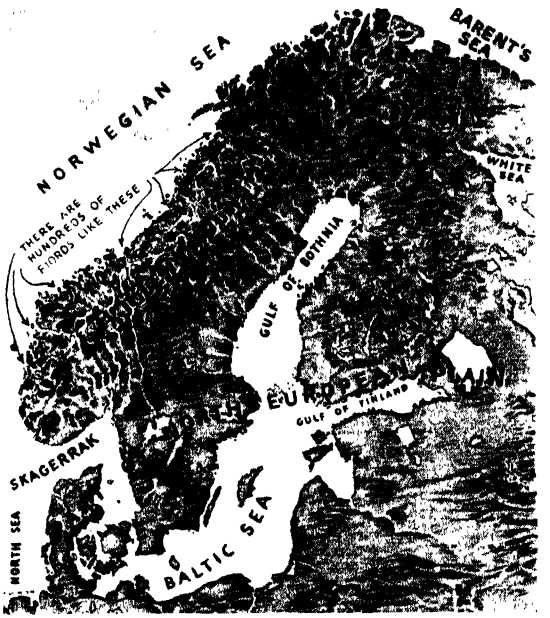
Spain and Portugal

Spain and Portugal became nations at about the time of Columbus. Turn back to pages 148-160 if you need to review the earlier history of this peninsula, which faces both the Atlantic Ocean and the Mediterranean Sea. The people living along these coasts played an important part in the story that is to come. You will see in a later chapter how they helped civilization along. Like the Phoenicians many centuries before, they became daring explorers and sailors. Their exploits may remind you of the bold Vikings, who also sailed out looking for new lands.

The Vikings

The roving Northmen and their home. Perhaps this will be a good place to see what the Northmen were doing during all these centuries. First, let us look at the map on page 291 and notice the two peninsulas where

The French kings grew stronger after the time of Joan of Arc, and finally the English were driven out of all France except the city of Calais, across the English Channel from Dover. The Duke of Burgundy still held large parts of France and did not acknowledge the king of France as his overlord. Notice the Holy Roman Empire, which extended far into Germany. Venice was an independent city which ruled land along the Adriatic Sea. Find the lands which belonged to the Church and not to the Empire.



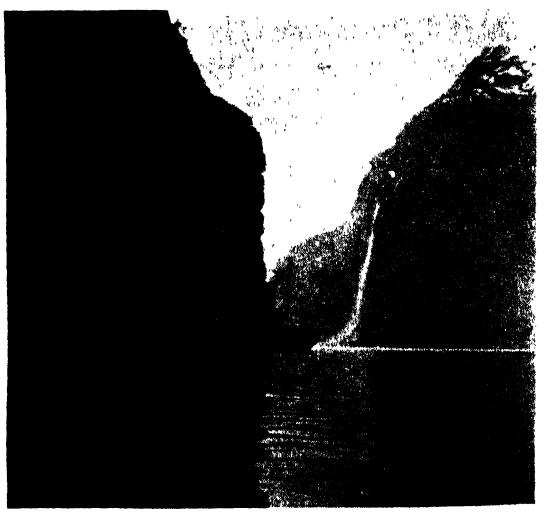
Notice how part of the Scandinavian Peninsula is low land like the North European Plain. The many lakes, large and small, which you see on this map were left when the great glacier melted. On the coast of Norway see how some of the fiords run far inland, and how hundreds of islands dot the coast line and protect the fiords from heavy gales.

the Northmen lived. Today these lands make up the kingdoms of Norway, Sweden, and Denmark. We have read, in the story of England, how people from this region invaded England and helped to found the English nation. We have also read how Northmen, or Vikings, became famous seamen, visiting many lands to plunder, to trade, or to settle. Hardy adventurers from these tribes settled down in England, in Russia, in France, and in other countries. We have seen how they became a part of the peoples of those countries. But what about their homeland—the peninsulas to the north? Their land was slowly becoming civilized like the rest of Europe.

Centuries of violent strife. The Northmen loved fighting more, perhaps, than any of the other Teutonic peoples. The story of these tribesmen is one of constant wars for hundreds of years. Warring peoples do not have time to settle down and become very highly civilized. The Church had a hard time in reaching these fierce tribes, and most of them were still pagans in the year 1000. There were few churches throughout the northern land, but there were many splendid castles built by the lords and barons. These tell us that the feudal system, with its lords and vassals and serfs, had reached the north countries.

Sometimes a strong king would rise to power and bring most of the tribes in the two peninsulas under his rule. But the peoples were never content to stay under one central government. There would be a sudden rebellion, and the peoples would split up again into small kingdoms.

The three divisions of the Northland. If you look at the map on this page, you will find another good reason for this split. It will explain why the region of the Northmen is separated today into the three kingdoms of Norway, Sweden, and Denmark. Although these three peoples were the Northmen, they were separated by mountains and sea. This made it natural for them to become three dif-



The coast of Norway is indented by many fiords such as the one you see in this picture. Usually rocky cliffs rise steeply from the water's edge. Here and there are narrow valleys or shelves of land where there is enough soil for farming. You can see that even a large country could not support many people.

ferent nations. But their languages are much alike, and they have interests in common.

Look at the high mountain-range running down the Scandinavian Peninsula. On one side is Norway, a country made up almost entirely of mountains. Centuries ago, in the time we call the Ice Age, only the tops of these mountains showed above the great ice-sheet that covered much of northern Europe. As the ice-sheet, or glacier, pushed down the mountain valleys toward the sea, it gouged the valleys deeper and deeper. When the ice finally melted away, the sea filled the valleys.

The sea-filled valleys of Norway are called fiords. Norway is said to have a "fiorded coast," and there are few other places in the world like it.

Naturally, these fiords, or protected inlets of the sea, led the Norwegian people to become fishermen. That part of the North Sea is one of the best fishing-grounds of the world. Do you remember how the many inlets along the coast of Greece led the ancient Greeks to a life on the sea?

On the other side of the range of mountains, facing the Baltic Sea, is Sweden. A look at the map shows you that Sweden has more level land. The Swedes therefore became largely a nation of farmers. Some of those who lived in the mountains became miners, while others cut wood in the forests and made charcoal with which to smelt iron and other metals.

Denmark is separated from Norway and Sweden by a stretch of water. The ice-sheet had once spread southward over Denmark and far into Germany. But instead of gouging out deep valleys, as in Norway and in the mountains of Sweden, the melting ice spread a mantle of sand and soil over Denmark. As this sandy soil made good farm-land when fertilized, it was natural for the Danish people to become a nation of farmers.

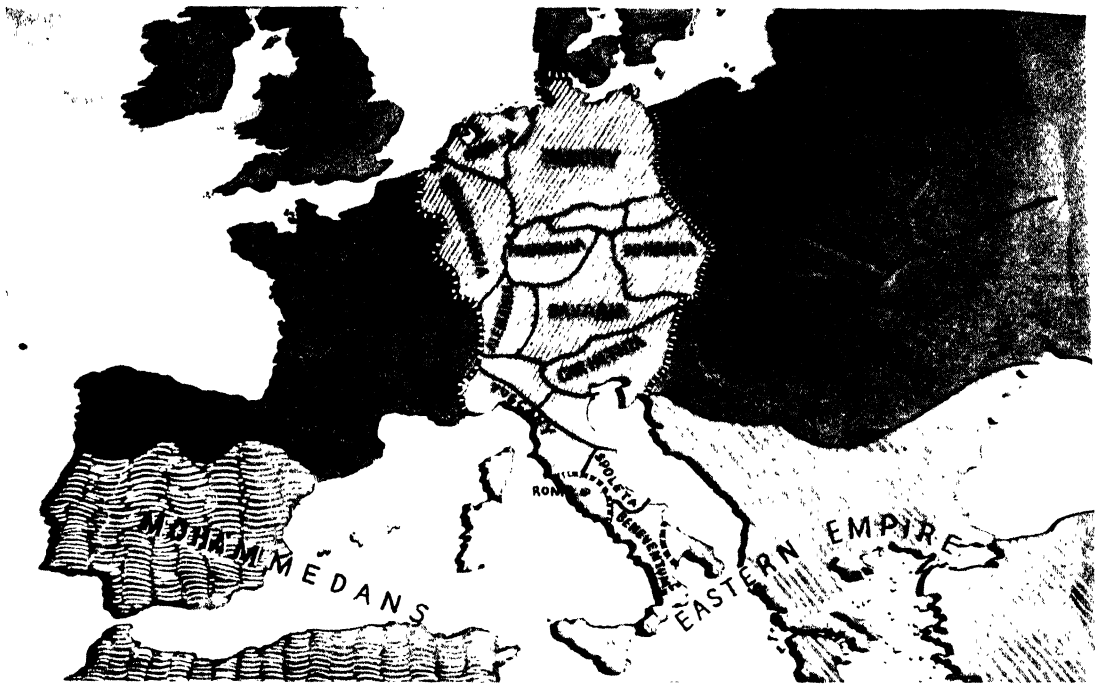
These three peoples are now independent and separate nations. Their history has been an exciting one, but for a century now they have kept out of the wars fought by the other countries of Europe. As a result the people are happy and prosperous.

Peoples Who Were Not United into Nations

Not all of the peoples who lived in Europe became nations during this period we are now studying. Some of them did not have strong rulers to unite them; others suffered from wars and invasions which prevented them from joining together.

The Germans and their land. Those tribes of Teutons who had stayed in their homes by

A noble traveler in 1550 used a horse-drawn litter like this. It could not have been very comfortable, but it was better than a cart without springs. This noble has an armed body-guard with him. By this time, you see, heavy armor had been discarded. The men are carrying pikes and swords.



At the time of the Emperor Otto, before the year 1000 A.D., Europe was divided into many small kingdoms. Notice on this map the different kingdoms which made up Otto's empire, which is the shaded region in the center of the map. At the right is the Eastern, or Byzantine, Empire. At the south is the great empire of the Mohammedans. West of Otto's empire were many little kingdoms, duchies, and counties of France. Remember that each ruler of each little kingdom and duchy worked and schemed to become ruler of other kingdoms also. No wonder there were many wars and many changes on the map as these kings fought each other in order to obtain more land and more power.

the Rhine, Elbe, and Oder rivers came to be known as the German people. Today their land is called Germany, one of the most important countries of Europe. You will remember that Charlemagne's empire of the Franks included a part of Germany. But after Charlemagne died, his kingdom was split up and became weak. Charlemagne had divided his empire into districts like states or counties. Over these counties he had appointed counts. The counts were like the Teutonic chiefs of olden times, who were so independent that they would obey no ruler. For many years after Charlemagne's death the counts managed affairs to suit themselves. They had a king, and when the king died, they met together and elected another; but they generally paid little attention to the rule of the king.

Otto and his empire. Just before the year 1000, the counts and the bishops, who also owned much land, met and elected Otto, the Saxon count, as their king. Otto had an idea that he could make an empire like that of Charlemagne. He had a hard time, but he managed to keep the counts in order and to unite the German people into one kingdom. Then Otto went into Italy, where the Pope was having trouble with the Italian nobles. The Pope crowned him Emperor of the Holy Roman Empire. But Otto was not able to unite Italy under his rule.

Do you see how this idea of the Roman Empire was kept alive? The old empire had been so powerful that for many centuries kings dreamed of establishing it once more. The very word Roman seemed to attract them, and they kept the name alive, even

Courtesy Book House for Children

This picture from an old manuscript shows the Pope crowning the emperor of the Holy Roman Empire. Beside the emperor stand the seven nobles who were called "electors." They were rulers of parts of the empire and selected the man who was to be emperor. There were frequent quarrels between the electors when the time came to choose a new emperor, because often they could not agree. For many years no emperor was powerful enough to keep the rule in his family or to say who should be emperor after him.

though the attempts to build a real empire often ended in failure.

Otto ruled from northern Italy to the North and Baltic seas. As you see by the map on page 293, his kingdom included both sides of the Alps. It was more nearly united than it had been since Charlemagne's time, but there was constant trouble with powerful nobles who objected to Otto's rule.

How German nobles became powerful. For about six hundred years after Otto's time the king of the German people was also ruler of the Holy Roman Empire. But during the last three hundred years of this period, the emperor had very little power. The emperors had to spend much of their time in Italy, quieting trouble there. Meanwhile the German nobles ruled their own counties about as they pleased.

After the Crusades many of these feudal nobles took the title of king. Probably it pleased their vanity more to be called "king" than to be known just as "count" or "duke." In this way the German people became divided into nearly two hundred little groups or kingdoms, each with its king, prince, duke, or count at the head.

Two ruling families. One of the strongest of the ruling families among these German states, or kingdoms, was the great house of Habsburg. When Rudolph of Habsburg was elected king of Germany in 1273, he made his son duke of Austria. For nearly seven hundred years, until the World War of 1914-1918, some member of the Habsburg family held the throne of Austria. For a long period the Habsburgs also ruled Germany. You can see that this royal family was a very powerful one.

At the same time that the Habsburgs were ruling in Germany and Austria, another family was slowly becoming stronger in Germany. It was the house of Hohenzollern. For many centuries the Hohenzollerns were rulers of small estates, but gradually they became powerful and seized the rule of all Germany.

Quarreling kings and nobles. The German kingdoms were always quarreling among themselves. The Germans did not think of themselves as one people, but as Austrians, Bavarians, Saxons, Hessians, Prussians, or as citizens of some other small division within the country. Look at the map on page 293 and see how many different little kingdoms and dukedoms there were in Germany at this time.

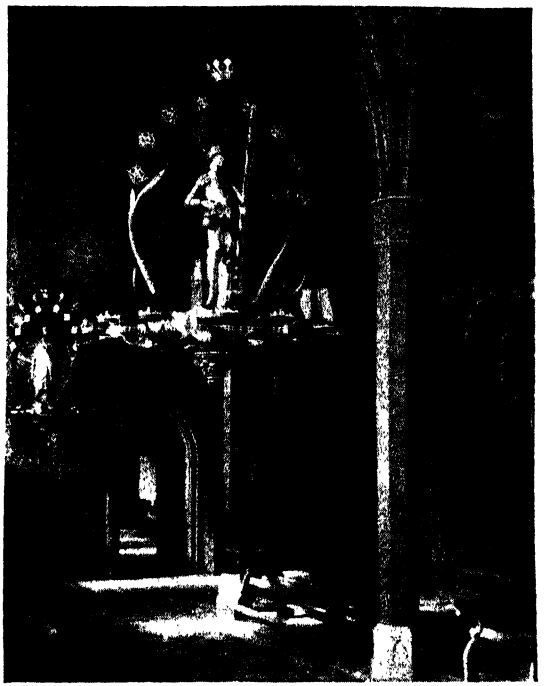
Although a part of Europe was called the Holy Roman Empire, it was not ruled by the

wise laws of the ancient Romans. Instead it was ruled by feudal lords who made their own laws. No emperor could hope to keep them all in order.

Notice on the map, also, how many different kinds of country the emperor had to rule. His empire was a slice of Europe from north to south. It included the shores of northern seas and the plains of Europe; the highlands of central Europe and the mighty Alps; the Po Valley and the shores of the Mediterranean.

Eastern Europe

More barbarian invasions. We have constantly been reading of civilized lands that were invaded by barbarians. During this period there were invasions of Europe by fierce tribes from Asia. Luckily these invaders did not reach the new centers of civilization. The Turks who captured the Holy Land and fought the Crusaders had come into Europe out of Asia. Later another tribe of Turks from Asia captured Constantinople.



Courtesy German Railroads Information Office

In the Marienburg was a hospital for the German Knights. This picture shows the dining-room of the hospital. Notice the chandeliers decorated with carved figures and antlers. They are hung on chains so that candles could be put in and lighted easily. You can see that people were living more comfortably at the time when this great castle was built.

Metropolitan Museum of Art

This picture shows a banquet scene in the later part of the Middle Ages. The emperor is greeting a group of "mummers." Mumming was dressing up in costumes with masks or animal faces. The mummers often acted plays to entertain the guests. Notice how the tables are arranged. At the table in the foreground stand the musicians. Can you name any instruments?

For more than two hundred years the Turks kept moving westward. Little by little they spread over the Balkan Peninsula and up the river valleys. Finally it seemed as though they would conquer all Europe. But in 1683 they were turned back in defeat near Vienna. That ended the power of the Turks in Europe. Little by little the Turks lost their conquered lands. Now there is only a small corner of Europe left in their hands.

The Turks were not the only Asiatic invaders of Europe during this period at the end of the Middle Ages. Without warning, a great horde of Mongols called Tatars, or Tartars, came riding out of Asia. Their

Here you see how far into Europe the Ottoman Turks pushed their way. The light lines show the boundaries of today's European countries. What countries of today did the Turks once rule? What two peoples of Europe had to fight back the Turks and keep them out of the rest of Europe? Turn to the map on pages 230-231 and see how much territory in Europe the Turks now possess.

leader was the great Genghis Khan. Killing and plundering, these wild horsemen swept over the eastern part of Europe. A glance at the map on page 297 will give you an idea of the enormous district conquered by these Tatars. It was centuries before the countries that they visited recovered, for the Tatar wished only to plunder and slay.

The story of eastern Europe is different in many ways from that of western Europe. In the first place, the people were not closely related to those we have been talking about—the Greeks, Romans, and Teutons. Then, too, the country had something to do with the story. Suppose we see what the land itself is like.

Plains and highlands of eastern Europe. The great plain of north Germany stretches eastward a great distance across Europe. Most of the countries of eastern Europe are on this great plain—Russia, Estonia, Latvia, Lithuania, Poland. Find them on the map on page 300.

The highlands of central Europe stretch eastward, too. Just south of them rise the Carpathian Mountains. Notice how this mountain-range curves around the plain of Hungary. Czechoslovakia is almost entirely a highland country. There is a big knot of Carpathian highlands in the middle of Romania, but the plains around them make up one of the most fertile garden spots of Europe. South of Hungary is Yugoslavia, whose mountains reach down into the Balkan Peninsula.

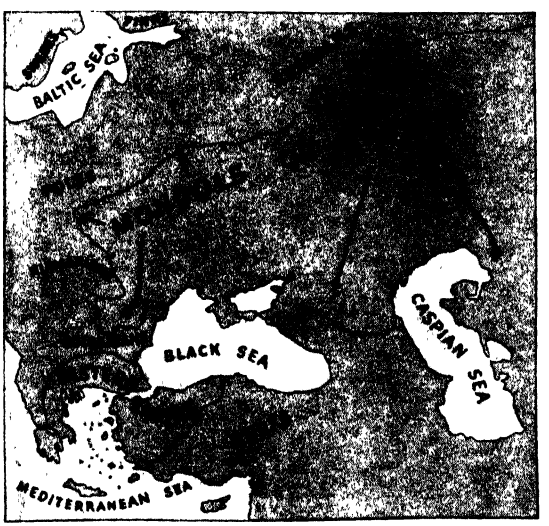
The Slavic peoples. The people of eastern Europe are mostly Slavs. Their ancestors were related to ancestors of the barbarians who settled in Greece, Italy, and Germany. We might say they were distant cousins. At some time in the past, ancestors of all these peoples spoke languages very much alike.

For a long time the home of the Slavs was in the river valleys north and east of the Carpathian Mountains, mostly in what is now Poland. We know that the Slavs were living there in the time of Julius Caesar. The land

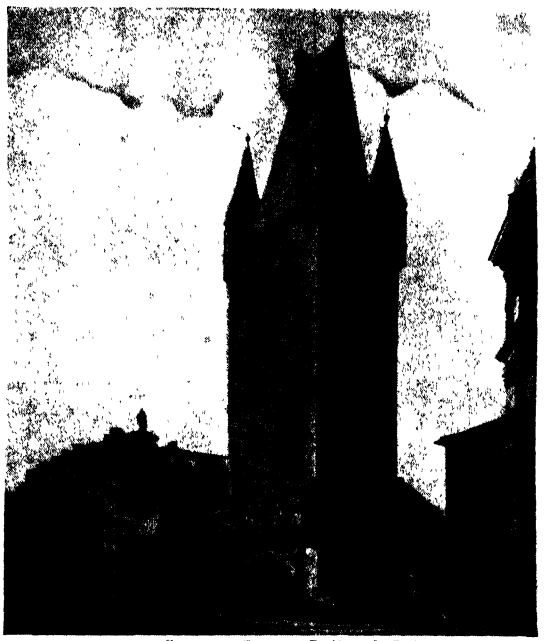
was good, and the number of Slavs grew. By the time of Charlemagne they had spread out over a great deal of territory. They spread southward until they reached the shores of the Adriatic. They could not spread very far to the west because that part of the country was full of fierce Teutonic tribes. But they could spread to the north and east, into what are now Poland and Russia.

Poland—an unprotected kingdom. Look at the map, and you will see one of the reasons why it was hard to establish a strong kingdom of Poland. There are few natural boundaries to protect such a kingdom. On the east and north and west are plains or low highlands. Only on the south is there a good wall, the Carpathian Mountains.

At one time Poland was one of the largest countries of Europe. Long after the Middle Ages there were huge feudal estates in Poland. One great section of it was held by knights who were invited into the country after the Crusades. But wars were constant, and each of the three nations which hemmed in Poland—Russia, Germany, and Austria—took a slice of Poland's land. In 1795, while George Washington was President of the United States, Poland disappeared from the map as a separate nation. How it became a nation again belongs to a later story and another chapter.



This map shows where different peoples were living in Europe at the time when the Mongols invaded Russia. One of the Mongol tribes was the Tatar, or Tartar, tribe, and the Europeans often called all the Mongols by that name. Notice the places where the invaders forced the European peoples out of their lands. For nearly two hundred years the Mongols ruled much of the territory outlined on this map. They followed the shores of the Caspian Sea and entered Persia and then Mesopotamia, where they destroyed cities and irrigation works.



Courtesy German Railroads Information Office

In early days the feudal lords did not permit anyone to build towers as high as the castle walls. When the lords needed money, sometimes citizens of the towns were able to buy the right to erect any kind of building they wished. Many towns were proud of their towers, for the towers showed that the citizens had become independent of the lord.

Russia's beginning. But what of the people on the great plain that stretched farther and farther to the east? Do you remember Rurik and his companions? These Northmen, on one of their trading expeditions, pushed southward into the Russian plain, following the rivers as far as the plain of Muscovy. The story is that Rurik was asked to come and help keep order. But whether he was invited into Russia or just happened to

The Bettmann Collection

This picture, drawn more than four hundred years ago, shows two workmen making coins. One is hammering out thin bars, while the other is stamping pieces into coins. They are being watched by the officials, who must see that all coins are full weight.

go there, Rurik became powerful. We know that sometime between the years 800 and 900 the Slavs in this region were being ruled by a few Vikings. Our word "Russian" comes from a word describing these Northmen. *Russ* means an oarsman or rower of a boat. The first capital of the "rowers," or Russians, was at Kiev, on a height 300 feet above the Dnieper River where its great tributaries come together.

The river towns which the Northmen established in Russia for trading were not well protected. Roving bands of barbarian horsemen from Asia kept attacking the peaceable Slavs, very much as Indians attacked our settlers on the Great Plains west of the Mississippi. Naturally the Slavs sought refuge in the swamps and forests, of which there were many. Here they were safe, for the mounted bandits were accustomed to treeless plains and were afraid of forests. And so, in the forests and marshes about Moskva, the Russians established themselves. There the huge Russian nation, a Slavic people, had its beginning.

The Volga—cradle of the Russian people. As the Russian people grew stronger, their settlements gradually spread out from the marshes, always along the river valleys. Only along the streams was travel possible in the enormous extent of the great plains. The Volga, with its winding course of more than 2500 miles, is the longest river in Europe. For many centuries it has been the cradle of the Russian people. For more than two hundred years Russian life centered along this stream. It held the people together in one group or nation, just as the Mississippi River held the American pioneers in the early days of their western settlement.

The Cossacks. Some ancient kingdoms built walls about them for protection. But the kingdom of Muscovy, as part of Russia was called, did not need to build a wall. Russians could use the tribes of Cossacks, instead. Who were the Cossacks?

Let us go back a moment to the invasion of the terrible Tatars under Genghis Khan. These Tatars overran Russia for more than two centuries. Finally they were driven out. In the borderlands they left behind them tribes of hardy people who were a curious mixture. Some were Tatars, others were runaway serfs, thieves, and men who had been badly treated in the countries of western Europe. They were a queer people—wild, brave, savage, and lawless—but they were free men and loved to fight.

The border Cossacks made a barrier between the barbarians of Asia on the east and

The story is told that Peter the Great had soldiers placed at the gates of the Russian cities to cut short the clothes of all who entered the city. The Europeans wore coats that came to the knees in Peter's time; so he had his soldiers snip off the long coats and robes of the Russians at their knees.

the feudal Russian farms on the west. And so the Russian farmers had a chance to grow in numbers and in strength.

How Siberia became part of Russia. The Cossacks were soldiers, every one. Like the Spartans of old, the men served in the army from the time they were old enough to fight until they were fifty years old. Those who were not fighting lived on farms which the government gave to them. Some of the best farm-lands in Russia were given to these soldiers.

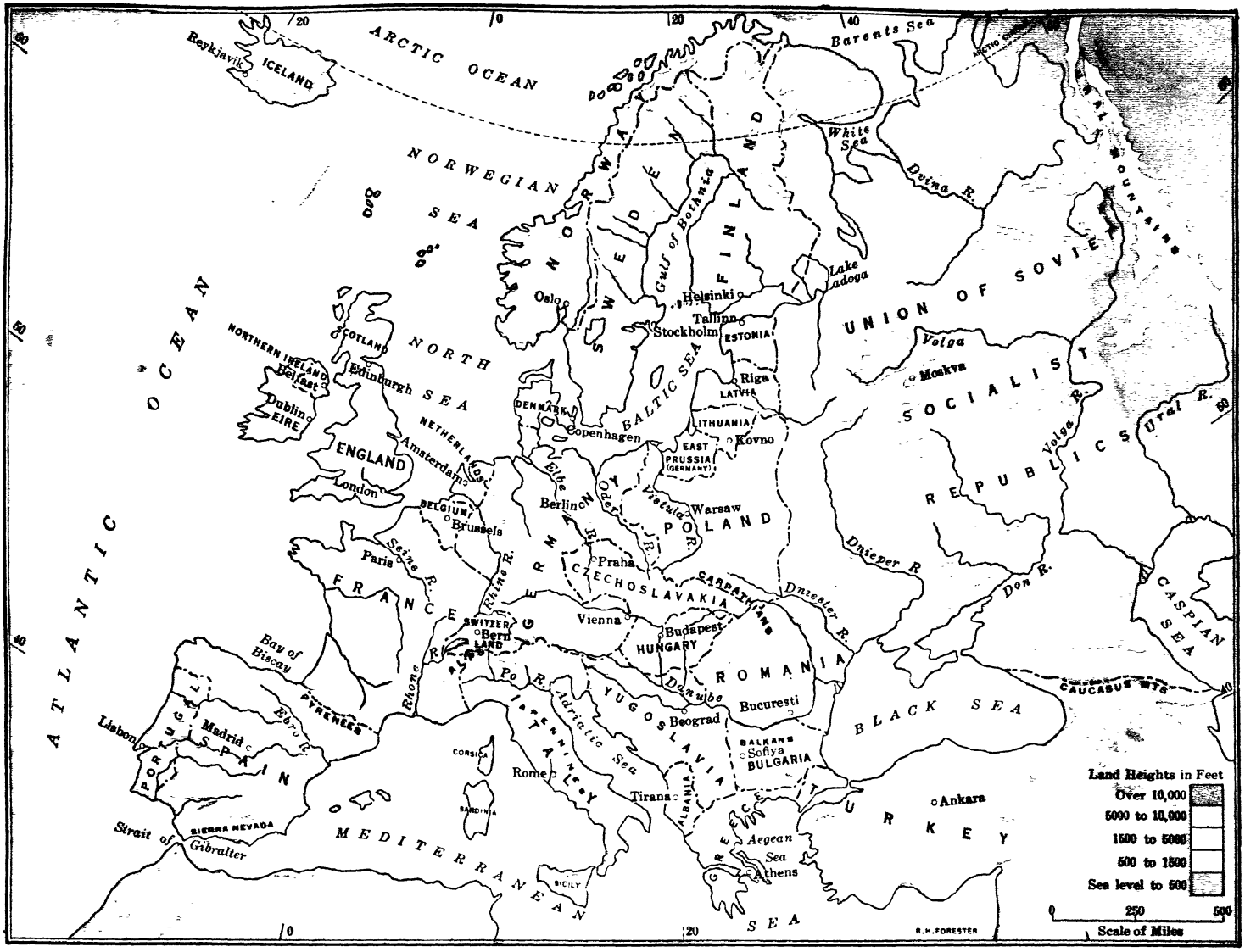
Meanwhile the old empire of the Mongols and Tatars in Asia was growing weaker. The Cossacks, loving adventure, pushed eastward into the Mongols' territory. They won more and more land, until at last Russia stretched all the way from the Baltic Sea to the Pacific Ocean. This new land in Asia was called Siberia.

Why Siberia was long unused. Look on the map and find Siberia, which stretches across northern Asia. Wouldn't you think this vast territory would be a great help to a country? It wasn't, at least not for a long time. We shall see why.

For one thing, the early Russians already had enough land in the part of their country that was settled. Even when they began to spread eastward across the Ural Mountains, the pioneers were so far away from civilization that Siberia was still a wild, unsettled country. It contained some good farm-lands, but there was no way to ship products back to the crowded cities of Europe. There were dense forests, but no roads on which to carry the lumber to market.

There was still another reason why Siberia did not help Russia for many years. People from the crowded lands of Asia drifted westward into Russia until Russia was more like a part of Asia than a part of Europe. For centuries Russia had very little of European civilization. It was their famous czar, Peter the Great, who realized that Russia should be a part of Europe and its civilization.

Peter tried hard to make the Russian people over. He made them throw away their long Oriental clothes and shave off their beards. He brought in foreign workmen to teach the Russians new trades and European ways of doing things. He built cities on the


ARCTIC OCEAN
Barents Sea
Reykjavik
ICELAND
NORWEGIAN SEA
NORWAY
SWEDEN
FINLAND
Gulf of Bothnia
White Sea
Dvina R.
Lake Ladoga
Oslo
Helsinki
Tallinn
Stockholm
ESTONIA
UNION OF SOVIET SOCIALIST REPUBLICS
Volga
Moskva
Ural R.
Ural Mts.
ATLANTIC OCEAN
NORTH SEA
SCOTLAND
NORTHERN IRELAND
Belfast
Edinburgh
Dublin
EIRE
ENGLAND
London
NETHERLANDS
Amsterdam
BELGIUM
Brussels
DENMARK
Copenhagen
BALTIC SEA
Riga
LATVIA
LITHUANIA
Kovno
EAST PRUSSIA (GERMANY)
Elbe R.
Oder R.
Vistula R.
Berlin
Warsaw
POLAND
Seine R.
Paris
FRANCE
Rhine R.
GERMANY
Praha
CZECHOSLOVAKIA
Carpathians
Dniester R.
Dnieper R.
Don R.
CASPIAN SEA
SWITZERLAND
Bern
Vienna
Budapest
HUNGARY
ROMANIA
Bay of Biscay
Rhone R.
Po R.
Adriatic Sea
Danube
Bucuresti
Beograd
YUGOSLAVIA
BLACK SEA
CAUCASUS MTS.
Lisbon
Madrid
SPAIN
Ebro R.
PYRENEES
Tagus R.
CORSICA
Rome
APENNINES
BALKANS
Sofiya
BULGARIA
Tirana
ALBANIA
Ankara
TURKEY
Strait of Gibraltar
SIERRA NEVADA
MEDITERRANEAN SEA
SARDINIA
SICILY
Aegean Sea
Athens
GREECE
Land Heights in Feet
Over 10,000
5000 to 10,000
1500 to 5000
500 to 1500
Sea level to 500
0
250
500
Scale of Miles
R.H.FORESTER

European side of Russia, and interfered in quarrels between the countries of Europe. You will read more about Peter the Great in a later chapter.

Other Peoples Who Were Not United

Italy—a disunited country. There were other peoples in Europe who were not united into nations at the end of the Middle Ages. Perhaps it will surprise you to know that Italy had not been able to make itself into a nation. As it had been the center of the Roman Empire, you might think it would be one of the first countries where the people would get together under a strong government. But this did not happen.

Italy was split up into estates very much like Germany. In some regions the feudal nobles controlled everything. Then there were many cities that were independent, much like the independent cities of ancient Greece. Certain of these towns—Milan, Florence, Genoa, and Pisa—became important centers of trade, industry, learning, and art. They kept their independence for centuries. In fact, it was not until 1870 that Italy became united as a nation.

Italy, you can see by this map, was made up of many small kingdoms and dukedoms. The cities of Venice and Genoa were very powerful. The lands of the Church extended far north of the city of Rome.

Paul's Photos

All the Cossack men were soldiers. Every boy knew that he would be a soldier until he was over fifty years old. There was no other business for a Cossack. The women took care of the farms, and when the men were not fighting, they came home to help.

The northern part of Italy belonged to the Holy Roman Empire and was supposed to be ruled over by the emperor. But often the emperor was not able to keep the nobles in order. Most of the central part of Italy was under the control of the Church, while the southern part was known as the kingdom of Naples. Strangely enough, this kingdom was ruled by Normans. These French descendants of the old Vikings had conquered Sicily and most of Italy south of Naples, and ruled it for many years.

How kings formed their nations. Now that we have traced the story of the development of nations in Europe, let us look again at the two maps on pages 289 and 293. We can see the great changes that came about. The maps tell us the first important fact: that the peoples of Europe were beginning to come together into large national groups instead of

being divided up into many hundreds of little dukedoms.

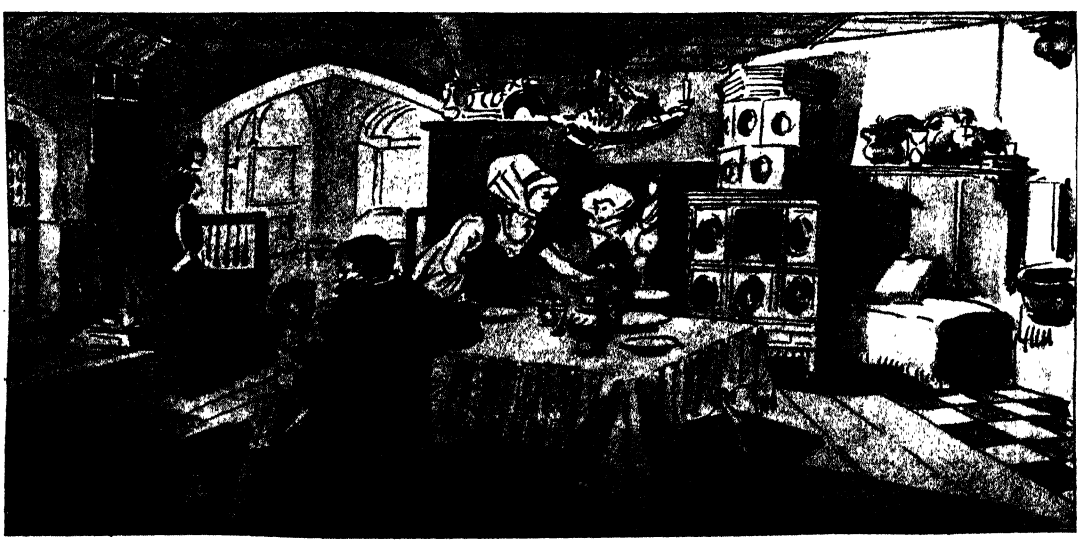
Most of the kings belonged to families that had become powerful by successful fighting. With their armed vassals they had simply seized the land belonging to weaker nobles. Other royal families grew powerful by marrying their sons and daughters to rich landowners. Of course some of these kings were good, and others were bad. But when they became powerful, they slowly made their kingdoms into nations.

The kings stopped the fighting that had been going on between their own nobles. Many of the nobles also had constant trouble in collecting taxes from citizens of towns. The wiser kings stopped this trouble by giving charters to the towns. These charters set down on paper exactly what rights the citizens should have.

How strong rulers helped trade. Strong kings kept peace and order within their nations. One of the first things they did was to keep the robber barons under control. This helped the merchants. Good roads were built because armies needed them. But the merchants were allowed to use them, and that helped trade a great deal.

Good roads made new trade routes, particularly if the roads were safe and people were at peace. The strong kings helped in another way. As more money was collected in taxes, the rulers fitted out ships for exploration. This became so important that we shall have a whole chapter about it. All of these things meant more trade and more mingling with other peoples of the world.

How the use of money helped trade. As trade grew, people had to use money more and more. Barter was a clumsy and time-wasting way to exchange goods. The use of money made trade easier. Instead of allowing each noble to coin money, the king coined it for his whole nation. That made it easier to figure prices. Imagine how hard it would be for us to figure what things cost and what change we should get if each of our states had a different kind of money. With national coins, worth the same everywhere, people can trade in any city with no trouble.



As trade increased and more things were produced by workmen and more crops raised by the farmers, the people lived more comfortably. In the cities the merchants built better houses, with fine woodwork and comfortable furniture. People began to use table-cloths, dishes, forks, and spoons. Men invented large stoves of tile so that rooms could be warm in winter. People had glass in their windows and even rugs on the floors.

German Railroads Information Office

You can see by this air view of Lübeck, Germany, that the city has a splendid location for commerce by water. In the Middle Ages Lübeck was an important city because of its trade. Lübeck was a member of the Hanseatic League, a union of many cities that controlled the trade of the Baltic Sea. The cities of this league were called Hanse towns or cities, and their fleets sometimes made war. You can see that Lübeck would be easy to defend, as it is surrounded by water.

How separate languages developed. The royal courts encouraged national languages and literature to develop. Kings had scholars at their courts to help them in many ways. Then books were written in the language of the common people instead of in Latin. For example, Luther translated the Bible from Latin into the German language. From that time on, arguments about correct German grammar and spelling were settled by looking at what Luther had written. Later, other books were written in much the same style. Instead of speaking and writing a dozen slightly different languages, the German people came to use the language of Luther's Bible. Much the same thing happened in other countries.

The need for good laws. When people were unjustly treated and did not have good laws, there was constant danger of rebellions. Good kings realized this and tried to make their kingdoms safe and peaceful by having good laws. Strong national governments gave the people more justice than they had ever had before.

How fast did changes come? When did these changes occur? All these improvements did not happen at once. Nor did they occur during the life of any one king. In some nations it took centuries for the changes to come. No king was powerful enough to change his people from disorganized groups into a nation in a short time. Nor did the kings suddenly decide to give justice to the people. In fact, some of these changes are still going on today.

In this period we have been reading about, however, we have seen the beginnings of the

nations of Europe as they are today. Very slowly the peoples of Europe were changing their ways of life to more civilized ways. Their governments were getting better, their homes were better, and their laws were better. Trade brought them many new things. And they were finding out new ways to think and act. The next part of our story will tell about these new ways in which people were thinking and acting.

Talking Things Over

1. In the early days of English history the king made the laws. At times the laws were unfair to the common people. When Magna Carta was signed, the people were promised certain rights. At later times they gained more rights and also a share in the government. In America we have some of the same ideas that the English have about the rights of the people. The first ten amendments of our Constitution are called the "Bill of Rights." Bring a copy of the Constitution to class and read this part of it. Is it like part of Magna Carta in any way?

2. Have you seen any motion-pictures about this period of history? Such pictures will help you to form an idea of the way people lived in the past, for they are carefully planned to be historically correct. Most of the pictures deal with the lives of nobles. Why are not more of them about the lives of common people?

3. Talk over the ways in which the stories of the European nations are alike. Do you think that the story of the Scandinavian countries is different in some ways?

4. In what way did the geography of Russia cause it to have a different history from the other European countries? Would the size of Russia, as well as its position in Europe, have anything to do with its history? To help you discuss these two questions you might first think about another question: Is the history of North America different from that of Europe because of its size and position?

5. At first glance, the room pictured on page 302 seems a good deal like one you might find in a home today. Examine it more carefully. Can you find ways in which it is different from modern homes?

6. This chapter tells how some of the languages of Europe became more and more unlike each other. At the same time more people in each of the countries came to speak their own language in the way certain books were written. Why did a language become more uniform as more books were published and read? Do you think that the radio will have any effect on European languages now? Will it have any effect on our language in America?

Doing Things Together

1. The Picture History on page 330 shows you how the nations developed together. Can you see where their stories come together? Can you find any events which affected more than one country? You might make some parallel time-lines to show some of the events which are told in this chapter but are not included in the Picture History. Which nations would you select for use in your time-lines? You might add one for the United States, too. Show 1492, 1776, and the year in which most of the members of your class were born.

2. Practice making up parts for the story of Joan of Arc. You might take the scene when she first saw the Dauphin, or the one in which the Dauphin was crowned. Divide your class into several groups, and have each group responsible for a certain part of the story. Practice the parts separately and when each group is prepared give the story like a play.

Courtesy Art Institute of Chicago

In the northern countries rich merchants and nobles made gifts of fine paintings to the churches. They paid artists to do the work, and in that way artists were able to live. This picture shows the artist's idea of the birth of Jesus at Bethlehem. Notice the figures at the right and the left of the center painting. The artist painted in the face of the man who gave the picture, and also the faces of his wife and son. This was often done in pictures painted for churches.

XIX. THE OLD WORLD BEGINS TO DO SOME THINKING

The Renaissance—Learning Is Reborn

PEOPLE in the Middle Ages did not have nearly so many kinds of things to think about and talk about as we have today. If you wanted to make a list of the things we think about, how would you do it? One good way might be to write down the subjects of radio programs for a week. Another way would be to make a list of the books that people take out of libraries. We should find that people nowadays are thinking and talking about politics and government, laws, music, art, business, science, farming, religion, adventure, and dozens of other subjects.

How many of these things do you suppose interested the people of the Middle Ages? We know that they must have talked and thought a good deal about farming, because so many people made their living on the land. They certainly talked about business, because trade was very important, particularly to the people who lived in the cities. Government and law were important, too, and we know that people were beginning to think about their rights and about justice. We have been reading about all these things in some of the chapters of this book.

The Church and its schools. People in the Middle Ages talked and thought a great deal about religion. Perhaps one reason was that the churches were the largest and finest build-

ings in the towns and cities. The people had helped to build them. Another reason was that men worked all the time, day in and day out, except on the Church Holy Days. Those free days reminded people of the Church. Another thing that reminded them of the Church was the school.

As you have read, the schools of the Middle Ages were Church schools. Not everyone could afford to go to school. But the Church had to have learned men to carry on its work; and so there were many Church schools. Today, if you plan to be an engineer, an artist, or a business man, you go to school and study subjects that will help you in your future work. In the Middle Ages young men went to school to learn to be churchmen. It was only natural that they studied subjects to help them in their future work. You can see, then, why educated people read and thought and talked chiefly about religion.

This picture from an old book shows a famous teacher at a medieval university lecturing to his students. At first the universities did not have any buildings, and the students met at the homes of the teachers. Later, the students lived together in one part of the city, and the university grew up around them.

A new kind of school. Gradually, schools began to change in ways that made people think and talk about other things. In the Italian city of Bologna a great scholar gave lectures about the laws of the Romans. This was interesting to the nobles and the kings, whose business was law and government. Soon many young men were going to Bologna to learn about law.

In another Italian city, Salerno, where people went because the climate was healthful, a monk from Carthage began to lecture on medicine. Students went there to hear him and find out what they could about treating sick people.

In Paris some of the priests of the cathedral of Notre Dame started a new kind of school. It was different from the schools of the monasteries where young people were taught only to read and write and to study a few subjects. In the new school the teacher read to the students; then all of them discussed what had been read.

The first universities grew up around such teachers. These universities were not much like the ones we have today, as you will see. Men, young and old, came to them. Some came to listen to just one of the teachers; others came to hear lectures given by several teachers. The students paid something for each lecture.

New answers to old questions. You know what happens in a classroom. Questions are asked. Both students and teachers ask them. What we must remember about this particular time in the Middle Ages is that people began asking questions about more and more things. Have you ever become suddenly curious about something you have seen every day, so that you wanted to know how a radio works, or how a plant grows? These students

Art Institute of Chicago

This Italian palace was built during the Renaissance. Notice how strong the walls seem, and how the lower floors are built so that they can be defended easily. The windows are barred, and the doors are very heavy. There are pictures of the inside of this palace, and of others like it, on the following pages. The Italians did not consider the outside important.

and teachers of the last part of the Middle Ages became curious about many things.

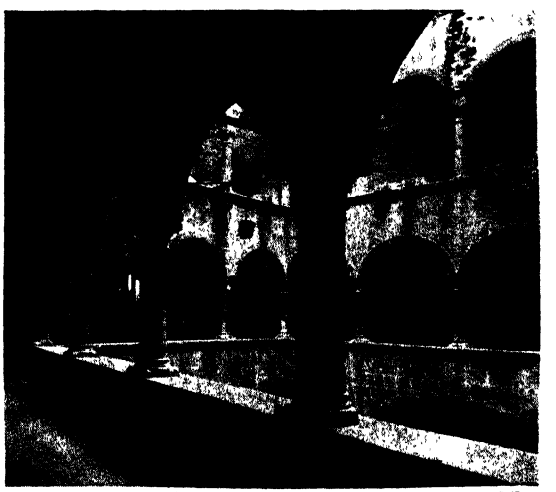
Young men who had heard stories about the deeds of the Crusaders in the Holy Land wanted to know about other countries. They asked questions about the shape of the earth. There were questions about nature, about man, and about religion. Both teachers and students wanted to know the answers.

Lessons from the past. Men who had read the books of the great scholars and thinkers of ancient times knew that the Greeks and Romans had thought and written about these questions. And so the teachers and students of this medieval period became very much interested in the old Greek and Roman civilizations. This was especially true in Italy, because all around them the Italians could find ruins of the old Roman civilization.

When men became interested in the "classical" period, as they called Roman and Greek times, they discovered a great many things that had been overlooked for centuries. Roman and Greek statues were dug up, and old books were found in the monasteries. People tried to imitate the civilization of ancient times.

This particular period is called the *Renaissance*, a word which means "a new birth." It really meant a new birth, or revival, of the ancient learning of the Greeks and Romans. But the word Renaissance means much more than that, as we use it when describing this period. People not only revived the ancient learning, but made progress in their own arts and literature and science.

A new interest in art. Perhaps when you hear the word "art," you think of long picture galleries filled with paintings or statuary. But to the people of Italy during the Renaissance, art meant a great deal more than just pictures and statues. To them art meant doing everything in a beautiful, inspiring way, designing the furnishings for a home, build-



Courtesy Italian Tourist Information Office

Usually there were two courtyards in an Italian palace, just as there were two in the Roman house. The main building had a courtyard like this, with corridors reaching all the rooms and stairways to the next floor. There was no roof over this courtyard.

Art Institute of Chicago

This is the outdoor courtyard of the Italian palace. In what ways does this remind you of the Roman house which you have seen in this book?

ing a house or palace, or laying out a city. When people come to feel that art is as important in their daily life as food or cleanliness, then there will be great artists among those people. That is just what happened in Italy.

There were many reasons for this new interest in art. People wanted to decorate their churches with paintings and statuary. In the cities there were many rich merchants and nobles who wanted fine things about them in their homes. They were not satisfied with the plain furniture and clothing of the common people. They wanted carved furniture, pictures, fine table ornaments, rich fabrics, and beautifully wrought jewelry.

Probably the most famous of these wealthy nobles were the members of a noted family called the Medici, who ruled the city of Florence in Italy. They filled their homes with works of art of all kinds. When rich people bought paintings and statues, artists could make a living and could go on producing beautiful things.

The great artists and their work. The greatest artists of the first part of this Renaissance period were sculptors. This was only natural. Many old Greek and Roman statues had been found, and the sculptors learned a great deal from these works. At first they just copied, but after a time they began to make original works of their own.

The paintings of the early part of this period were mostly *frescoes*. A fresco is a picture that is painted on a wall while the plaster is still fresh. Most of these frescoes were painted on the walls and ceilings of churches and palaces.

The artists experimented with mixing paints and tried painting on all sorts of materials—boards, paper, and cloth. They found out how to mix colors with egg, and then with oil. They discovered that canvas was an excellent material on which to paint. At first the painters imitated the only paintings they knew about—the paintings of the artists of Constantinople. But, like the sculptors, they soon began to work on subjects of their own and to use their own style. Among the great artists of this period were Michelangelo, Leonardo da Vinci, and Raphael. Even today they are considered among the greatest artists of all time.

Rome and Florence became the chief centers of art. The Italian artists who worked

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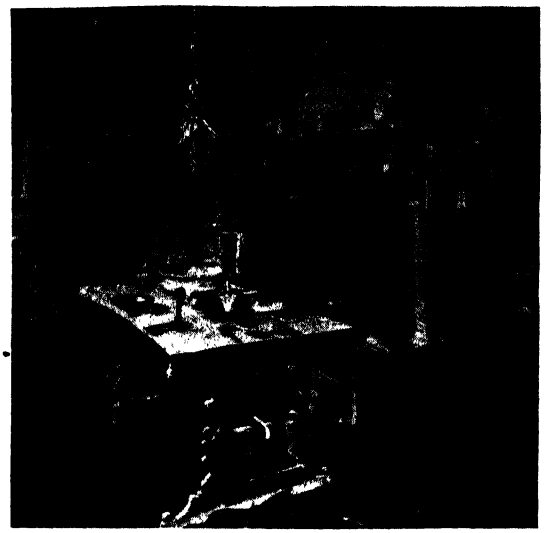
This is a bedroom in the same Italian palace. We would probably think it uncomfortable; but in the time of the Renaissance it was considered luxurious. See how the bed is raised from the floor on a platform. There are cupboards under it. Do you think two windows like the one you see are enough?



Art Institute of Chicago

Here is the dining-room in the same palace. Notice how the table is set. There are no forks. Not all the places have knives, either. Probably only the women were given knives at the table. The men used the knives that they carried in their belts. The fireplace is the only way to heat the room. You can see that people were learning how to live more comfortably.

in these cities taught the rest of Europe to love art and to make beautiful things. Italian artists went to French and German cities in order to work for rich people there. Benvenuto Cellini, a great Italian jeweler, spent much time in France making beautiful objects in gold and silver for the king of France. He also worked for the Pope at Rome; and he made a huge bronze statue of Perseus for his home city of Florence.

The great writers of the time. There were great writers in this period. One of the greatest of all Italian poets, Dante, lived at this time. He was a citizen of Florence but was driven from his city by enemies. For many years he wandered about unhappily. But this period of his life was a fruitful one because during his exile he wrote one of the world's greatest poems, called *The Divine Comedy*. Dante wrote this poem in Italian, in the language of the people of Florence, instead of writing it in Latin. Because of this poem, the Florentine way of speaking and writing the Italian language became the model for all of Italy.

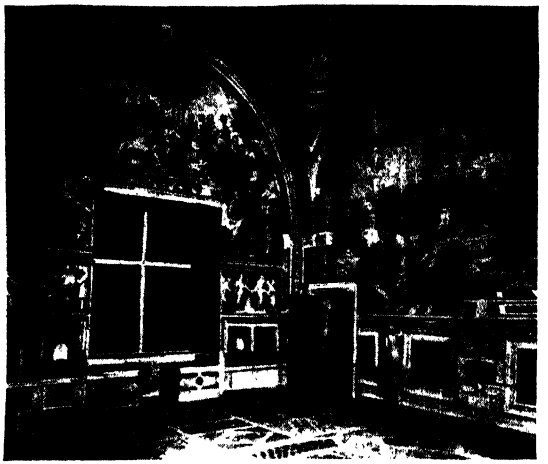
Another Italian poet, Francesco Petrarch, especially admired the old Greek and Roman writers. He wrote many poems in the same style that the ancient poets used, and he set the fashion for studying and imitating these old-time writers.

One of the results of studying the ancient writers was to make men want to express their own ideas in their own language. In almost every country books were written. Up to this time most of the writings had been books on religious subjects or records of events, like the chronicles of the monks. Now men wrote about everyday happenings, not in Latin, but in the ordinary language of the people.

The making of books. Are you wondering how it was possible to have so many books if all of them had to be copied by hand? Books in quantities large enough for the people to read would never have been possible by such a slow and costly method. The clay tablets of the Babylonians, the wax tablets of the Greeks and Romans, and the Egyptian papyrus books had been worked out entirely by hand. The monks in the old monasteries spent

Courtesy Art Institute of Chicago

Lorado Taft, a famous American sculptor, made this model of the studio in which Donatello worked. Donatello was a noted Italian sculptor who lived in Florence during the fifteenth century.



Art Institute of Chicago

Some of the greatest paintings made by artists of the Italian Renaissance were painted on walls, not on canvases. Churches employed painters to beautify places of worship, and rich nobles hired artists to decorate their palaces. The walls of great rooms like the one in this picture were covered with paintings. Even the ceilings were sometimes decorated.

many hours daily copying books and manuscripts on parchment. Do you remember how long parchment had been used?

In the cities there were guilds of copyists, men who made a business of copying books. It usually took more than a hundred days' labor to copy one book. Would you be willing to pay a man's wages for four months in order to get just one book? You can see why books were so expensive in those times that poor people could not have them. The Bible was considered so valuable that it was chained to the reading desk in the churches.

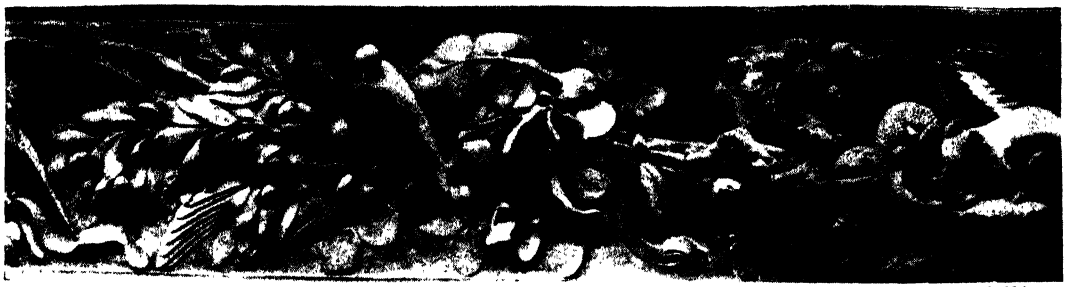
Men could not have cheap books until a way to print them was invented. And before printing could be of any use, men had to have paper smooth enough for clear and even printing. Parchment was very expensive, and no one in Europe was able to make papyrus. The Arabs had brought paper into Spain, and during the Crusades men from Italy and other countries learned how to make smooth, good paper. Clever craftsmen in Italy kept improving paper until it was smooth enough to carry printing.

How printing began. Then someone began cutting pictures on wooden blocks, inking the blocks, and pressing these against paper. This was the first kind of printing. These picture books often had letters cut into the wood to explain the pictures. The wood-engravers who cut these pictures did not like to spend time cutting out letters. Sooner or later some artist was certain to think of cutting the name of St. John or Ste. Mary from an old wooden block and using it with some new block in order to save the trouble of making new letters. It was only a step from that to cutting the letters apart and using them separately.

We may never know who actually invented printing from type, but we do know that the first books printed from type were done in the shop of Johannes Gutenberg, a German

Art Institute of Chicago

Hans Holbein, a famous artist, painted this picture of a merchant in his London office. The merchant is opening a letter, and there are other letters in a rack on the wall. None of the letters have envelopes. The paper was folded over and sealed with wax. The merchant's seal lies on the table. In those days all letters had to be given to messengers to deliver.



Art Institute of Chicago

The borders of the panels on Ghiberti's famous doors are also beautifully worked. The sculptor used birds, animals, and plants for decoration. You can see a squirrel gnawing acorns, a bird sitting on a branch, and sprays of berries. In the other picture on this page you can see how these borders ran around the panels.

printer of Mainz. The earliest book of any size to be printed was the Bible. It was in Latin and could be read only by the churchmen, for most of the common people did not know any Latin.

It was not long, though, before men began to translate the Bible into the languages of the people of the different countries. You have read about Luther and how he translated the Bible into German. Other men translated the Bible into English, French, and Italian, and people began reading it in their homes. Other books were printed, too. Do you know what two books are the best-selling books today? Bibles and cook-books. They were the most widely read books five hundred years ago, too.

Many of the early books were geographies and stories of travel. Does that give you an idea of the kinds of things that interested people in those days? From these books the people learned of lands they had never seen and of strange people with different ways of doing things.

How the new invention spread. Printing made it possible to have many books and better schools, for now quantities of books could be printed from type at a small cost. In just a few years there were printers in almost every country of Europe, all busy turning out books for the people. Printing, you see, was so useful that it spread like fire. Did you know that there was a printing-press in America almost a hundred years before the Pilgrims came? The Spaniards brought one to Mexico City.

You must remember, though, that the printing-press was an invention that depended on other earlier ideas. In the first place we have to thank those unknown men in the Sinai Peninsula who invented the alphabet. Then

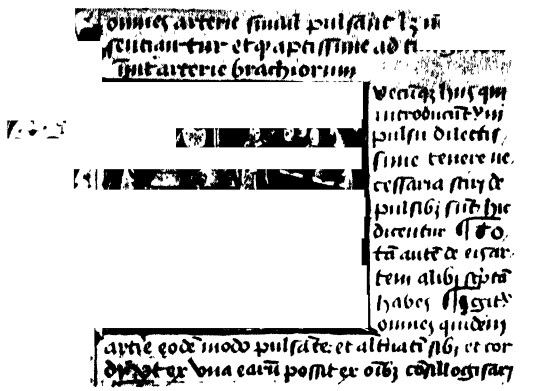
Art Institute of Chicago

This is just a small panel in one of the celebrated doors made by an Italian sculptor, Ghiberti, for the Baptistery in Florence. Each panel shows a different scene from the Bible. This one shows Christ walking on the water. The doors are of bronze and are said to be the finest ever made.

we have to thank the monks for the careful, beautiful lettering they made. The men who cut the first type copied the lettering of the monks. And finally, we owe a debt to the Arabs and the Italians who learned to make paper that was cheap and also smooth enough for printing.

The Protestant Reformation

You have been reading about a great many changes in the lives of the people near the end of the Middle Ages. Life was different in many ways. More and more people were living in cities. The kind of government was changing as the feudal system died out. More people were being educated. They asked questions about a great many things. They wanted



The Bettmann Collection

The monks who carefully copied manuscripts spent many hours making books beautiful. Not only did they draw elaborate initial letters, like the "Q" in this picture, but frequently they added pictures. This kind of work is called "illuminating." It was done in colors, usually blue, red, and gold.

This is a page from a "block" book. The picture and the lettering were carved out of a single piece of wood. This block of wood was inked, and paper was pressed on it to make the print. Such books were made for a long time before anyone thought of cutting letters separately and using them over and over again in different words.

to know why the nobles had the right to rule, for many of the common people were growing discontented with the way they were governed.

Questions about religion. It was only natural that people would also ask questions about religion. They were not always satisfied with the answers that were given. In many parts of Europe the bishops were just as powerful as the nobles and held just as much land. In some places people objected to the rule of the bishops, just as they objected to the rule of the nobles.

These people were called Protestants because they "protested" about certain things that they wanted to change. They thought these changes would "reform" the Church; and so we call this period the Protestant Reformation.

The Church, as you know, was very strong and important in the lives of the people. From time to time nobles, and even kings, had quarreled with the Church, generally over money. In many cases the nobles thought the Church took more than its share of taxes. Sometimes rulers objected to the power of the Church and its influence on the lives of the people. Some rulers wished to appoint their own

bishops and other church officers. They did not want the Pope to have that power.

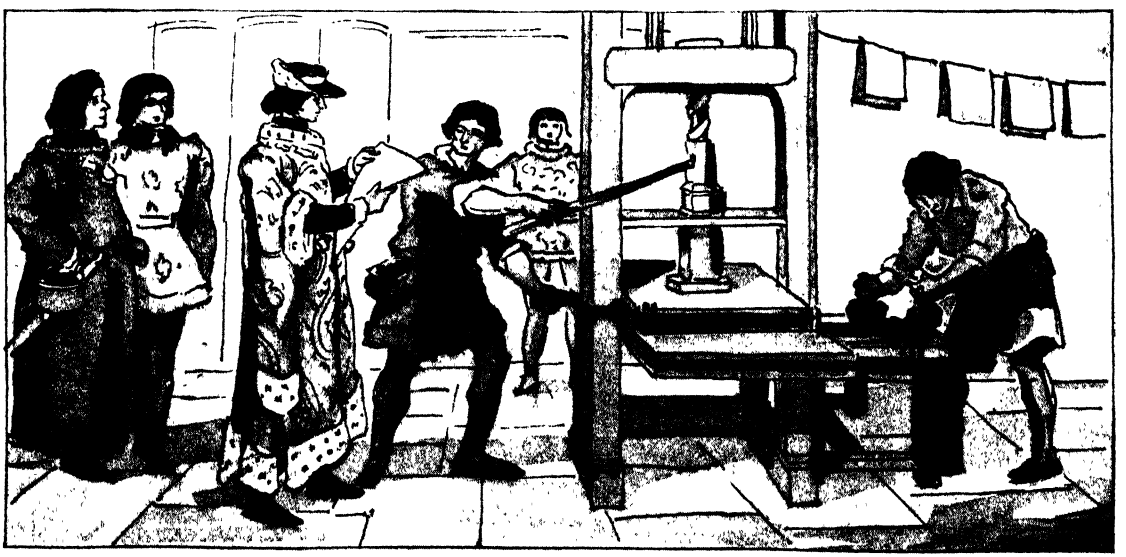
As people thought and argued and wrote about religion and the Church, many different opinions arose. People did not always agree about what certain parts of the Bible meant. They began to ask if there was only one way for men and women to worship God. None of these objectors wanted to destroy the Church, and none of them wanted the people to be without religion.

Roger Bacon, father of modern science. Among those who asked questions was an English monk named Roger Bacon. He has been called the father of science because he urged people to experiment and find things out for themselves, not only about religion, but about other subjects, too. He reminds us of Aristotle among the ancient Greeks, who was much the same sort of man.

Martin Luther and his Bible. In the German lands another monk, named Martin Luther, did not agree with the leaders of the Church about what should be taught. Many people in Germany joined him, and he became the leader of the Protestants in Germany. Luther translated the Bible into German so that everyone could read it. In this way, he thought, people could read and decide for themselves what to believe.

How the study of the Bible helped learning. Thousands of people, not only in Germany but in other countries, learned to read in order to study the Bible. Schools were established to teach children to read as well as to teach them religious ideas. In earlier days, you remember, most schools were for training boys who planned to become priests or monks. For the first time in Europe, many people received an education. You can see, then, that establishing schools was an important step for the people of many European countries.

New churches are established. As the years passed, many of the German princes came to agree with the teachings of Luther. These rulers protested against the Pope's authority over the church in Germany. Finally they seized church property within the boundaries of their countries.



William Caxton was an English cloth merchant. He heard about the new business of printing books and went to Flanders to learn it. In 1476 he returned to England and started a printing-press at Westminster, just outside of London. The picture shows Caxton explaining his press to King Edward. Perhaps the king is looking at part of the second book to be printed in English. It was a book on the game of chess.

Courtesy German Railroads Information Office

In this room of the Wartburg, a castle in Germany, Martin Luther wrote many hymns for the people to sing in church. Here he worked on his translation of the Bible into the German language. The chair seems to be like a modern office chair. Notice the stove made of tiles.

Before the end of the sixteenth century several kingdoms—Norway, Sweden, Denmark, Bohemia, Scotland, and parts of northern Germany—had broken away from the Roman Church under the Pope. In almost every case the king declared himself to be the head of the church for his own people. These new churches were called Protestant.

Wars between Catholic and Protestant princes. All during the sixteenth century there was fighting between the Protestant princes and those who still belonged to the Catholic Church of Rome. Sometimes Catholic kings of France fought against Protestant Germans, and Protestant German princes fought against other Germans who were still Catholics. Sometimes there were wars between Catholics and Protestants who lived in the same country.

Because of this religious warfare thousands of men and women fled from their home countries to seek refuge in other lands. New religious organizations sprang up, too. The Presbyterian church was begun by John Calvin. The German princes and their people built up the Lutheran church. In England the king quarreled with the Church at Rome and started what was known as the Church of England. The Episcopal church had its beginning there. Then another group appeared in England, known as the Puritans. They did not agree with either the Catholics or the Church of England, and wanted to worship in their own way.

For a hundred years the Protestants and the Catholics fought each other. You must not think that they were fighting all this time just about their religion. In many cases they fought for land and power or to gain some advantage in trade.

In the German countries the struggle lasted so long that it was called the Thirty Years' War. By the time this war was over, nearly two-thirds of the German people had been killed. Most of those who were left were starved, ragged wanderers. Many cities were abandoned ruins. Cattle had been killed, and crops were destroyed. It took almost a hundred years to recover from that war.

Centuries of turmoil and change. The last few centuries of the Middle Ages were exciting and full of changes. There had been terrible plagues which killed hundreds of thousands of people because they did not know how to keep clean and free from disease. One plague, called the Black Death, killed so many people that there were not enough workmen and farmers left. By this time there were not many serfs, as most of them had been freed and worked for wages. These free workers demanded better wages, and the remaining serfs demanded their freedom. Employers had to give in because men could get work at good wages almost anywhere.

A time of experiments and discoveries. Perhaps one of the most important things during this period was that people became curious. As they learned about new things, they began to try new ways of life. They kept experimenting with new ideas and found out still more things. Other men who followed them made the great discoveries and

inventions of the sixteenth and seventeenth centuries.

You already know the stories of some of the great explorers. There is no more exciting chapter in the history of the world than the story of the explorers of the New World. But there were explorers of the Old World, too, and in the next chapter we shall follow the first of the famous travelers, the Polo brothers. They made their remarkable voyage near the close of the thirteenth century, more than one hundred years before the invention of printing; and their daring example gave Europe a taste of adventure and led other bold men to explore the globe.

Talking Things Over

1. It is not possible to say that any one invention was the most important one in the history of civilization. Why not? Why was the invention of printing very important? Discuss how modern civilization depends upon printing. How was knowledge spread from country to country before the printing-press was invented?

2. Practically all of our inventions have developed gradually. The wheel was a very simple invention of ancient peoples; but it has been very important in civilization, and many of our modern inventions use it. Can you name some inventions we could not have had without the wheel?

3. All of us have two kinds of knowledge: what we have learned by experience and what we have learned by reading or by being taught. We learned to walk by walking. We learned to talk by talking, but we were helped by being taught new words and by learning to read. Name some other things you can do and decide whether you learned them by yourself or were taught to do them by people or books.

Doing Things Together

1. Do you know where there are large copies of famous paintings by Italian artists, or pictures of their sculptures? If it is possible, go to see some. You will like some of the pictures better than others, and some you may not like at all. Try to understand why it is that other people like them. It may be for some very simple reason. The expression on a face may be attractive, or the colors used may be very pleasing. Talk over together why you like the ones that appeal to you.

2. Perhaps you can find some small prints of paintings by these artists in magazines. You can, of course, find many of them printed in books, but these are not always in colors. Bring what you can find to class and spend a few minutes every now and then looking at them. Do not try to look at too many at one time. You will find that you learn to like some of them better than you *did at first.*

3. Have you had anyone this year read you something in a foreign language? The sound of a language is interesting even if you do not understand it. Italian is a very pleasant language to hear spoken or read. Do you know anyone who speaks or reads Italian? If so, perhaps he or she will read you a page or two from the works of Dante or Petrarch. You would then have some idea of the rhythm of the language.

4. There is not room in this book to tell you about all the great artists and writers of the Italian Renaissance. Many of them had very interesting lives. You can find out about them in encyclopedias and other books. Divide your class into small groups to look up and report to the whole class on the lives of Michelangelo, Leonardo da Vinci, Raphael, Cellini, Dante, and Petrarch. Make your reports short, but try to find interesting stories about each man.

The great cathedrals of the Middle Ages were built by the prosperous people of the towns. Nobles, merchants, and workmen gave what they could, because the church was the real center of each town.

Courtesy German Railroads Information Office

Although this photograph was taken recently, probably Bremen, Germany, looked much like this in the Middle Ages. The houses and churches were much the same in those days, and the river was also filled with barges of merchandise, as Bremen did a thriving business with other cities. Of course, the barges were not so modern, and the bridge in the distance had not then been built.

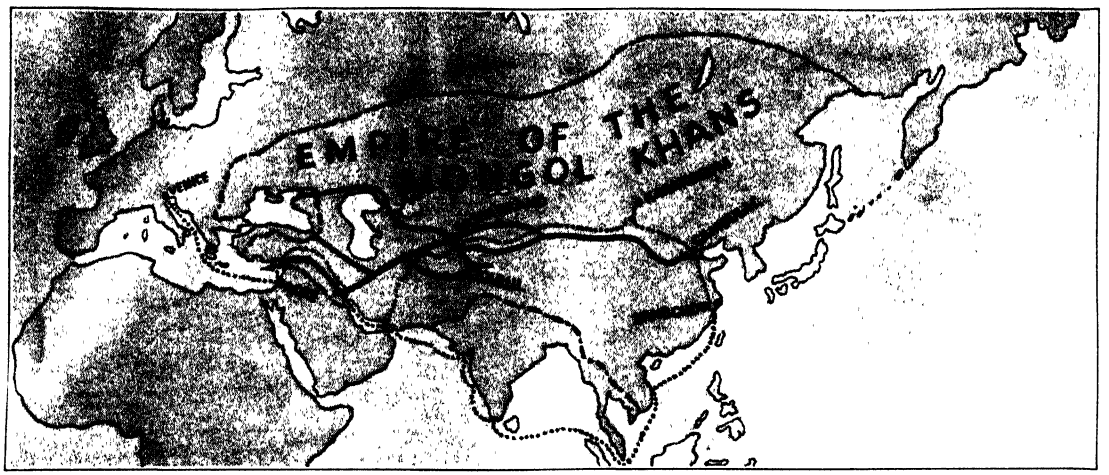
XX. THE MODERN WORLD BEGINS

The Discoveries

YOU remember reading that during the Crusades the people of Europe became acquainted with the East. They discovered new things to eat, such as peaches, apricots, melons, sugar, pepper, and other spices. They found people wearing clothing of cotton, silk, and linen. They learned new ways of doing things, such as pumping water with a windmill, sailing a ship with a compass, and piping water into a house for fountains and baths. The Romans had enjoyed some of these luxuries, but most of them were new to Europeans of the Middle Ages.

How the Crusades affected trade. Europeans wanted these luxuries, and there were plenty of traders ready to bring the new articles to them. At first the pilgrims and the returning Crusaders brought quantities of the new products back with them. But that did not satisfy the demand. The cities and towns were growing, and the merchants of Europe were becoming wealthy enough to buy what they wished. More and more Eastern products were wanted by the rich townsmen of Europe.

The Italian cities of Venice, Pisa, and Genoa began sending their ships to all the ports at the eastern end of the Mediterranean. There they were loaded with goods from Egypt, Arabia, and near-by countries. Caravans came to these ports from the Far East—from India, China, and the islands in the Pacific Ocean. The cities of Marseilles in France and Barcelona in Spain also sent



The dot-and-dash lines show the boundaries of the empire which the great Mongol Khans conquered and ruled. The dotted line shows the route which Marco Polo took to the Orient and back to his native land. Most of the return journey was by sea. The heavy black lines are the caravan routes from Asia to Europe. At Samarkand, the routes separated. One of them passed north of the Caspian Sea while the other went to the south. One trader did not carry goods from one end of the route to the other. Usually the goods passed from one trader to another. Of course, each trader added a profit as the goods passed through his hands. Do you wonder that silks, spices, and other goods from the Orient were very expensive?

ships to these ports. Trade grew, and Eastern merchandise became fashionable. People wanted Eastern jewelry, rugs, glassware, and dishes.

Goods from the Far East, particularly silk from China, had to come by land most of the way. Leading westward across Asia was a caravan trail which was called the Great Silk Road. Over it came large quantities of merchandise from China to satisfy the demands of the people of Europe.

Suddenly much of this trade ceased. Few caravans came through by the overland roads. Suppose we see what happened in the faraway part of the world we call China that could stop this trade with Europe.

The Mongols and their leader. Look at the map on this page and find the place called Karakorum in Mongolia. Karakorum was the capital of the Mongols, and it was becoming a very important place about the year 1200.

The Mongols were barbarian nomads. At first they lived in the valley of the Amur River, where their flocks found good grazing. They lived in tents and moved from one camp to another in covered wagons. They were small and wiry men, with yellow skin, high cheek-bones, and straight, black hair. They were very much like the Huns who had invaded the Roman Empire centuries before. The men were hard riders and fierce fighters. The soldiers wore tough, leather armor and used lances and bows and arrows.

These Mongols were the people who finally expanded their country until it became one of the largest empires the world has ever seen. The Chinese were so afraid of the Mongols that they built a great wall along the boundary to keep these fierce invaders out of their land.

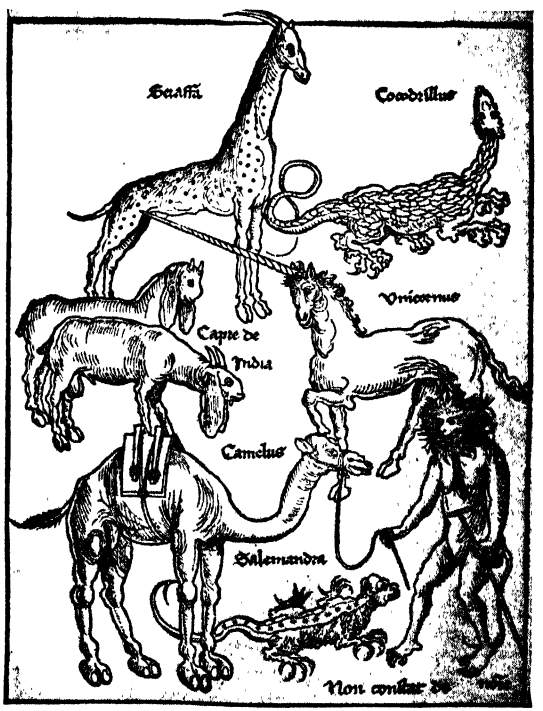
The greatest leader of the Mongols was Genghis Khan. With his wild horsemen he invaded northern China and then Turkistan. As he moved, he gathered together a greater and greater army. All the fierce tribesmen wished to join, for the Mongols plundered wherever they went.

The first conquests of Genghis Khan put him in control of the two great caravan roads

from the East to Europe. Find these roads on the map on page 318. Then he decided to move westward and southward with his army.

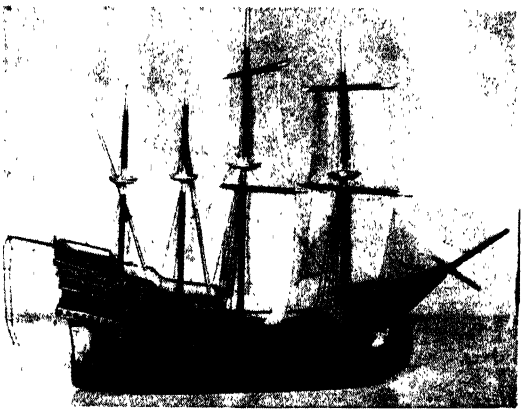
The Mongol Empire. By the middle of the thirteenth century the Mongols had captured all the land which now makes up China, Turkistan, Persia, Armenia, India as far south as Lahore, and Russia as far north as Kiev. The empire of Genghis Khan and his descendants stretched from the Yellow Sea to the Persian Gulf and the Black Sea.

A grandson of Genghis Khan, named Kublai Khan, became emperor of China. He chose as his capital the city we know as Peiping. Kublai Khan was ruler over more human beings than had ever before been subject to one man. In Peiping he built a tremendous palace, surrounded by a double wall of stone. Inside were groves filled with animals, gardens of flowers, and hundreds of buildings. He even had an artificial lake.



Metropolitan Museum of Art

Travelers in the Middle Ages brought back strange tales of queer animals and monsters. One such traveler drew these pictures of animals he had seen on a trip to the Holy Land. Do you know which animals he must have heard about from other travelers?



Philadelphia Commercial Museum

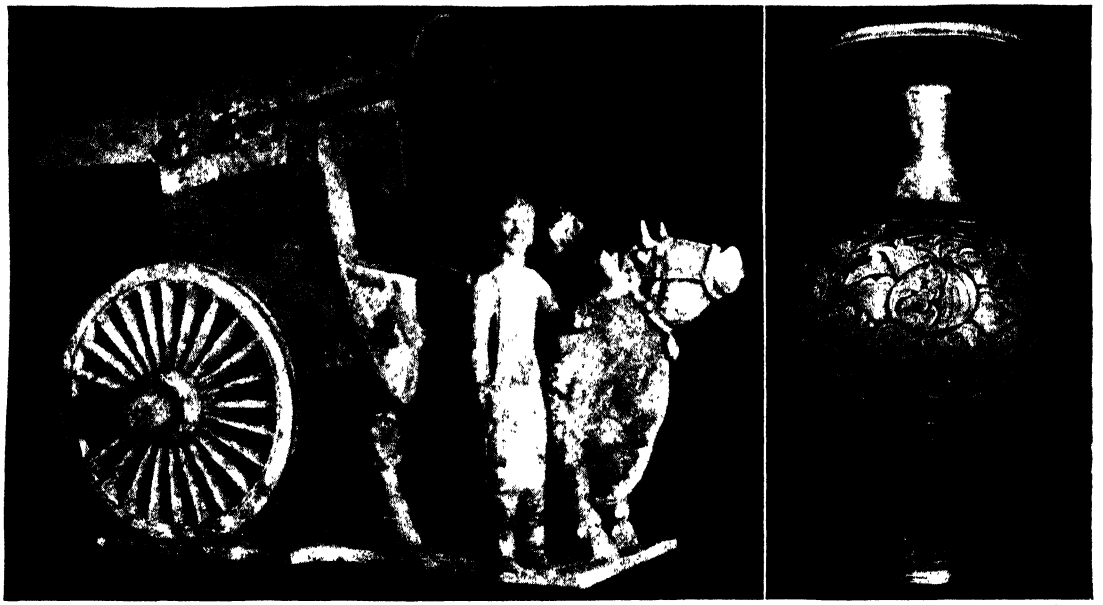
The seamen of Venice and Genoa made progress in building ships as you can see when you compare this sixteenth-century vessel, called a "nef," with the pictures on pages 274 and 277. This ship has more space for cargo and more sails. What else has it?

The Polos journey to Cathay. Tales of the riches of far-off Cathay, as the Europeans called China, reached the cities of Europe. In the city of Venice lived two brothers named Nicolo and Maffeo Polo. They set out to see this land. When they arrived at the court of Kublai Khan, the emperor showed them great friendship. Upon their departure for their Western home, he invited them to make another visit and to bring young Marco, the son of Nicolo Polo.

When the Polo brothers made their return trip to Cathay, they took seventeen-year-old Marco with them. Their trip was a long, zigzag caravan journey across the largest continent in the world. Follow their route on the map on page 318.

Like many of the Crusaders, the Polos went from Venice to Acre by boat. Then they followed the old caravan route to the Tigris-Euphrates Valley and so to Bagdad. At this city of the *Arabian Nights* they again took ship and sailed to the mouth of the Persian Gulf.

Across the mountains and deserts of Asia. Now the Polos began the rough part of their



Courtesy Art Institute of Chicago

In Marco Polo's time the Chinese were already experienced potters and metal workers. Besides dishes, they made porcelain figures like the oxcart at the left, and vases like the one at the right. These two pieces of Chinese porcelain, now in an American museum, were made during the time of Marco Polo. At that time the Chinese were also making utensils and ornaments of brass and bronze.

journey over the deserts and mountains into Afghanistan, and then on to Kashmir in India. Plodding through the snow, they passed over the "roof of the world" to Kashgar. The "roof of the world" is what many people call the Pamir Mountains. For many weeks the caravan toiled across the desert, with the towering mountains of Tibet on the south, and the high mountains of central Asia on the north. The Takla Makan Desert led them into the Gobi Desert, just north of China.

These deserts are not like the great Sahara in Africa. Although they are hot in summer, they are very cold in winter; while the Sahara is hot all the year round. If you will look back at the map on page 25, you will see why the deserts of central Asia are colder than the Sahara. They are much farther from the Equator. But they are like the Sahara in one way—they are very dry.

Perhaps you can figure out why the interior of a vast continent like Asia is always dry. It is because the wet winds from the ocean have given up their moisture long before they reach the interior. The westerly winds that blow from the Atlantic over Europe grow drier and drier as they move inland. They carry only a little rain for the plains of Russia, still less for the Kirghiz steppe, and almost none at all for the Takla Makan and Gobi deserts. It is much the same in America, you remember, where our Great Plains are too dry for ordinary farming. Our plains are hot in summer and cold in winter, too.

When the three Polos reached the edge of the Desert of Gobi, they were met by an escort sent by Kublai Khan, who helped them over the last forty days of the trip to his capital. It had taken the Polos three years of hard journeying to reach the court of the emperor.

A surprising Eastern civilization. Young Marco was astonished at the wonderful court. He was amazed at the rich and beautiful things he saw—the rugs, chests, and vases,

and at the silken garments worn by the nobles. Marco soon learned that the people of far-away Cathay were in some ways more civilized than Europeans.

Kublai Khan had a great postal system. Relay riders sped from town to town, bringing messages as fast as horses could gallop. It is said that there were more than 400,000 horses used for that purpose alone. The emperor built public granaries and free drug-shops for the poor. He even issued paper money, and tried to get the Chinese to use a simple alphabet instead of their thousands of word-signs. The emperor was interested in the civilization of Europe. He had many Europeans in his employ.

Successful years for the Polos. Kublai Khan took a great fancy to young Marco Polo. He appointed the Italian youth as governor of one of the provinces and also gave offices to his father and uncle. The Polos traveled over much of China. Fifteen years went by, and finally they became homesick. They decided to leave Cathay, and Kublai Khan agreed to send them by boat as far as Persia. First they sailed through the South China Sea, past some of the islands of the East Indies, around the peninsula of India, and then into the Persian Gulf.

By the time the Polos reached home, they had been gone nearly twenty-five years. Their old friends and neighbors did not know them. No one believed their stories about the great wealth they had found and the marvelous sights they had seen in China.

The Polos decided to make their friends believe by showing some of their new riches at a great party. When it was time for the guests to leave, the three Polos opened the seams in the clothes they had been wearing. From the linings poured forth a tableful of precious gems from the Orient. Can you imagine the surprise of the guests when they saw the banquet table covered with glittering jewels?

An adventure tale written in prison. Some time after the return of the Polos, trouble arose between the cities of Venice and Genoa. Marco Polo, while fighting for his city, was captured and put into prison. During his imprisonment he passed the time by telling stories of his adventures. Wild tales they were, about Cathay and the great cities he had visited—Ningpo, Hangchow, and Cambulac.

Courtesy Museum of Fine Arts, Boston

This Chinese painting on silk was made about the time of Marco Polo, or even earlier. It is one of four paintings that tell the story of a Chinese woman who was kidnaped by the Mongols and held a captive for twelve years. This picture shows a Mongol camp beside a hill. Notice the curtains which enclose the round tent, or "yurt," of the chief. In front of the yurt is a pavilion, under which you can see four tables. Outside the fence of curtains two men are busy preparing a meal. Near them is another yurt and a cart. In front of the hill is a high-wheeled carriage with an awning, and two camels are waiting to be hitched to it. Chinese and Tatars are standing with their horses at the left of the picture.

He told also about the hundreds of elephants he had seen in Burma; about the great ocean lying to the east of Cathay; and about the wealth in the islands we now call Japan.

Marco shared his cell with another prisoner, named Rusticiano, who wrote down the stories Marco told him. They were printed; and the book at once became a great success.

How imaginations were stirred. Marco's book was full of adventure. It told about gold, jewels, and wealth of all kinds. Before long everyone who could read was reading it. Those who were unable to read found someone to tell them what the book said, for Marco's story was interesting to all Europeans.

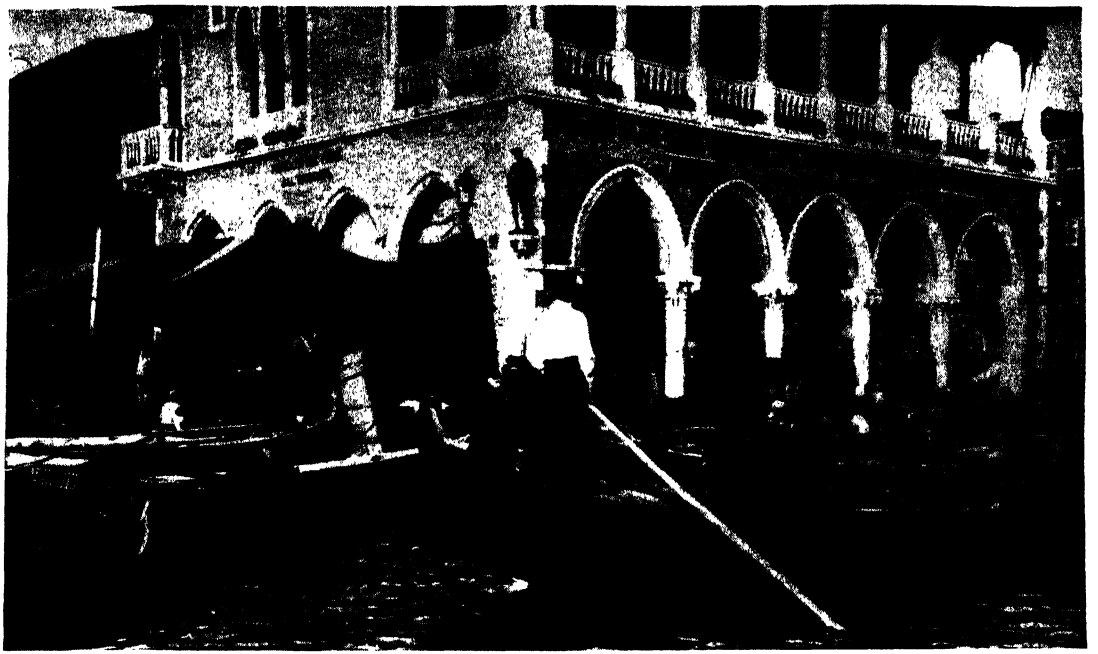
The people of western Europe had learned from the Crusaders something about a few of the products of the Orient. But they had never known about the lands from which these things came. They read Marco's book and the books of two monks who were missionaries in China. It was only natural that many men wanted to find some of these wonderful riches for themselves. Instead of being afraid to venture into strange lands, men were willing and eager to go. Many of them wished to go into the spice business, which was very profitable.

Why the people needed spice. When you look at the little cans of pepper and other spices in your pantry at home, it is hard for you to realize that once these products were very important. You may wonder why pepper and spices were so necessary then that men risked their lives in the spice trade.

You must remember that in those days there was no way to keep meat fresh. There were no refrigerators, no ice, no ways to preserve food except by drying, smoking, and salting. Such food became very tiresome. Adding spices to cooked dishes gave the people a welcome variety. Besides, the flavor of the spices helped to conceal the bad taste of meat that had begun to spoil.

The spice trade. Spices were very expensive. Most of them came from the part of the world known as the East Indies. Long ago these places were called the Spice Islands. Loads of spices were brought by ship and caravan thousands of miles, across stormy seas and over deserts. These caravans unloaded their boxes and bags at ports along the Syrian coast and along the shores of the Black

Most of Marco Polo's return journey from the land of the Great Khan was by sea. When the Polos arrived at Venice, few people knew them, for they had been absent nearly twenty-five years.



Hudson Historical Bureau

Venice was a busy city during the Crusades and for many years afterwards. Probably the canals were even more crowded than now. Here you see a view of one Venetian canal with boat-loads of merchandise being unloaded. In the days of the spice trade, many warehouses lined the canals, and merchants from all over Europe came to Venice to purchase spices, silks, glassware, and other goods.

Sea. Then ships took them across the Mediterranean to ports of Europe. Spices were costly because they passed through so many hands.

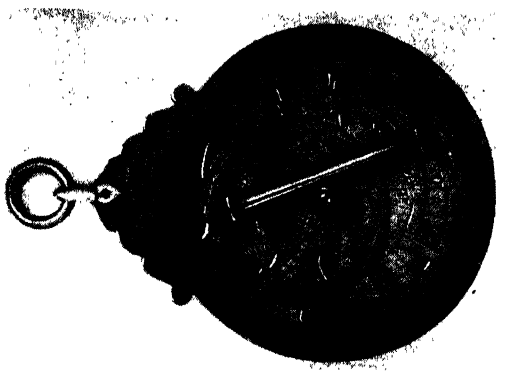
There were times when the European merchants were unable to get spices. Once, you remember, the Turks closed one trade route by capturing Constantinople. If you had been a medieval merchant in the spice trade, you would have been looking for a safer, cheaper way of importing your wares from the countries of the Far East.

The need for an all-sea route to the East. The cheapest way to transport goods long distances is by ship. The merchants of the Mediterranean sent their sailors to find an all-sea route to the Indies and to China. They knew that if such a way could be found, they could bring whole ship-loads of spices and silks and other goods to Europe from the East. Trade was getting better all the time, and it would be very profitable to supply people with more goods at lower prices.

Now you have found out two things about this period of history. You know that merchants wanted to find new trade routes, and you also know that people were talking about strange lands and the riches that could be found in them. Everything was ready for the Age of Discovery—except one thing. That was a safe way for sailing long distances on the oceans.

Sailing is made less dangerous. About two centuries after the time of Marco Polo some wonderful inventions were made. One of these was the building of a new kind of ship. To understand how important this was, we must look at the ships of earlier days.

Up to the time when William of Normandy invaded England, the vessels that were used in northwestern Europe were like the Viking ships. They were open boats with



Metropolitan Museum of Art

This complicated instrument is an astrolabe. With it the sea-captain could tell the time of day and the latitude of his ship. Do you know what the lines of latitude and longitude are? Mariners do not use astrolabes any more, but have an instrument called the sextant, which gives much the same information and is much more reliable. Do you think that any workman could make an astrolabe?

single sails, rowed at times by oarsmen. The picture on page 220 shows you the kind of boats they were. Only the most daring sailors ventured very far out to sea in these ships.

When the Normans settled in England, they protected themselves in fortified castles. As they began to fight at sea, they built two little castles on each of their ships, one at each end. These were about eight feet high and were a good protection for the men. Before long these little castles were made a part of the ship when it was built. Look at them in the pictures on pages 274 and 277. Even today a part of every ship is called a forecastle.

All the ships then were open. They did not have decks. The merchants complained that their goods were often spoiled by sun, rain, and storm. And so a new kind of ship was built. It had covered decks beneath which the cargo could be protected.

At the same time sailors were learning more and more about sails. The first ships could sail only with the wind. Now the seamen found out how to make different sails and to adjust them so that they could sail "across" the wind. The rudder was invented, and ships no longer had to be steered by a huge oar near the stern.

These things were a great help to shipping. Before good sails were invented, ships had to carry oars and plenty of men to use them. Often slaves were used for rowing, for slave labor was cheap. But the slaves had to be fed, and a great deal of space was taken up by the rowers and their food and water.

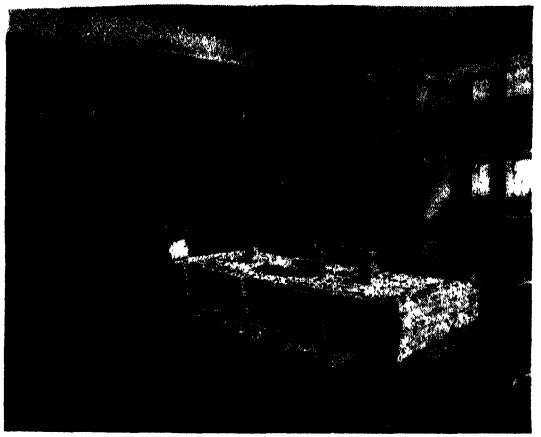
Sailing the open ocean. This new kind of ship with the adjustable sails, the rudder, and the covered decks was called a *carack*. By the fifteenth century all the mariners were using them. They were safe enough ships to take out on the ocean.

In those days the open ocean seemed a fearful place. Sailors told stories of terrible sea monsters that swallowed ships at one mouthful. There were stories of boiling seas, so hot that the nails and the pitch in the seams melted away and the ships fell apart. Then, too, there were terrifying tales of storms with waves as high as the highest church. But in the caracks the sailors felt much safer.

The compass and the astrolabe. Not long after the carack was invented, two instruments came into general use that were a great help to explorers on the sea.

The Bettmann Collection

This old engraving, made in 1560, shows a map-maker in his study. On his desk you can see a world globe. On the water in the big basin floats a board. On the board is a piece of lodestone, or magnetic rock. This device was a compass.



Courtesy German Railroads Information Office

This picture shows the dining-room of a merchant's home, just as it was in the days of the Hanseatic League. The circular staircase is beautifully carved, and the furniture is especially fine. The merchants of the Hanse towns made great fortunes in trade and were able to live comfortably and to hire workmen to make fine things for their homes.

You will remember that the Arabs used a compass to help them find their way about the sea. Perhaps they borrowed the idea from the Chinese. You have seen a compass and know how one end of the needle always points toward the north. Until the compass came to be used, mariners had to figure out their direction by means of the sun and the stars. With the compass, a sailor could find his way on the darkest night or the cloudiest day. At first many people thought the little compass needle was bewitched, but after a time every ship used one.

The other invention is called an astrolabe. With it a mariner could tell the time and how far his ship was from the Equator. This instrument was very useful, for it helped sailors find their way back again to places that they had discovered on some previous voyage. Do you see why? Both of these inventions made sailing less dangerous.

The work of the Portuguese explorers. With these new ships and new inventions to help sailing, bold men began to explore the seas. All of them were searching for new routes to the riches of the East. Several countries of Europe hunted for these new ocean trade routes.

For many years, merchants from Venice and Genoa went by sea to sell their goods in Antwerp and Ghent. On the way their fleets touched at the port of Lisbon, in Portugal. It was not long before the Portuguese were sending out fleets of their own to trade and to explore. Sailing was natural for the Portuguese, as many of them gained their living from the sea. By the middle of the fifteenth century, Portuguese sailors had discovered Madeira, the Canary Islands, and the Azores.

One of the most daring of the Portuguese explorers was their prince, Henry, who was often called "The Navigator." He built a tower at Sagres and gathered together a num-

The Bettmann Collection

This old Italian painting shows a group of merchants who have met to settle their bills. After some years this part of their business was handled by bankers, and the merchants then could spend their time buying and selling goods.

ber of men who knew a great deal about sailing and geography. One was an Arab, another was a Jew, and still another was an Italian who made maps. You might almost say that Henry had a school of sailing and geography. At any rate, he trained some very skilful seamen and sent out many expeditions to find a way to the Indies.

Prince Henry and his sea-captains especially wanted to explore the African coast. They had heard of a king in that land whose country was immensely rich. It was said that even the rivers in his country flowed over sands of pure gold. Every year Portuguese seamen sailed farther down the western coast of Africa. Wherever they stopped and turned back, they built a small stone tower. Finally, in 1487, one of these explorers, named Bartholomew Diaz, sailed as far as the Cape of Good Hope. Find this cape on the map of Africa on page 533.

German Railroads Information Office

The tall building, called the Crane Gate, was built in medieval times when Danzig, at the mouth of the Vistula River, was a member of the Hanseatic League. This league of seaports controlled not only shipping along the Baltic and North seas, but also many businesses, such as herring fishing.

German Railroads Information Office

These old warehouses in Lübeck, Germany, were built in the days when Lübeck was one of the Hanse towns and carried on a huge trade with cities along the Baltic coast. These warehouses were for storing salt, and boats could be loaded directly from them.

As the Portuguese mariners sailed farther and farther south along the African coast, the seamen became much less fearful. They began to think that perhaps there wasn't any edge of the world over which ships might fall. Perhaps the world really was round, after all. It might not be so hard to find an all-water route to India, or even to sail around the world.

But who would have the courage to sail far enough out on the open ocean to find out? You know who did. It was Columbus, the sailor from Genoa, who spent much of his time studying Marco Polo's stories and the maps of Italian sailors.

A new world is discovered. A brother of Columbus had been aboard the ship on which Diaz rounded the Cape of Good Hope. Columbus himself took several trips down the African coast. One of his friends was Toscanelli, a map-maker. According to Toscanelli's map, the world was round, and a ship might sail around it. You remember that some of the ancient Greeks, Aristotle for one, had believed that the world was round. But

in the centuries during which Greek civilization almost entirely disappeared, that old truth had been forgotten.

According to Toscanelli's map, ships could sail westward to Cathay and the Indies. Of course Toscanelli did not know that a whole continent lay to the west between Europe and the Orient.

Columbus and his friend had many long talks together. At last Columbus was convinced that if the earth was really round, he could reach the Indies by sailing west. All that he needed was money to buy ships and to pay the crews.

You know how Columbus finally persuaded the king and queen of Spain to give him the money. They believed that a new route to the Indies would be very profitable for Spain. It would mean much trade for Spanish ships and merchants, new mines to open up, more gold and silver, silks, and merchandise.

In other books you have read about the voyages of Columbus—how he sailed across the ocean to a new continent. And so we need not linger on his story, except to say that he did not find the Indies, nor any gold and silver mines.

Vasco da Gama and other explorers. The failure of Columbus to find great riches and a quick way to the Indies did not discourage other bold explorers of Europe. Within a few years, a Portuguese captain, Vasco da Gama, sailed around Africa to India. This was in 1498. Now the sea route to India had been found. Soon it became a regular trading route. Portuguese fleets began to bring home rich cargoes from the Spice Islands, from India, and from Cathay.

Hudson Historical Bureau

Christopher Columbus is here shown explaining to Queen Isabella that he believes he can find a way to the Indies by sailing westward. Most of the people listening do not seem to believe Columbus. Perhaps the man holding the casket is bringing in the jewels which Isabella is said to have pawned in order to buy and equip the three small ships.

Other explorers followed. The Spaniards were jealous of the success of the Portuguese. They increased their efforts to find a way of their own to India and the East. They still did not know that the great continent of America prevented them from sailing straight west to the Orient. They felt certain that there was a way past the islands and the coasts of the Americas. And so Ponce de León, Hernando de Soto, Coronado, Balboa, Cortez, Pizarro, and finally Magellan sailed westward. Magellan was killed, but by the time his last weather-beaten vessel dropped anchor in the harbor of Seville in Spain, men were certain of the fact that the world is round. By this time they knew, too, that Columbus had not discovered the Indies, but that he had found a new world.

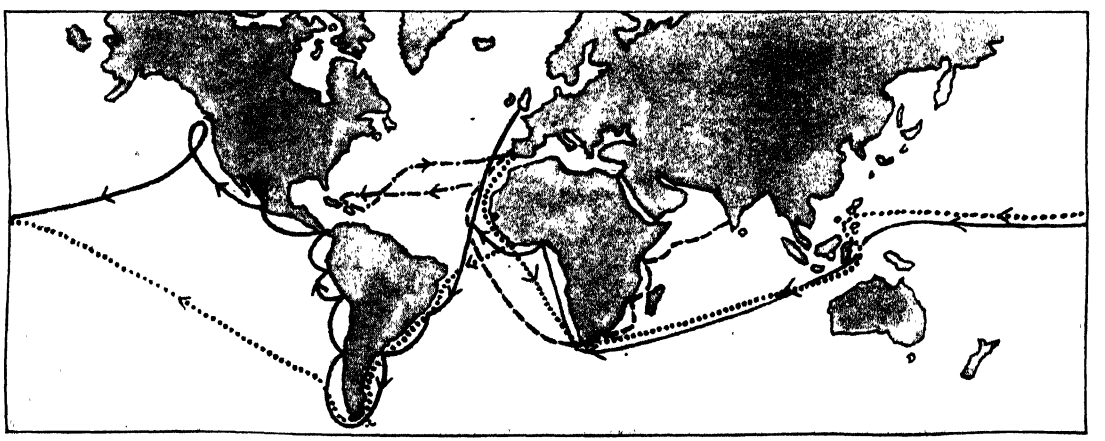
The Old World shares the New World. At first the New World seemed to the people of Europe only a barrier in their way to the East. In those days the explorers were eager to find a way through America, or around it. They wanted to reach the Indies, where they might trade for valuable silks, precious stones, and spices.

Some of the bold sea-captains headed their ships toward the new continent, trying to find a passage through it. Others went looking for gold; some wanted to find new places to trade. They claimed the land for their countries wherever they explored—French explorers for France, English for England, Spaniards for Spain.

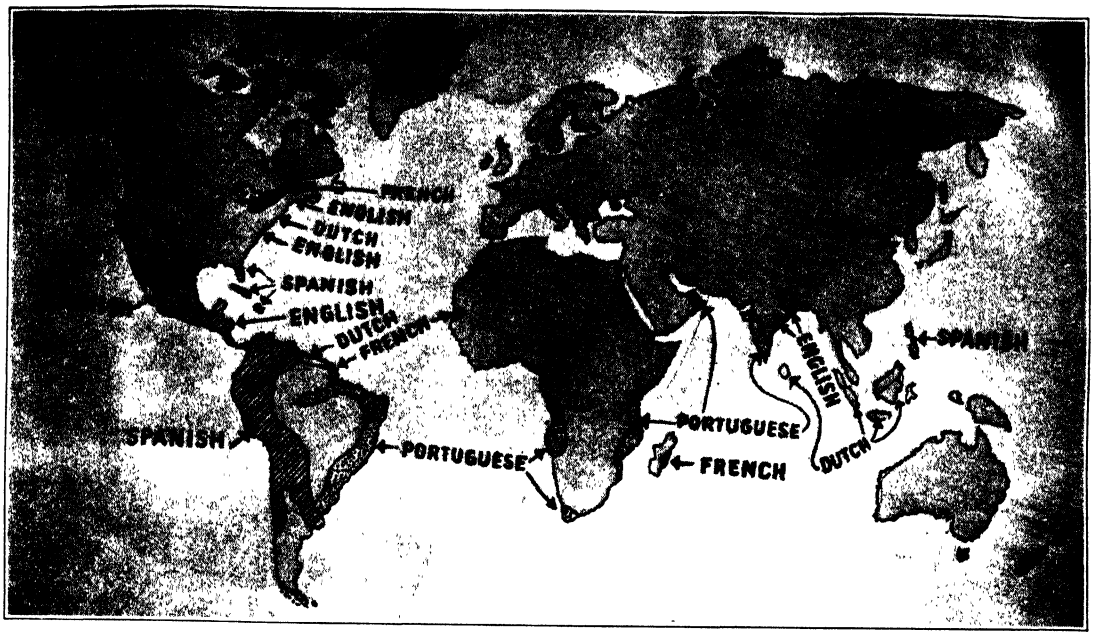
At first they were disappointed in the new land. All that North America yielded them were vast areas of land. Then the Spaniards found gold and silver in Mexico and South America. Later Mexico and our Southwest became dotted with huge Spanish farms. They were like great feudal estates.

A boom for Europe's trade. The keen French merchants saw a chance for business in America. Furs were in great demand in Europe, and there seemed to be an unlimited supply of them in the New World. Before long, French trappers and traders were paddling up the rivers in many parts of North America. They carried on a lively trade with the Indians for skins that would some day be worn by fine ladies and gentlemen in the European capitals.

English merchants saw the profits in the fur trade, too. But the New World meant even more to them. There were forests of wood that was suitable for building the ships which England needed. Along the Atlantic coast were other forests where they could



The solid black line on this map shows the long voyage of discovery taken by Sir Francis Drake. The dot-and-dash line shows where Columbus sailed. The dotted line is the route of Magellan. The line of dashes shows the voyage of Vasco da Gama to India. For what countries did these men explore?



On this map you can see where the nations of Europe founded colonies in different parts of the world. Trade with distant countries made some of the nations prosperous, and they wished to control the places where their merchants and traders secured goods and raw materials. Besides, colonies in other lands gave the nations room to grow as their own homelands became crowded with people. Not all the colonies are shown on this map. Nor did all the nations manage to keep the colonies which they first settled.

obtain pitch and turpentine. These products were called "naval stores" because they were needed for building ships and keeping them in repair.

So here we find the Spanish, the French, and the English—all claiming an empire in the New World. This brought about a wild scramble for land and bitter quarrels among the nations of the Old World. Other European countries, too, such as Sweden and the Netherlands, were attracted by the opportunity to establish colonies.

What the discoveries meant to the Old World. The discoveries of new land and new trade routes did two important things to the Old World. In the first place, the trade and the new mines of gold and silver made many people rich. In the second place, European nations began to struggle for land in the New World. Each country wanted a great colonial empire. This had important results, as we shall see.

As riches increased, more ships were built and sent out. As more ships sailed the high seas, the people at home grew richer. In France, in Spain, and in England the royal courts grew more and more splendid and extravagant. Merchants and traders rivaled the nobles in wealth. Even the workers made more money.

During this period of exploration the farmers made money, too. Many serfs, by selling their farm produce, were able to pay for the use of their land in cash instead of by work. In this way they became tenant farmers—that is, farmers who paid rent and were independent, instead of remaining serfs who took orders from their lords. Some even bought their farms outright and became landowners.

At the same time the number of craftsmen grew as the demand for manufactured goods increased. People with money wanted more shoes, more clothing, finer furniture—more

of everything. There were profits in making and selling goods; and so more and more men learned to be craftsmen. As such business paid best in the towns and cities, most of the skilled workers went to the towns for employment. The cities grew rapidly because more people found ways to earn a living away from the farm.

In our next chapter we shall learn about London in the days when it was becoming the largest city of the world. We shall find that there were good reasons why this city grew large and prosperous.

Talking Things Over

1. Why was the cost of bringing spices to Europe greater than the original price paid for the spices themselves? Talk about the details of transportation. Do you know of any articles whose transportation costs more than the cost of producing them?

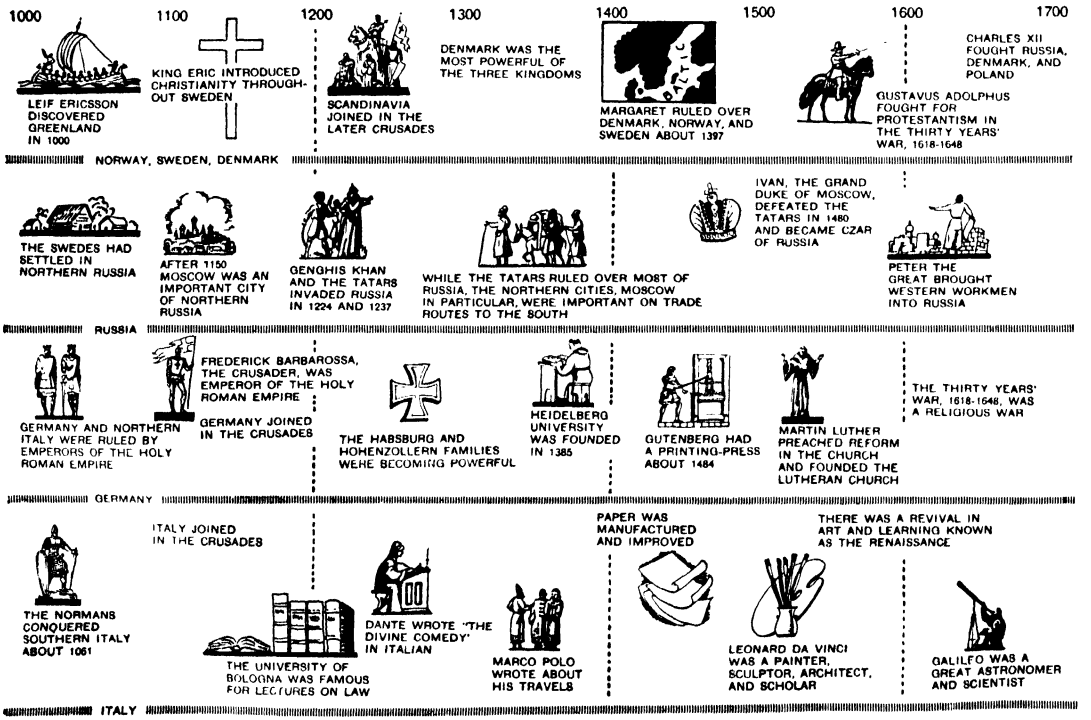
2. Why were spices so important in the Middle Ages? Why isn't our need of them as great today?

3. In what way is ice a civilizing influence? Can you tell of several different ways to keep food from spoiling?

Doing Things Together

1. Spices can be used for a game which tests the keenness of your different senses. Bring small amounts of different spices to school. You might bring cinnamon, cloves, nutmeg, ginger, or any other spice. See if you can identify them by sight without smelling or tasting them. Next try to identify them by the sense of smell alone, and then by the sense of taste alone. Keep track of the scores you make.

2. Most people find pictures of boats attractive. Why don't you plan an exhibit that shows how the boat has been developed? You can show pictures of the primitive canoes of savages, and many other boats down to the big modern liner.



PICTURE HISTORY

Other countries were developing at the same time as those you see named in this Picture History. You could make a Picture History of events mentioned in this book which are not included in this chart.

Metropolitan Museum of Art

The English artist who painted this picture is showing Queen Elizabeth bidding good-by to Sir Walter Raleigh, who is about to sail on an expedition to South America. Although Sir Walter had persuaded the Queen to let him send many expeditions to North America and try to found colonies in Virginia, the Queen never permitted him to go to the colonies. Do you know what happened to Raleigh's expeditions?

XXI. ENGLAND IN THE DAYS OF QUEEN ELIZABETH

A Time of Expansion

LONDON, the heart of England. Suppose we imagine ourselves in London, back in the prosperous days of Queen Elizabeth, or "Good Queen Bess," as her subjects called her. She ruled from 1558 to 1603, and the years of her reign are called the Elizabethan Period. During this time England was becoming a strong and prosperous nation. London was the heart of the kingdom. It set the fashions and furnished the important news for all England.

Do you remember what was said about the *Londinium* of Roman times in Britain? Turn back to page 215 if you have forgotten. More than a thousand years later there was still a busy city where the trade roads crossed the Thames River. It was much bigger and busier than the old Roman city. Times were prosperous, and wealth was pouring into the country. England's trade with other nations was growing bigger and richer every day.

The old walled city. The Romans had built a wall around Londinium. William the Conqueror built the Tower of London at a corner of this wall in order to protect the city and to control traffic up and down the river. The Tower was one of a group of buildings surrounded by a moat as well as by a wall. For a long time the Tower was used as a palace, but later it became a prison, with gloomy dungeons beneath it.

The old city of London was inside the city

The narrow streets of London were thronged with people of all kinds—soldiers, sailors, workmen, shopkeepers, beggars, and lords. Merchants stood outside their shops to invite customers inside, and thieves watched for an opportunity to steal goods that were left unguarded.

wall. But during the reign of Elizabeth it began to spread outside. Today the part that was inside the old wall is called "The City." In the days of Elizabeth the part of London known as Westminster was a separate city, a mile west of London and farther up the Thames River. There had been a palace and an abbey at Westminster since before the days of William the Conqueror.

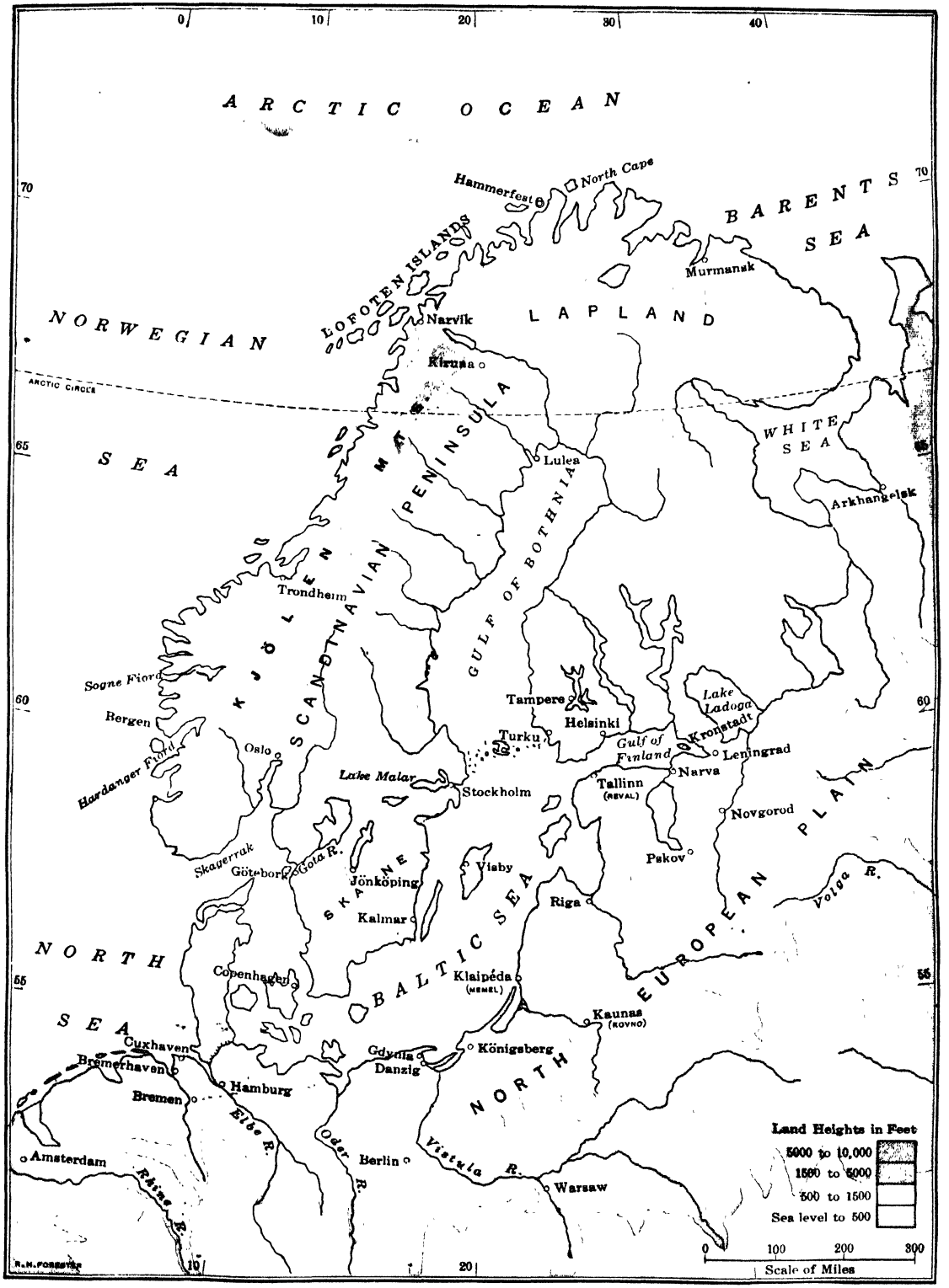
Londoners at work and at play. Within the wall almost everything needed by London people was made. There were millers to grind grain, brewers to make ale, and bakers to bake bread and cake. There were slaughter-houses where meat was prepared and tallow melted for candles, as well as tanneries for producing leather. In shops inside the wall armorers hammered out armor, and smiths forged every kind of tool or weapon used by the English.

Peddlers cried their goods up and down the dark little alleys—for so we should have called most of their streets. The loudest cries were from the fish-wives, the orange-women, the broom-sellers, and the apple-sellers. Muffin-men went about ringing small bells. Chimney-sweeps in tall hats rode their donkeys, followed by the boys who were learning the business.

Joyous festivals and holidays were common, and so were pageants and other shows. It was about this time that the first theaters were built in England. Before this, plays had been given in churches or in the yard of some inn or tavern. For these first English theaters William Shakspere wrote his plays.

From the Tower of London as many as one hundred thirty churches could be seen. The holy days and the saints' days were always celebrated in some way.

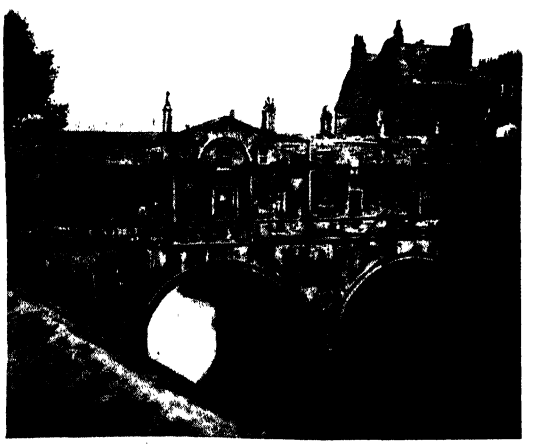
The common people had a good time at the markets. There were several within the city walls. What is called Covent Garden today was then the Convent Garden of the monks of Westminster. During the reign of Elizabeth this was a market for hay and straw. Bartholomew Fair, which dated back to 1133, was held just outside the city walls. It was a market for cloth and other goods, and lasted until 1855. There were other markets for fish, for cattle, for flowers, and for many other things.


ARCTIC OCEAN
NORWEGIAN SEA
BARENTS SEA
WHITE SEA
NORTH SEA
BALTIC SEA
LAPLAND
LOFOTEN ISLANDS
Hammerfest
North Cape
Murmansk
Narvik
Kiruna
ARCTIC CIRCLE
Lulea
Arkhangelsk
SCANDINAVIAN PENINSULA
KJÖLEN MTS.
GULF OF BOTHNIA
Trondheim
Sogne Fiord
Bergen
Hardanger Fiord
Oslo
Skagerrak
Göteborg
Göta R.
Tampere
Helsinki
Turku
Lake Ladoga
Kronstadt
Gulf of Finland
Leningrad
Narva
Tallinn (REVAL)
Lake Malar
Stockholm
Novgorod
Pskov
Volga R.
EUROPEAN PLAIN
SKÅNE
Visby
Jönköping
Kalmar
Riga
Copenhagen
Klaipéda (MEMEL)
Kaunas (KOVNO)
Cuxhaven
Bremerhaven
Bremen
Hamburg
Gdynia
Danzig
Königsberg
Elbe R.
Oder R.
Berlin
Vistula R.
Warsaw
Amsterdam
Rhine R.
Land Heights in Feet
5000 to 10,000
1500 to 5000
500 to 1500
Sea level to 500
0 100 200 300
Scale of Miles
R.H. FOSSETT

The Thames and London Bridge. The heart of London was the river Thames, a great highway for travel. As there was no factory smoke or soot in those days, the river was clear and sparkling, in great contrast to the narrow, muddy streets. Many small boats plied up and down, carrying passengers or laden with goods for market. Ocean-going ships sailed up as far as London Bridge.

You have all heard of London Bridge; probably many of you have sung, "London Bridge is falling down." Parts of old London Bridge really did fall down, several times. The bridge-builders of the time did not know how to make foundations that were strong enough to stay in the shifting sand-bed of the river.

The old London Bridge was nearly one thousand feet long. It was forty feet wide and stood sixty feet above high water. It was a street as well as a bridge, for it was lined on each side with houses which had shops on the lower floors. There were ale-houses, and shops for needle-makers, bakers, hosiers, and haberdashers. As there was no separate path for foot-passengers, anyone walking across the bridge had to make his way among horses, carts, and vehicles of all kinds.



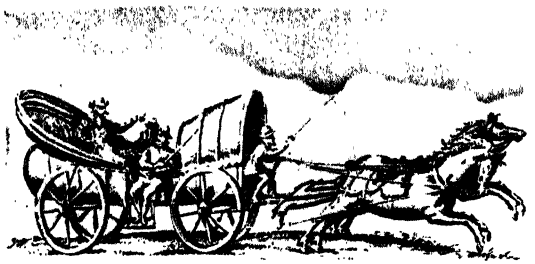
London Bridge did fall down, and we can no longer see what it was like. But this old bridge in Bath, England, is somewhat like the old London Bridge. There are houses on both sides of the bridge, and the roadway, which you cannot see, runs between.

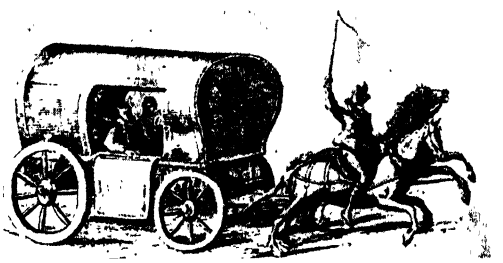
Associated British & Irish Railways

Many buildings like this were built in Elizabeth's time. This one is in the old city of Chester. Notice how the house is ornamented. The steps lead up to a second sidewalk which leads from building to building. In this way there can be shops on both floors of the building.

Travelers in London. At least twice a year the country squires and the landowning nobles came to the city to spend a few weeks. Travelers from Italy, France, and the East also came. Among them were scholars, many of them with Greek or Roman books which they were translating. New books of poetry, plays, or travel were being printed. Musicians from Italy and France came to England.

Others came—merchants, sailors, and adventurers, who brought the English people wider knowledge, eager hopes, high spirits, and a passion for adventure. Boys playing on the wharves heard men talk of adventures on the seas and saw strange articles that had come from distant lands. No wonder English sailors wanted to sail out of the Thames and away!





Coaches such as these were used in the time of Queen Elizabeth. Evidently the coach-makers had not yet learned to make springs. In most places the roads were poor—dusty in dry weather and deep in mud in wet weather. We can go as far in an hour in our automobiles as people could then in a whole day of hard traveling. Even in Elizabeth's time there were highwaymen who laid in wait for coaches on the roads and robbed the travelers. It was many years before the roads were safe at all times.

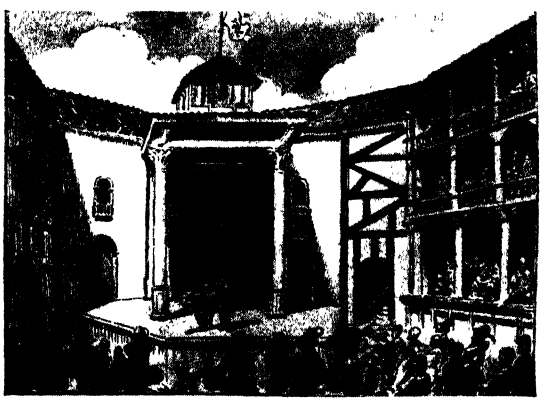
Why many Englishmen became sailors. The coasts of England were almost as thickly inset with coves and inlets as the coast of Greece. Such harbors make good training-schools for sailors. The North Sea has always been rich in fish, and the coves along the North Sea on the coast of England make fishing easy. From earliest times the people of England have been fishers and fish-eaters.

The waters of the shallow North Sea, under the strong breeze that is common there, were too rough for boats rowed with oars. At an early time the British mariners rigged their ships with sails. After they had become skilled in sailing on these stormy waters, they were not afraid to venture out on the broad seas. It was natural that the sailors of Britain and the other countries near these stormy seas should become the best seamen of the wide world.

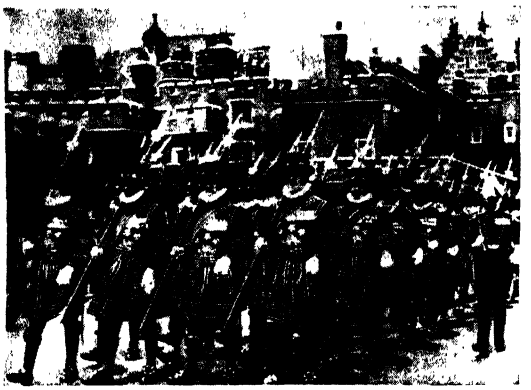
The great forests of England, with their tall, straight trees, furnished masts and timbers for many fleets. Merchants found it profitable to sail their ships far and wide.

There was still another reason why so many Englishmen turned to the sea. The land was becoming crowded. Not all the people could live on farms. As the oldest son of a rich landowner inherited all of his father's land, the other sons had to find some way of earning a living. Some became churchmen, and others joined the army, but many turned sailor.

Hawkins, a famous English seaman. Many of these younger sons of noble English families became famous seamen. Other noted captains came from families that had long been connected with the sea. Captain John Hawkins was one of these. His father was a ship-builder. Hawkins sailed to the West Indies to trade with the Spanish. There he found that the Spaniards could not get enough men to work for them on the plantations in the islands. So he sailed to Africa, where he captured a number of Negroes and took them back to the West Indies. The Spanish settlers were glad to buy them for slaves. The Africans could work in the tropical heat of the plantations. That was the beginning of the African slave-trade.



Here is the stage of a theater in the time of Elizabeth. How is it different from theaters of today? Notice that there is no scenery. There were no lights, and all performances were given in the daytime.



Pictures, Inc.

The Tower of London is now a museum, but in the days of Queen Elizabeth it was both a prison and a fortress. The guards of the Tower still wear uniforms which were designed in the sixteenth century. Notice the pikes they are carrying, their buckled shoes, neck ruffs, and odd hats. They are called "beefeaters."

Then Hawkins began to capture some of the Spanish treasure ships. That meant fighting, but Hawkins nearly always won and got away with the gold. Part of this wealth he always took to the Queen of England. To reward him, she made him a knight, and he was known as Sir John Hawkins.

Drake, who sailed around the world. Sir Francis Drake was another famous British adventurer. Sailing along the West Indies, he captured many Spanish treasure ships laden with gold.

Soon there were many Spanish war-ships sailing about the West Indies, eager to capture Sir Francis Drake. Then he decided to go to Peru, where the Spaniards obtained much of their treasure. He thought that it would be easier and safer to capture the ships as they were starting out for Spain.

Drake set sail in the *Golden Hind* with five other boats. Off the coast of Peru he captured Spanish ships laden with more than a half million dollars' worth of gold, silver, and precious stones. But now that Drake had this booty, how was he to get back to England? He had lost all of his ships except the *Golden Hind*. He knew he could not go back the way he had come because the Spanish war-ships were waiting for him. It looked as if he might lose the gold and his life, too.

To escape the Spanish ships, Drake took a bold course. He sailed up the west coast of America as far as California. Then he headed straight across the Pacific, through the Indian Ocean, and around Africa to the Atlantic Ocean, to reach home at last. Can you follow his route on the map on page 328? He had sailed around the world. Most of the gold and precious stones he gave to Elizabeth, his queen.

The Spaniards were furious. They tried to make Elizabeth give back the gold and pay for the ships that Drake had sunk. Elizabeth only laughed at them and rewarded her bold sea-captain by making him a knight—Sir Francis Drake. Of course, nowadays we should call a man like Drake a pirate and probably hang him. But people at that time had different ideas about law and order. And since Spain had bullied other nations in Europe, the English thought that it served her right to be robbed of the gold she had stolen from others.

The "Invincible Armada." At last the Spanish king, Philip, grew tired of having the

Associated British & Irish Railways

This manor-house of the days of Queen Elizabeth is particularly interesting to Americans. It is called Sulgrave Manor, and was the property of George Washington's ancestors. It is now a museum. There were many such comfortable manor-houses in England.

Associated British & Irish Railways

Shakspere was born in this house in the little town of Stratford-on-Avon. Does the house look more like houses of today than others you have seen thus far in this book? Can you think why the windows were made of many small panes?

English sea-captains plunder his ships. He began to build a great fleet of war-ships in the harbor of Cadiz. But before the fleet was ready to attack England, bold Sir Francis Drake sailed right into the harbor and destroyed many of the new ships.

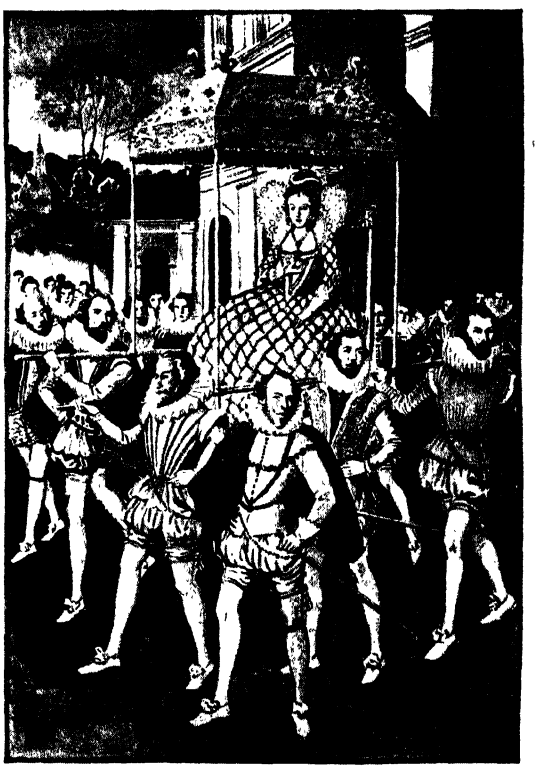
Of course the Spanish king was furious. Quickly he built more and more ships. When there were one hundred fifty, they sailed for England. The Spanish called this fleet the "Invincible Armada," which means "unbeatable navy," for they thought it too powerful to be resisted.

Queen Elizabeth had good reason to fear the power of Spain. English soldiers were hurried toward London from all parts of the country. The British sea-captains hastily put their ships in fighting trim. Great was the excitement when the huge Spanish fleet slowly sailed into the English Channel! Each ship was crowded with Spanish soldiers.

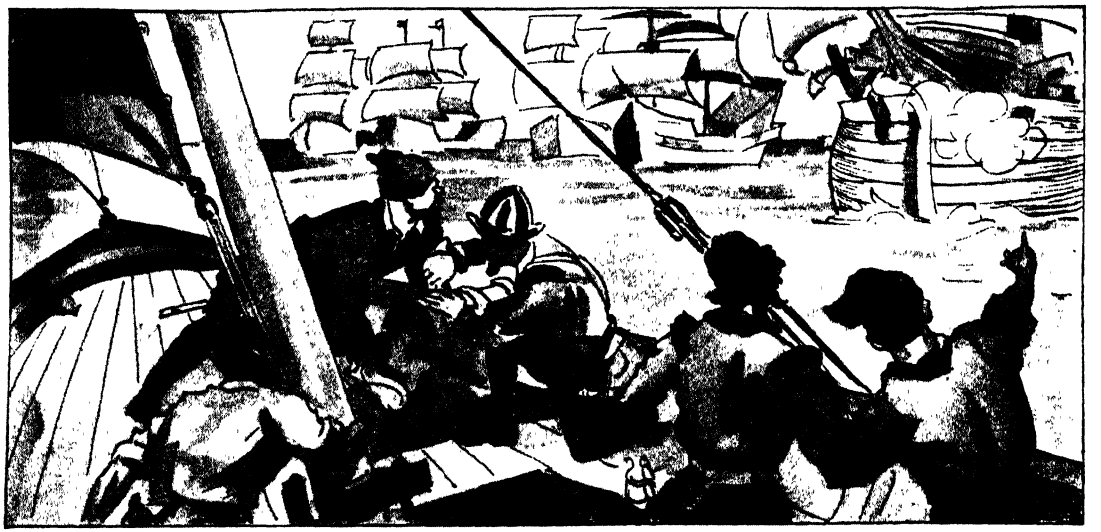
On came the mighty Armada, arranged in the form of a half-moon. But the Spanish ships had one great weakness—they could not move rapidly. All Mediterranean ships were clumsy and slow in comparison with the swift English craft that were built to sail the stormy waters of the North Sea and the open Atlantic Ocean.

The destruction of the Armada. The English captains let the Armada sail past them. Then they attacked the Spanish fleet in the rear. They would sink a ship and get away before the Spaniards could turn to chase them. Again and again the English vessels darted to the attack, sinking ship after ship of the Spanish fleet.

At last the remaining Spanish ships retreated to Calais, on the French coast. While the Spaniards were in the harbor of Calais, the English set fire to some old ships and turned them adrift, so that the wind and tide would take them into the harbor and set fire to the Spanish ships.



One method of transportation used in cities was the chair. Here you see Queen Elizabeth being carried in one on the shoulders of her courtiers. Later the chair was enclosed and called a sedan. We have a vehicle today called a sedan.



The Spaniards had built the Armada as a war fleet, but the English had to use whatever ships they could get to attack the Spanish invaders. Some were fishing boats and merchant ships on which the English hurriedly mounted small cannons. Some ships were manned with men who knew nothing of either sailing or fighting.

Dismayed and helpless in the face of so clever a foe, the Spaniards then sailed away for Holland. But a terrific storm arose and blew the Spanish ships across the North Sea. The English fought them as long as the powder held out. Finally the Spaniards tried to sail westward, around the British Isles, and then home.

Still another storm came, and many more ships of the "Invincible Armada" were wrecked, some of them on the coast of Ireland. Less than half of the Spanish fleet finally reached the home ports of Spain.

Great was the rejoicing in England over the victory of the swift English ships and their clever captains! From that time on, Spain's power on the sea grew steadily weaker, while England's grew stronger. The defeat of the Armada was a very important event to the English people. It proved to them that they had the strongest navy in the world. It also convinced them that they must always have a strong navy in order to protect their islands. Since then England has always kept a larger fleet of war-ships than any other nation of Europe.

The gallant Sir Walter Raleigh. Many Englishmen were wise enough to see that now was the time for their nation to expand. Walter Raleigh was one of these men. Perhaps you have read the story of this handsome man who spread his cloak over a mud puddle so that Queen Elizabeth might cross without getting her shoes wet. Elizabeth made him a knight and favored him in many ways.

Sir Walter Raleigh urged the Queen to send expeditions to explore and settle in America. He wanted to plant an English nation in the New World. He thought that this was a sure way for England to build up a great empire. You remember that empire-building was then the great idea in the minds of all Europeans. The nations of the Old World were racing to get possession of the New World.

How England became an empire. Since that time the British Empire has been constantly growing. Today it is said that "the sun never sets on the British Empire." This means that the empire has members or governs colonies in all parts of the world. When

it is night-time in England, it is daytime in some part of the empire.

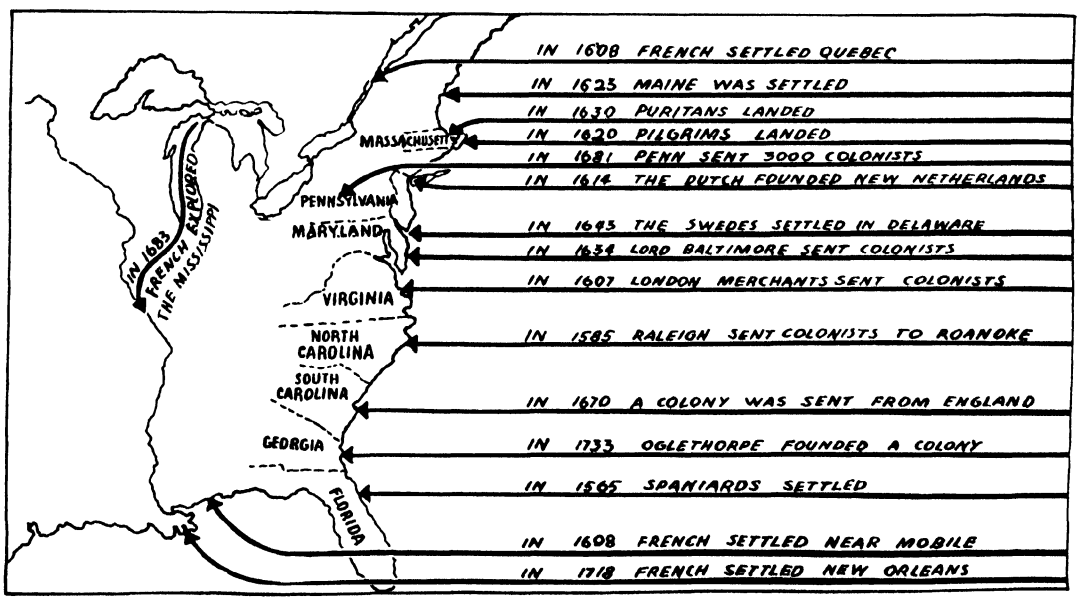
England began its expansion by taking in all the British Isles. Then it spread to other lands far away, west, east, and south. The English kings lost their lands in France, as you have read, but that did not prevent England from growing in other directions. As the English people extended their rule, their whole territory became known as the British Empire. Do you remember reading how the mighty Roman Empire grew until its laws governed almost all of the world that was known at that time? In somewhat the same way the British Empire spread English law, order, and civilization over widely scattered parts of the world.

Why many people left England. You know the story of how America was settled. Not only English people, but French, Spanish, Dutch, and Swedish people left Europe to go to the New World. Thousands of people left England to go to the colonies in America. The prosperous days of Good Queen Bess came to an end and were followed by hard times. Many people were poor and wretched. There were crowds of beggars in the city streets.

There was war in England because the people could not agree about religion and government. One group called Puritans wanted certain changes made and rebelled against the king. The war was won by the Puritans, and the king was beheaded. The people's leader, Oliver Cromwell, was made "Lord Protector" of the nation and ruled the people in place of the king.

At this time some of the defeated supporters of the king, who were called Cavaliers, left England and settled in the colonies of Maryland and Virginia, where other English people were living.

After Cromwell died, the English people welcomed another king to the throne. Then many more Puritans went to the New World to make homes for themselves. It was only natural that they should call the place of their settlement "New England."



In this period America was settled by the European nations. The map shows some of the principal colonies of North America. Notice the names of other European nations, besides England, and the colonies they founded. Do you know what happened to the colonies of these other countries?

The people gain new rights. The English people had more and more trouble with their kings. At times it seemed as if the people would lose the rights for which they had struggled so long. But in 1688 they managed to secure a new law, as famous as Magna Carta. By this law, known as the Bill of Rights, the English people won certain important rights: (1) no one could be imprisoned without a fair trial; (2) no taxes could be collected without the consent of Parliament; (3) members of Parliament were granted freedom of speech—that is, they could say what they pleased about politics and government; and (4) the people had the right to bring complaints before the king.

This Bill of Rights, with Magna Carta, established the English system of government. Part of our Constitution, which you know states the kind of government we have, contains the very same language as the English Bill of Rights. The Bill of Rights showed that the people had more power than the ruler. We have the same idea in our country.

You can see why so many of our ways are like those of the English when you read about the settlement of different colonies in America by English people. Now that you have read how the English became a strong nation and began to spread into distant lands, you can understand how English ways were carried to other parts of the world. In that way the civilization of Europe reached other continents.

Talking Things Over

1. What are some of the reasons why the English were interested in being sailors? In what other land of northern Europe did the men very early become good sailors? Is there anything similar in the geography of England and of the Scandinavian peninsula?

2. Discuss the reasons why England felt she should have a large navy. Why were the English able to defeat the Spanish Armada, which was made up of more and larger ships than the English fleet? Reread the account on page 98 of how the Greeks defeated the Persians in the battle of Salamis. How do this battle and the fight of the English with the Armada resemble each other?

3. It is not always the same time of day in different countries, or even everywhere in the same country. Do you know what time it is in California when it is three o'clock in New York? When it is daytime in America, it is night-time on the other side of the world. With this in mind, explain how it can be true that "the sun never sets on the British Empire."

4. The reign of Elizabeth was known as the Golden Age in English literature. Do you remember reading of periods known as golden ages in other countries? Who were some of the famous men you learned of in Greece's Golden Age? William Shakspere is the best known of the writers of Elizabeth's time. What are some of the plays he wrote? Did you ever see any of them acted on the stage? There have been motion-pictures made of several of these plays. If you have seen "A Midsummer-Night's Dream," discuss the parts you liked best.

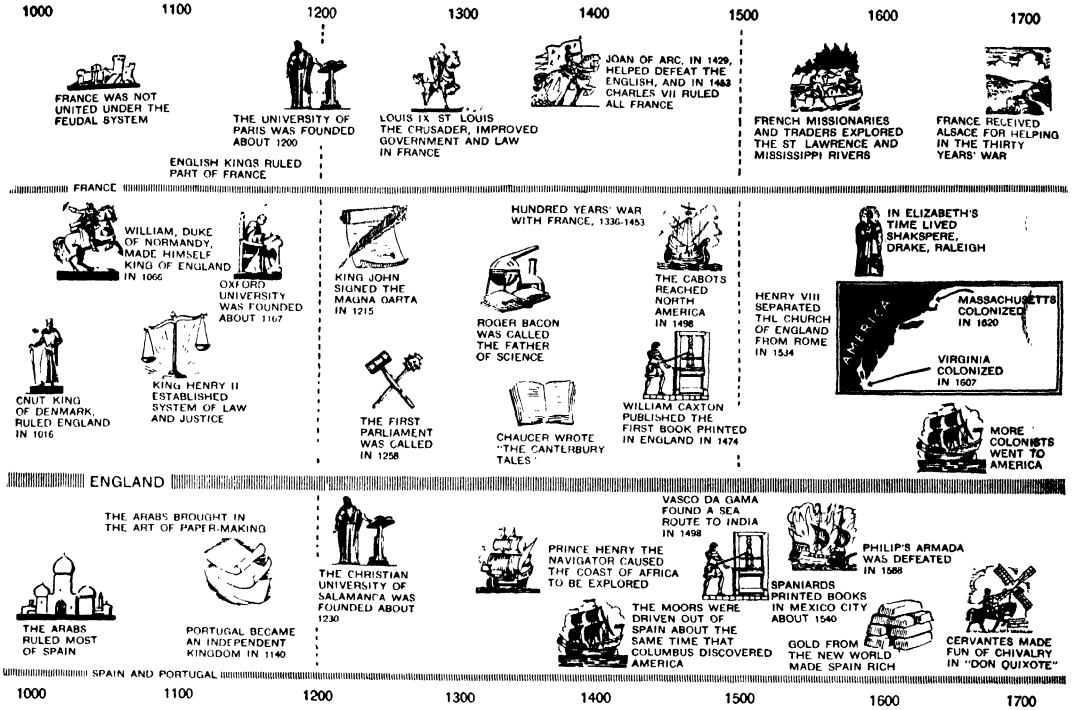
5. Read and discuss the provisions of the Bill of Rights. Go back to the discussion of Magna Carta on page 283 and see if the Bill of Rights developed further any of the rights that were won in Magna Carta. Do we have these same rights in America? Do you remember that we call the first ten amendments of our Constitution the Bill of Rights? Bring a copy of the Constitution to class again, and compare our Bill of Rights with the English Bill of Rights.

Doing Things Together

1. The Tower of London is one of the oldest and most interesting buildings in London. Look up and report on its history. You might tell briefly, also, of some of the famous people who have been imprisoned there.

2. It would be interesting to have a picture exhibit of London. Find pictures of Westminster Abbey, the Thames River, the Tower, and any other famous places. You might be able to find some pictures of life in old London to compare with scenes in London today.

3. There was not room in this chapter to tell very much about the many interesting people who lived in this period. Why don't you look up and report to the class on some of these? One of you might choose the life of Elizabeth; another, that of Sir



PICTURE HISTORY

Here you can see what went on in England and in other countries of Europe during the period you have just studied. On page 330 is another Picture History that shows events in countries not shown here.

Walter Raleigh. There are many others: for example, Sir Francis Drake, Sir John Hawkins, Shakspere, and the Earl of Essex.

4. Sir Walter Raleigh was very much interested in starting a colony in America. One of you might read about his attempts to plant a colony in Virginia and tell the class about it briefly.

5. Pretend you are a group of English sailors getting your ship ready to meet the Armada. Talk with each other about the size and number of the Spanish ships, of your own navy and the preparations you are making, and what chance you think you have of winning the battle. Try to make your conversation natural and easy, and remember that you do not know while you are talking that you will defeat the Spanish.

Courtesy German Railroads Information Office

For many years the emperors of the Holy Roman Empire were selected by men who met in the tall building with the high windows and the balcony This picture was taken in the market square of Frankfort-on-the-Main Can you locate this city on the map?

XXII. THE GROWTH OF OTHER NATIONS

The Scramble for Empire

ABOUT the time the English were settling in Virginia and Maryland and in New England, the Dutch people were making a settlement at New Amsterdam, which later came to be called New York City. Other countries were sending colonists, too Families came from Sweden, Ireland, Scotland, and parts of Germany Hundreds of people left France to make new homes in Canada. French also settled in our southern states

The Spanish had settled much of the southern part of the New World, but the English no longer feared them The defeat of the Armada had broken the power of Spain. During the next hundred years the real struggle for power was between the French and the English. In the end, as you know, the English won almost all of North America from the French, while other parts of the New World were left to Spain and to Portugal

Wars for new lands and trade. You see, it was just another scramble for empire The colonies in the New World were the big prizes for the winners of the many wars that went on in Europe during the seventeenth and eighteenth centuries As we look back, we see how distracted the people of Europe must have been with so much warfare During the feudal period the warring was chiefly between small lords During this modern period the fighting was between different kings. Sometimes it was between a king and his own people. But most of the wars were for more territory or for the control of trade.

One special cause of fighting among nations was the trade with the Far East—with the islands of the East Indies for spices, and with India for spices, cotton, and silks. The countries that traded with these Eastern peoples grew rich selling their valuable products to the rest of Europe. Finally, Holland won most of the "Spice Islands," or East Indies. England's queen became empress of India.

Frederick the Great builds up Prussia. As you remember, up to this time there had been no German nation. There were dozens of small and large dukedoms and little kingdoms in that part of Europe, but no one German nation. The people thought of themselves as Prussians, Bavarians, Saxons, Hessians, and so on, but not as Germans belonging to one united country.

The king of Prussia was a member of a family named Hohenzollern. This noble family was becoming wealthy and powerful. Its members married into other rich families, until they controlled a great deal of land and wealth. At this time Prussia included all of northeastern Germany.

Courtesy German Railroads Information Office

Frederick the Great had many canals like this one dug in the swampy parts of Germany. These canals drained the wet land so that crops could be planted. What else was necessary before the farmers could make the land produce good crops?

Courtesy German Railroads Information Office

Every year in the town of Nordlingen, Germany, the people hold an outdoor play about events that happened there during the Thirty Years' War. The people of the whole town take part in it, and the streets of the town are the stage. These two men are dressed like soldiers in the year 1634.

The third king of Prussia was Frederick the Great. When he came to the throne in 1740, he did many things to improve his country. He called leading French scholars to teach in the university he started. From all over Europe he brought musicians to his capital. He built an opera-house and hired Italian singers and dancers to present operas and ballets. He interested himself in agriculture and had the people adopt new and better ways of farming. Experts from the Netherlands were hired to teach farmers how to fertilize the land. Swamps were drained and put under cultivation.

Frederick did many more things for Prussia. He established schools, so that children could have an education. He had a strong, well-disciplined army and kept good order in his kingdom. Best of all, he ordered that newspapers should be free to say what they pleased about their king or any of the officials. He said, "In this country, every man must get to heaven in his own way." By that

he meant that his subjects could follow any religion they desired. Perhaps this religious freedom pleased the German people more than anything else, for they had suffered for many years while their princes had quarreled over religious matters.

Two royal families at war. Because Frederick made his kingdom stronger and increased the size of his army, Austria became jealous. Austria was ruled by the Habsburg family. At this time the king of Austria was also emperor of the Holy Roman Empire. Do you see how long this idea of the Roman Empire had lasted? Of course, by this time the emperor of the Holy Roman Empire did not have much power. He could not keep the kingdoms in his empire at peace with one another.

Both Frederick and the king of Austria wanted the leadership of Germany. The struggle between the two families, the Hohenzollerns of Prussia and the Habsburgs of Austria, is called the Seven Years' War. Perhaps you might think of it as a war between Prussia and Austria, but it was really a contest between two families to decide which one would lead the German people. In the end Frederick was the winner, and Prussia became the stronger.

The Bettmann Collection

When Frederick the Great was a young prince, he often angered his father, Frederick William, because he would rather play the flute than study military tactics. Even after he became emperor, the young man kept up his interest in music. He brought French and Italian opera singers to Berlin and built a large opera-house for the people. He invited French authors for long visits to his palace.

Metropolitan Museum of Art

Carpenters must have been proud of their tools in the days when these fancy, engraved tools were made. How many of these tools can you name? Are they very different from those in use today?

Frederick worked hard to make his country powerful and prosperous. He started many new industries in the cities of Prussia. He encouraged building and trade. You can see why he is called Frederick the Great. During Frederick's reign almost everyone prospered except the serfs on the German farms. But Frederick's large army and his wars made taxes very high.

Russia, a stranger in Europe. Just as kings in the West had tried to carry on the idea of the Roman Empire in the west of Europe, so did another ruler try to carry on the idea of the Eastern Empire. But when the Turks captured Constantinople in 1453, the Eastern Empire came to an end. The grand duke of the Russians, Ivan the Great, claimed the throne and thought he could carry on the old empire. Ivan's grandson, called Ivan the Terrible, even called himself Caesar. The Russian word for Caesar was czar, and from

that time the rulers of Russia were called czars. You see how the old name of Caesar and the old idea about Rome were kept alive. But no ruler could make Europe into one empire.

Protected by its forests and swamps, the Russian nation grew larger and stronger. Most of the overland trade routes from the Far East passed through Russia, and the Russian people thought and acted and dressed more like people of Asia than like people of Europe. But there were also some trade routes from Russia into Europe. One of them led from the town of Nizhni Novgorod, where a fair was held. However, the Russian people disliked the people of Europe, and Europeans were not allowed to stay in Russia for long.

Peter the Great makes Russia part of Europe. At last one of the Russian czars, Peter the Great, saw that his country really needed to carry on trade and to keep in touch with the nations of Europe. Peter knew that his land was a part of Europe. So he decided that Russia should "face west," and not east. To help bring this about, he built a new capital nearer the coast and moved his government there. That capital, first named St. Petersburg, or Petrograd (Peter's city), is now called Leningrad. Find it on the map on page 432. Do you see how it helped make Russia "face west"?

This old picture shows men paying their taxes in an Italian city. The man at the left is paying a tax to support the army, while the man at the right is paying taxes to support the law courts.

Metropolitan Museum of Art

This thick watch was made in Germany about the year 1700. It was wound with a key, like a clock. Although it was made by hand, without the help of machinery, it was accurate in keeping time. We know, then, that workmen were steadily improving and finding better ways of doing their work.

As Peter wanted a larger empire, he kept pushing out the boundaries of his land. He fought with the Turks until he had established ports on the Black Sea. His armies fought along the shores of the Baltic until they had conquered some of the lands there. He sent explorers to the east to make maps of Siberia and the eastern part of his empire. One of his explorers was Vitus Bering. His last name was given to the sea that lies between Siberia and Alaska.

Peter invited many foreigners into his service, and his capital was filled with people from England, Germany, and Sweden. The czar did succeed in making a part of his country more like Europe than it had been, but many people still followed customs of Asia.

Metropolitan Museum of Art

People also made progress in music while they were improving in other ways such as in building and transportation. This French picture shows a group of musicians practicing.

Struggles with neighbors. You have read how the various nations of Europe were fighting among themselves. These wars went on for many years. England and France were enemies in these wars, because each nation wanted the trade and the lands that the other had. Sometimes other nations of Europe went into these wars, first on one side and then on the other. All of them wanted trade and lands, too. The wars were just a scramble for empire.

All the countries of Europe thought they could have better trade and business if they owned colonies. The colonists would send food and raw materials to the home country. The home country would send manufactured goods to the colonists. In this way the home country would get rich.

The kings of Europe and their power. But while the struggles between the nations were going on, the kings were also having a great deal of trouble with their own subjects. As many of the kings in western Europe grew stronger, their kingdoms became larger, until in size they were somewhat like those of today. It was harder to rule many people than just a few.

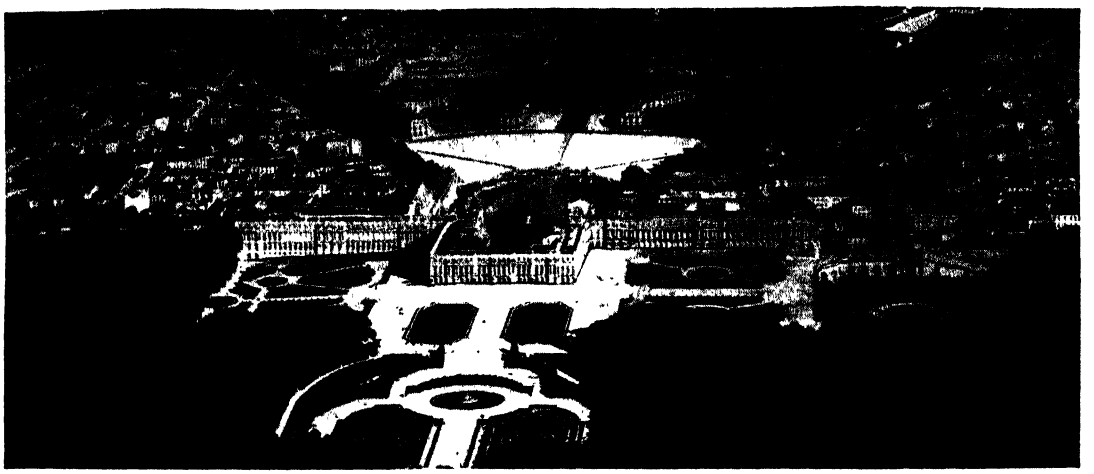
In some of the countries the kings lost power. In Switzerland the people gained their independence from the Austrian kings and ruled themselves. In England the people demanded more and more rights for themselves. The English kings handed over their power, bit by bit, to Parliament. As Parliament represented the people, you can see that the people were gradually coming to rule themselves.

Some of the European kings, however, were still what we call absolute monarchs. That means they had entire control over everything. They raised armies as they pleased, collected taxes as they liked, decided what the laws were to be, opened or closed schools just as they thought necessary, and even declared what was to be fashionable. In fact, they ruled *everything*. The most powerful of these absolute monarchs were the Hohenzollerns of Prussia, the Romanoffs of Russia, and the Bourbons of France.

The magnificent French court. No kings ever ruled over more brilliant courts than those of the Bourbon family in France. The most powerful and extravagant of these monarchs was Louis XIV, who built several beautiful palaces. The greatest of these still stands at Versailles, near Paris. In this building were halls of marble, with many beautiful paintings on the walls. One great room was lined with huge mirrors in which the king

Metropolitan Museum of Art

A famous artist from the Low Countries made this picture of winter sports in the sixteenth century.



Chicago Aerial Survey

The great palace of Versailles was built by the king of France. This air view gives you an idea of its tremendous size. It was the extravagance of kings, building such palaces, that helped to cause the French Revolution. The people finally discovered that they had to pay for everything.

and his courtiers could admire themselves in their magnificent clothes.

The park in which the Versailles palace stands is still famous for its flowers, its trees, and its fountains. Beds of royal purple flowers border the fountains. Each year thousands of people go to Versailles to see this park and the palace, which is now a museum filled with noted works of art.

The tax money which was paid by the poor French peasants and workers was wasted for luxuries of the gorgeous court. The poor people, of course, were never invited to see the royal display or to eat the fine food served in the handsome banquet hall. They lived in huts, with piles of straw for beds, and were lucky to have enough black bread to eat.

The peasants were having a hard time in France. The king made many bad laws and repealed many good ones. For example, Louis gave a certain company the right to sell salt in France. Then he ruled that every person over seven years old must buy seven pounds of salt each year, whether he needed it or not. This was called the salt tax. Even the poor who could not afford to buy all the bread they needed had to buy their seven pounds of salt every year.

The reign of a French despot. Then suddenly Louis repealed the law that had given the Protestants of France the right to worship as they pleased. These Protestants were called Huguenots. The king's action caused many thousands of the French Protestants to move to other countries. Thousands of them came to America.

Many of these people were useful citizens. Some had businesses which they moved from France to other countries. But Louis did not care. He kept on with his extravagance and his bad management. He paid no attention to the angry, starved-looking faces of the common people who were paying the taxes and submitting to his harsh and foolish laws.

Oppression leads to rebellion. It took the French people a long time to get rid of their Bourbon kings. It was not easy to find leaders and to break loose from the old way of doing things. Matters grew worse and worse, until many of the people were actually starving.

News from other countries helped to rouse the French. They learned how the English people had taken away some of the power from their king and forced him to treat them fairly. They saw how the American colonies had freed themselves from the English king

when he tried to tax them without giving them a part in the government.

These events in America and England roused the French people. Men wrote circulars about liberty and passed them out for the common people to read. "If the English people can free themselves, why can't we?" they asked. "If the Americans fought for liberty, why can't we?" But the French king threw such writers and talkers into a gloomy old prison called the Bastille.

The French Revolution. At last the French people could stand their Bourbon kings no longer. An angry mob stormed the Bastille. Some of the king's own soldiers joined them, and they battered down the walls of the prison and went into the dark and filthy underground cells. The mob brought out the ragged and starving prisoners and set them free. Then they cut off the heads of the guards, stuck them on poles, and paraded through the streets of Paris. This was on July 14, 1789, and July 14 is still celebrated by the French as their day of freedom, just as we celebrate July 4 as Independence Day.

The storming of the Bastille was the beginning of the French Revolution. In the country districts the peasants rebelled against the nobles. Many castles were burned, and the owners were killed or driven into exile. In some places the people drove out all the king's officials and set up little governments of their own.

The king, Louis XVI, and the nobles were frightened. The nobles offered to give up their privileges and let the people have what they wanted. It was too late. The French people were suspicious of the king and of anything the nobles did. The people decided they would never have any more nobles. They drew up a constitution and a statement that they called a Declaration of the Rights of Man. You can see, now, that they were doing just what the English had done in their Bill of Rights and the Americans had done in their Declaration of Independence only a few years before this time.

Among the things the people said in the Declaration of the Rights of Man are two worth remembering: "Men are born equal in

Louis XVI, king of France, called representatives of the people together in Paris and asked them to find new ways to raise taxes. Instead of doing this, the representatives insisted that the king grant the common people many rights which they did not then have. Then the king sent a messenger to tell them to go home. The leader of the people told the messenger that only soldiers with bayonets could make them go. If the king had listened to the people and granted their demands, perhaps he would not have lost his throne.

During the French Revolution a young officer, Rouget de l'Isle, wrote the words and music for a song. He sang it at a dinner in the city of Strasbourg and later to the people of the city. People liked it so much that it became the favorite song of the citizen-soldiers. The people of Paris first heard it when soldiers from Marseilles marched into the city singing it. Since then it has been called the "Marseillaise."

rights and remain so"; and "Law is the expression of the will of the people."

A new government at work. The first thing the revolutionists did when they had seized the power was to pass a law making France a republic. Instead of letting Louis XVI and his queen Marie Antoinette leave the country, they beheaded them. Later there followed what is called the "Reign of Terror." Thousands of nobles were beheaded, because they were not in favor of the new republic.

The republic set to work to pass better laws and accomplished a great deal of good. People could no longer be imprisoned for debt. The republic ended slavery in the French colonies. They made plans for better schools and hospitals, and they made a new system of weights and measures. Do you know what the metric system is? The French people invented it and began using it at this time.

The extravagance of the Bourbon kings had made France a poor country. In spite of all the taxes that had been collected, there was no money in the treasury. The republic had to find money in some way. And so the new government took possession of the rich lands of the nobles. Then the government divided up these great estates and sold them in small bits to the peasants. Soldiers were given land as a reward for their services. Within a few years France changed from a

The territory marked with the straight diagonal lines was ruled by Napoleon. He also controlled the lands marked with the dots. The countries marked with wavy lines were allies of Napoleon. Compare this empire with the Holy Roman Empire or with the old Roman Empire.

country of great estates owned by nobles into a land of small farms owned by the peasants.

Other countries watch France. The rulers of other countries did not want to see the French Revolution succeed. Of course they were afraid that their own people would act just as the French people had done. So some of these rulers decided to interfere. The French people were panic-stricken. They did not believe they could fight all the other European countries.

All this time France was at war with other countries. Prussia, Austria, and England were her chief enemies. France needed a strong leader to fight these other nations, and the leader appeared. He was the famous Napoleon Bonaparte.

Napoleon, leader of France. Napoleon, one of the greatest generals who ever lived, saved France from the other nations. But after he had defeated them, he tried to make himself emperor of all Europe. He wanted to rule a vast empire, as Julius Caesar had done.

In the short space of twenty years, Napoleon fought more wars and won more battles than any other general the world has ever known. If he had won his last battle, the story of Europe might have been very different. But at Waterloo, in Belgium, Napoleon was finally beaten by the English and the Germans. That was the end of his power.

The constant wars of Napoleon brought a great deal of suffering and loss to the people of France. But his soldiers and the people of France loved him, for he was a great man and did many good things for France. He had engineers dig canals to connect the French rivers so that farmers could easily bring their produce to markets. He had good roads built in all directions. Under his orders the school

system was improved so that all children could get an education. He also did something that a few other great leaders had done in earlier times: he had the laws put in order. Do you remember other great leaders who had done the same thing for their peoples?

Results of the French Revolution. When Napoleon lost his power and was sent into exile in 1815, the French people called back their Bourbon kings. But the new kingdom lasted only a few years. Then a republic was again established. For a brief time there was a second empire, but France once more chose to be a republic. The days of harsh kings and selfish nobles had come to an end for France during the Revolution. The great uprising of the people had brought certain changes that were to remain. Let us see what these changes were.

(1) The French peasants were free at last. The nobility no longer had special rights and privileges. Even when kings were brought back, they could not make laws, collect taxes, or imprison people as they pleased.

(2) France had a constitution which provided that laws were to be made by an assembly which was elected by all the citizens who paid a certain amount of taxes. Only this assembly could tax the people.

(3) Anyone had the right to worship as he pleased. We call this religious toleration.

(4) Newspapers were allowed to publish what they pleased. They were allowed to talk about their government as much as they wished.

(5) Thousands of great estates, once owned by wealthy lords, were broken up into small farms and divided among the common people.

From all these events you can see that the day of democracy was beginning on the continent of Europe. Already, the people of two countries, France and England, had a greater share in their government than before. Our next chapter tells how businesses grew and some countries became industrial nations.

Talking Things Over

1. We first heard of Germany when the Teutonic tribes began to invade the Roman lands. Later Charlemagne united most of Germany under his rule. Why did not Germany stay united? Think of reasons why it took longer for the Germans to become a nation than for the French or the English.

2. Frederick the Great allowed his subjects to follow any religion they wished. Was that unusual in Europe at that time? Do we have the right to worship as we please in America today?

3. Talk over some of the things that Peter the Great did for Russia. Look at a map of Russia and decide what Russia's size and position had to do with some of Peter's difficulties.

4. What do we mean when we speak of an "absolute monarch"? Explain how the Bourbon kings of France misused their power and caused a revolution. Do you think the people would have risen if they had been given some part in the government?

5. Compare our Revolutionary War with the French Revolution. Remember that American soldiers were fighting against troops sent from across the sea and that the colonists broke away from a government which was located on another continent.

6. Read over the results of the French Revolution. Were some of the rights which the French people won the same as some of the rights which the English people had won by more peaceful means?

Doing Things Together

1. Work together to make separate lists of the things done for their countries by Frederick the Great, Peter the Great, and Napoleon. Talk over the ways these different men used to solve similar problems.

2. See if you can find any books about Napoleon which have been written for young people. Collect some of the stories to read to each other.

3. The Duke of Wellington and Admiral Nelson were two English heroes of this time. Both of them fought against Napoleon. Look up their lives in the encyclopedia or in other books and make reports on them.

4. Notice the pictures of Versailles on page 347. It would be interesting to find pictures of Marie Antoinette and Louis XVI. Note their very elaborate clothes and hair dress. Bring what pictures you can to class and put them on the bulletin-board.

James Sawders

Modern Europe is now a land of both farms and factories. This great flour mill in Bremen, Germany, is located where it can receive grain by water, and can also ship out its products cheaply.

XXIII. THE INDUSTRIAL REVOLUTION

New Ways to Do the World's Work

THE lives of millions are changed. You have seen how nations developed in Europe during the sixteenth, seventeenth, and eighteenth centuries. You have read about their rivalry and wars for territory and trade. Then you have seen how the people of some nations struggled with their rulers for the right to rule themselves. These struggles we have called revolutions. In England the struggle resulted in making Parliament more powerful than the king. In France the Revolution put an end to the French kings and the ruling nobles.

Then a different kind of revolution came. It began in England about 1800 and gradually spread to other countries. It did not change the power of kings and rulers much, but it altered the lives of millions of the people. We call it the Industrial Revolution because it brought about a complete change in the way industry, or work of all kinds, was carried on. Because of it we now have streetcars and automobiles and factories and huge stores. Look at the pictures in this chapter. They show you some of the changes made by the Industrial Revolution.

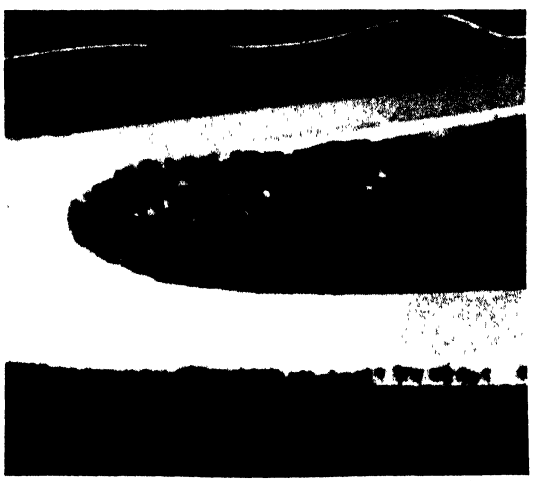
For nearly a thousand years the common people of Europe had lived and worked in much the same way. They cut their grain with a sickle and threshed it with a flail, as the early farmers had done. Men and women worked at spindles and looms in their homes, spinning thread and weaving cloth by hand. Men used iron tools of a kind that had been invented centuries before. Iron was heated in forges and beaten into shape by hand.

The country-side of old Europe. If you could have flown over the country in an airplane during those days, you would have seen a checker-board arrangement of cultivated

fields, fallow lands, and pastures. Here and there you would have seen a manor-house with its lawns and orchards, rough farm roads winding between the fields, and a highway cutting straight across the country.

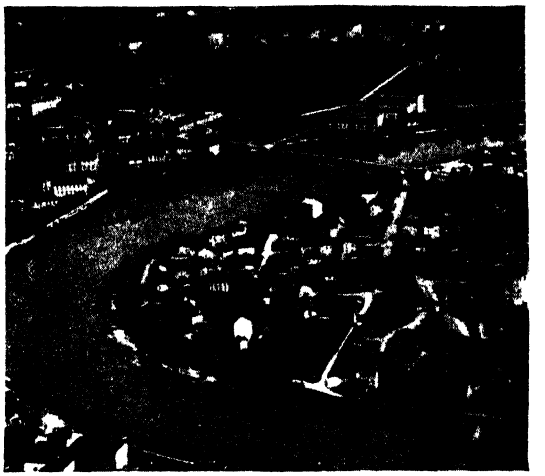
You would also have seen large areas of woodlands, rough hillsides, and fields that were used by all the people as pastures. Here and there you would have passed over villages of thatched cottages. And occasionally you would have noticed a larger town, with its market-place, city hall, and cathedral. There you would have seen narrow, crooked streets and a line of walls encircling the town.

Today you can actually go traveling in the air above the same country-side. What do you see? It is much the same checker-board as before, except that the fields are somewhat larger. The manor-houses are still standing, but here and there you see smaller houses that were not there before. The villages seem larger and better planned. The narrow, crooked roads have given place to broader highways. There are fewer forests, and in some places the trees have entirely disappeared and the slopes are bare.



James Sawders

The two pictures on this page and the one at the top of the next page may give you some idea of the way in which villages grew into towns and towns grew into cities. Here you see a village located at the bend of a river. What advantages has it?



French Government Tourist Bureau

Good transportation has helped the village to grow into a large town. There are many buildings now, and the town has grown across the river. There are docks for boats along the river, and you can see more roads than before. Another reason for the growth of this town is its location close to a good supply of raw materials for its workshops.

There are railroads, canals, piles of ore, coal, and slag. There are long rows of brick houses, all alike. Here and there streams have been dammed to form ponds, with mill-wheels in rambling factory buildings beside them.

In some towns you see pieces of the old walls, but most of the walls have been torn down, for the towns have spread far beyond them. There are railroad yards, gas-works, steel mills, and warehouses. You see bustling seaports that were little fishing villages in the days of Queen Elizabeth. Some of these fishing towns have become fashionable seaside resorts.

But the most surprising change is in the number of people. In your earlier bird's-eye view you saw only a few million people in all Europe. Today there are more than three hundred million.

Why did the towns and cities grow so large? How is it that the land is now supporting so many more people? To understand these things fully, we must go back and see just what happened. Suppose we look at

Sloane Collection

When engines were invented to run machines, and factories were built, some towns grew into cities. What are the changes you can see when you compare this picture with the two on page 353? Besides the material that is made into goods in the factories, what else must the city obtain easily?

England, for that is where the Industrial Revolution began.

Why sheep-raising was important in England. In the seventeenth century, England was still a country of farms. Wool was the chief article the English had to sell. It was shipped across the English Channel to towns in Flanders, where there were many expert weavers. Bruges, Ghent, Ypres, and Antwerp were called the "cloth towns" because in them so much cloth was made. It was all woven by hand in the weavers' homes. Find Flanders on the map on page 293. What is its name today?

English wool brought a good price in Flanders, for the English sheep had fine, long, silky coats. The English had found out that wool was the most profitable crop they could raise on their farms. Hunters had killed most of the wolves, and since England and Scotland form an island, no wild animals could enter from other lands. For that reason it did not take so many shepherds to protect a flock in England as in other countries.

The problem of farm labor. English farmers began to fence off part of the common lands and some of their grain lands for sheep pastures. But doing this meant that hundreds of farmers had to give up their fields. You see, one shepherd with his dog could watch over many acres of land grazed by sheep. On the other hand, it took a good many farmers to care for crops on the same amount of land.

The farmers whose small farms were turned into sheep pastures had no place to go except to the towns. Other farmers went to the towns, also, because they could no longer get work to do on farms. Owners of land were finding out how to raise better crops and finer cattle. They made the land produce more for them with less work. And so one man was able to take care of more land than before. Perhaps an owner with ten farmers working for him found that eight men could do the same amount of work and raise the same crops. He would no longer hire two of the ten men, and so those two moved to a town to find work.

What were all these men who moved to the towns to do for a living? What work could they find to do? Suppose we see what

German Railroads Information Office

With the aid of this simple machine men were able to make better thread and yarn. The spinning-wheel also made thread faster than it could be made with the distaff and bobbin. This German craftsman is winding yarn from the large reel on a bobbin which will be used for weaving.

German Railroads Information Office

Compare this slow way of weaving textiles with the picture on page 461. Although this German weaver has the help of a good hand loom, he cannot produce very much cloth in a day.

happened and discover how these men found work in a business that has been important to England for many years.

England's weavers. The English weavers were very busy at this time. England had beaten France in America in a war they called the Seven Years' War. (We call it the French and Indian War in our American histories.) After the war, business was good, and the English people bought a great deal of cloth. Many thousands of yards were shipped to the colonies in America. Weaving was a profitable business.

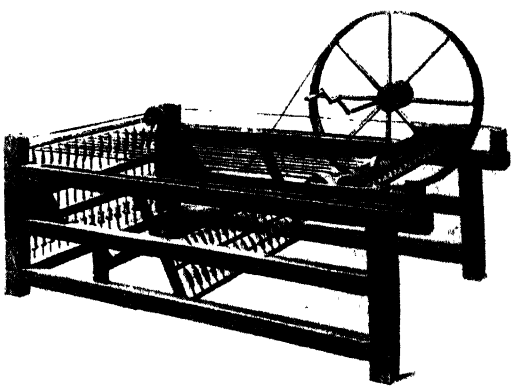
But in Flanders weaving was not so profitable. Many of the weavers in the cloth towns did not have enough work at home. Some of them crossed the Channel in order to get a share of the profitable English trade. They set up their looms in the villages of Kent, on the southern coast of England. The moist climate there was good for weaving, for dry threads break easily and cause trouble. The weavers' **settlements**, spreading rapidly through Norfolk, Suffolk, and Kent, also became known as cloth towns. From these skilful foreign craftsmen the English learned better ways of weaving.

Soon the **flourishing cloth** industry became very important in England. Several laws were passed to protect it. The export of raw wool—that is, wool just as it is clipped from the sheep—was forbidden. All people except the royal family were forbidden to wear any foreign cloth. Those who spent less than five hundred dollars a year on clothing were compelled to go without furs and silk linings and were forced to use woolen linings instead.

The weaving of woolen cloth soon became the chief industry of England. As a result of this increase in spinning and weaving, the poor men who had flocked to the towns found work helping to make cloth.

There were no factories in those days. A weaver owned his loom, went out to the market and bought his wool, and then spun and wove it in his home. When the cloth was made, he sold it to a cloth merchant or perhaps took it to a cloth fair himself. Because goods were made in the homes, we call this method of work the "domestic" system.

Home workers become factory hands. At last some man with money enough to buy several looms thought of a new plan. He put a



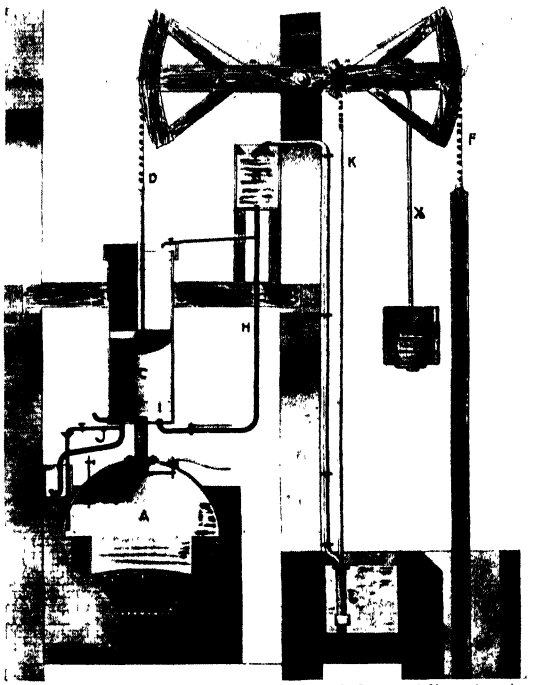
The Bettmann Collection

This simple-looking machine, the spinning-jenny, helped to change the great textile business of England. Instead of having to make thread on a single spool, spinners could fill many spools at once with the aid of the jenny. Compare it with the method used by the Sicilian woman in the picture on page 176.

number of looms in a separate building and bought a large amount of wool. Then he hired weavers to come to this building and work for him. At night the weavers went home. They were paid for their work. When the cloth was made, it belonged to the owner of the looms. Do you see how different this plan was from the domestic way of making things? And so the first factory was started.

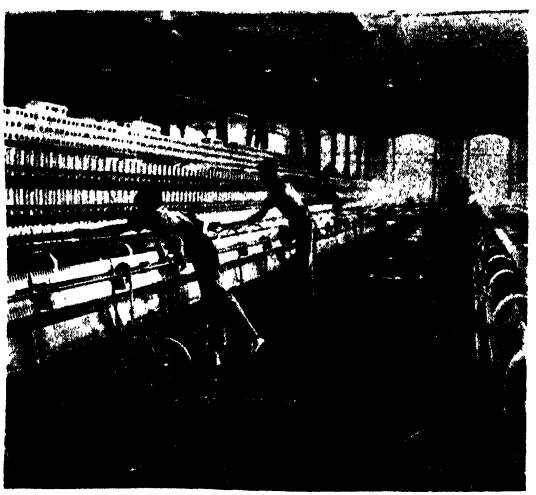
It was not long before there were factories like this in many English towns. The master weavers did not like the new system. They said that good cloth would not be made by such a method. But more and more men went to work in the factories, and more and more cloth was woven and sold. The new way was cheaper. From that time on, people could buy more cloth because it cost less.

The beginning of the machine age. Then men began to think of new and better ways to make cloth. They wanted to make it still cheaper. When many people begin to work on a problem, someone is sure to find the answer. The answer to this problem of making more and cheaper cloth was machinery.



Courtesy Compton's Pictured Encyclopedia

The first steam-engines in England were like this. Steam made in the boiler (A) moved the piston in the cylinder (C). That moved the pump-rod (F). Water cooled the steam in the cylinder, and the piston moved downward. This engine wasted steam.



Ewing Galloway

You can see only three men in this picture. They are tending to modern spinning machines that make miles of thread in a single day. Compare it with pictures of the first spinning-jenny and with pictures of hand spinning-wheels and distaffs.

A man named Hargreaves invented a machine that would spin many threads at once. Then Edmund Cartwright invented a loom that could be worked by power from mill-wheels turned by water. England had many little rivers coming down from the Pennine Mountains to the sea. So new factories were built near waterfalls.

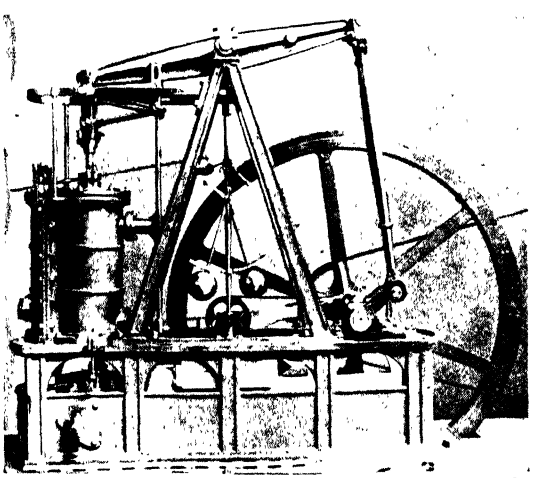
An American invention helps English weavers. Later, another machine was invented, this time by an American named Eli Whitney. Up to this time, cotton had been an expensive material to use. That seems surprising to us, because cotton is now so plentiful and cheap. But before cotton can be spun into thread, the seeds have to be taken out of each boll, or seed pod. Before Whitney invented the cotton-gin to remove the seeds, it took a whole day for a man or a woman to

pick the seeds out of a single pound of cotton. No wonder cotton cloth was expensive.

The English weavers knew how to make woolen cloth, and so it was only a step to making cotton cloth. They could get large supplies of cotton from America and from India. The climate of England is a moist one, which is just right for weaving cotton. Certainly it was a natural thing for this new business of cotton-weaving to get a start in England.

Iron and coal help the cloth industry. Much of the machinery of those days was made of wood. Perhaps that surprises you, because you know that iron and steel are much better for machinery. But almost anyone could make things out of wood, while it took a blacksmith to make iron into the right shapes. If a weaver broke a part of his wooden loom, he could cut a piece of wood and shape it himself. But wood machinery wore out quickly, and factory owners began to want better machines made of metal.

England was fortunate in having plenty of iron ore in the Pennines. Since ancient times, iron had been smelted in wood or charcoal fires. But during the Middle Ages many forests had been cut down, and wood had become scarce. Again England was fortunate. Right beside her iron mines were coal-mines. Look at the map, at the southern end of the Pennines and locate the coal region.



Courtesy Compton's Pictured Encyclopedia

James Watt improved the steam-engine of Thomas Newcomen, which is illustrated on page 356. The first engines were useful only for pumping water. But Watt's engine was made to turn wheels.

Photo from European

This is the oldest way to make things—by hand. This Italian workman is slowly hammering out the metal utensils you see hung up in his shop. For many centuries men had to make everything by hand.

With coal and iron close together, it wasn't strange that England made a great many things of iron and steel. Since many country people were moving into towns to work in the factories, many houses had to be built. That meant more tools, more nails—more business for the men who mined iron ore and coal, and for those who worked in iron. The ironworkers began to think of new ways to use iron. Of course they thought of making looms and other machinery out of metal instead of wood.

How the steam-engine made its appearance. Sometimes the coal-mines could not supply the smelters and the forges with enough coal. Water seeps into coal-mines and has to be pumped out. Keeping the water out of coal-mines was a problem that had to be solved. Miners had pumps, but no power

to work them except the power of horses or men. Some people began to think about using steam to do the work. The idea of a steam-engine was not entirely new. Almost four hundred years before this, men had talked about making war chariots that could be driven by steam. And in Alexandria, Egypt, before the year 1 A.D., a man named Heron had made a little steam-engine, although it was only a kind of toy engine.

Men in different countries tried to make engines that would work by steam. Finally, in England, Thomas Newcomen made an engine and pump that could be worked by steam. Later, James Watt improved this engine and made it very useful. Before long, people learned that this new engine could be used for other things than pumping out coal-mines.

Machines—our modern slaves. Suppose we see what progress had been made and what conditions were like in England. It will help us to understand a great deal of our later story. You have heard people say that we live in an "age of machines." When we stop to think of it, that is true. Perhaps you have envied the ancient Greek or Roman who had many slaves to work for him. Someone has figured out that there were sixteen slaves for each citizen of Athens. But have you ever figured out how many "slaves" you have working for you? How many slaves would it take to pump the water you use every day? How many to pull you through the streets as fast as you can go in an automobile? How many to build and tend the fire you can have by simply turning on and lighting the gas range? How many to copy by hand the books you read? Or to sew by hand the clothes you wear? Or to carry the messages you can telephone?

It is not surprising that the Greeks and Romans did not invent much machinery, since they had so many slaves to do their work. But at the beginning of the period we are

German Railroads Information Office

Here is metalwork being done in one of the first factories. This old forge was rebuilt by a German company so that visitors can see how the first crude machinery operated. Mill-wheels moved the wooden machinery. Directly in front of the boy is a wooden hammer with an iron face. The machinery raises and lowers it to the anvil. Crude as it was, it did much more work than a man could do with his hands alone. Now compare it with the picture on the next page.

German Railroads Information Office

This scene in a modern German factory shows you how great machines now do the work. The Italian workman in the picture on page 357 is shaping metal by hand with the help of a hammer. This great machine is also shaping metal—making yards and yards of sheet-iron out of hot steel.

now studying, the slaves and serfs had almost all been freed. Men asked and received wages for their work. It was profitable for people to think of ways to save the work of men who had to be paid for their labor.

Why the Industrial Revolution began in England. England was a prosperous country, with no foreign armies invading it. The people had time to work at peaceful occupations and to save money.

England had an excellent business in weaving both woolen and cotton cloth. There was a good trade in coal and iron, and in making tools and machinery of all kinds. An engine had been invented that could furnish power to turn machines. All the engine needed was coal and water and a man to tend it. Water was plentiful, and coal was cheap because the mines were close by.

There were four important things that were necessary for the Industrial Revolution. They were: iron to make machinery, power to run the machines, plenty of men to do the work, and men with money to buy machines and pay wages. England had all four of these. Some other countries had them, too, but not to such an extent as England. Either there were fewer people to work, or the coal and iron were located too far away, or else men did not have enough money to build factories and pay wages. And so England got ahead of the other nations.

The growth of factory towns. After the steam-engine had been invented, men could build factories anywhere. They did not have to find a place where there was water-power to turn mill-wheels. Factories were built in the cities, where there were plenty of people to hire. The work had to be done in factories, because the new machines and engines could not be used in a home. Do you see why manufacturing had to leave the home and go into the factory?

People flocked into the towns, not only from the English farms, but from other countries. People everywhere talked about the

Ewing Galloway

For many hundreds of years all shoes had to be made by hand. It took a long time for a shoemaker to make every part of a pair of shoes and put the pieces together. Can you find out what a pair of hand-made shoes costs today?

money that could be made in the towns. The population increased rapidly, so that some towns soon became large cities. The cities spread out, and suburbs were built. Many of the cities became much too crowded with people who wanted to be near the factories where they worked.

The need for coal in manufacturing. Of course the more factories men built, the more coal they needed. And so more mines were opened and more coal dug for the factory engines. Factory chimneys belched forth smoke and soot into the air until the blue sky was turned a dingy gray. People no longer burned charcoal. They burned the coal found in the lowlands around the southern end of the Pennine Mountains and in other places in England.

Coal was used for smelting iron ore in great furnaces. The coal country to the south of the Pennines became known as the "Black Country." It was soon a land of noisy, dirty towns, where people were crowded into wretched little hovels. Though they spent long days in hard work—sometimes they toiled twelve and fourteen hours a day—still they could not earn enough to buy all the food they needed.

Do you see what a change had taken place in the lives of many people? How different such a life must have been from the life on a small farm or in a little town! On a farm in the country, people would have had at least enough food and pure air. In the small town there had been enough work for the weaver and the blacksmith.

Results of the Industrial Revolution. We call this a revolution because it made so many changes. The old days when craftsmen worked in their homes were gone. Now men, women, and children toiled long hours in factories. England changed from a farming nation into a nation of factories. We call such a nation an industrial nation.

We call making single articles by hand "small-scale production." This method was replaced by the new system of making large quantities of articles by machinery. We call that "large-scale production." This shift in methods was another of the changes that took place during the Industrial Revolution.

Men began to plan how to make more things and to make them more cheaply so that more people could buy them. Ask your parents to tell you how much the first automobiles cost and how few people could afford

This old picture shows a group of men making wooden shoes. Each one is doing a separate part of the work. Although there is a building, we can hardly call this a factory.

Ewing Galloway

Almost all shoes are made by machinery today. Each worker, instead of knowing how to make every part, has a single job to do. He does that one thing over and over until he becomes very expert at the work.

to buy them. Then find out what you have to pay for an automobile today. Can many people afford to buy them now? Machines have helped to make things cost less. For more than a hundred years men have been looking for cheaper ways to make such things as cloth, shoes, nails, and tools.

Machines were invented to do more work, because men thought about the problem of making things cost less. Sometimes a machine was made that did the work of a dozen people. Then many people would be thrown out of work. In some English cities workmen tried to stop the factory owners from putting in the new machines. There were riots and fighting, and sometimes factories were burned down. But men kept inventing new machines to do more work and make more goods. Many of the people who were thrown out of work got jobs tending the new machines, and the factories and the towns grew larger and larger.

The Industrial Revolution on the Continent. This Industrial Revolution began shortly before the year 1800 in England. It did not begin in other countries until a number of years later.

As soon as there was a pause in the wars between the countries of Europe, and people had time to settle down to work in peace, the same changes began. Suppose we look at continental Europe for a while and see what happened there.

In Europe, as you know, towns had grown quickly as trade developed. Wherever there had been a cross-roads at which farmers met, settlements sprang up. At such cross-roads today in our country we usually find a country store and a filling station. Then there were markets for the sale of farmers' produce. These towns were chiefly in the midst of farming country in the great northern plain of Europe.

The towns were thickest in Europe in a wide belt that ran from eastern France through Poland. Find this region on the map on page 364. Under this belt there happens to be a wide streak of coal—the richest in the world. And so, all along this belt, steam power came to be used to make almost everything. Huge factories and mills took the place of small home workshops. Towns which during the medieval period had never had more

The Bettmann Collection

An English artist painted this picture of a miner going to work in the early part of the nineteenth century. This is one of the earliest pictures of a steam locomotive. Look at the picture on page 362.

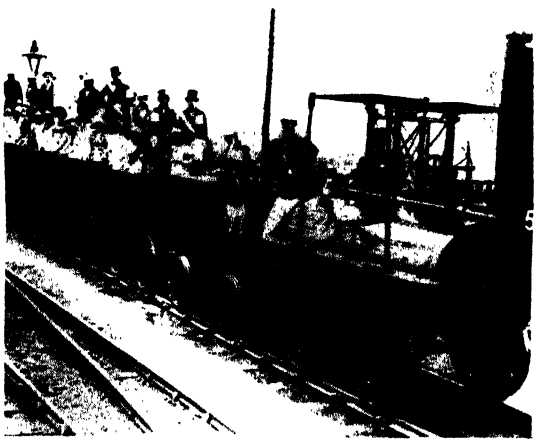
than five thousand inhabitants now became great industrial cities.

Although more than half of the French people remained farmers, France became an industrial nation within a century. In Germany most of the people began to work in factories, shops, or mines. In the Mediterranean lands and in Russia, Poland, Hungary, and the Scandinavian countries most of the people were still farmers or fishermen.

Raw materials came to the factories and mills in the great industrial cities from far and near. The finished goods were sold not only in markets near by, but also in foreign countries. The industrial nations of Europe traded everywhere—in the New World as well as in the Old.

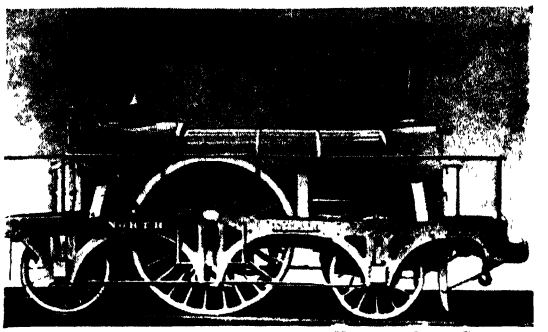
New methods of transportation. Men found out ways to use the steam-engine for pulling trains and pushing ships. These trains and steamships could carry great quantities of material to the factories and many finished products away from them. Soon there were railways and steamship lines connecting the different cities and the distant countries.

Since these new methods of transportation could carry people as well as goods, travel began to increase rapidly. People not only traveled back and forth between cities and farming lands, but between the different countries. In this way many ideas were carried from country to country.



Keystone View Company

This locomotive, called Puffing Billy, pulled the first train of freight-cars in England. It was used on a short railroad that carried coal from a mine to the factories in a near-by city.



Keystone View Company

Compare this early locomotive with pictures of the kind used today. Does it look more like them or more like the first locomotive, pictured below on this page? Inventors found ways to improve the locomotive so that it would pull heavier loads at greater speeds. Are men still trying to improve locomotives, or are we satisfied with them?

Thousands of people left their homelands to go to America. Many of them, especially in the Scandinavian countries, in Italy, Austria, Hungary, Ireland, and eastern Europe, had been having a hard time making a living. And so they migrated to a new land, just as their ancestors had done thousands of years before when they left Asia and moved into Europe.

European countries begin to import food. Even though many thousands of Europeans settled in America, the countries of Europe were still crowded. As more and more factories were built, the cities grew larger. Much food had to be raised to feed the city people, and so many farmers could make a living. But after a time there were more people in the cities of Europe than the farmers of Europe could feed. Then the countries of Europe had to bring in food from other parts of the world—from the plains of Asia, the wheat fields of Canada, the United States, and the Argentine, and from the rice fields of India, China, and Japan.

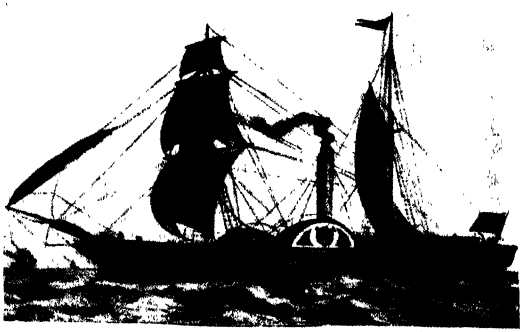
Old problems still to be solved. We know that people long ago had difficulties in traveling, in building comfortable homes, and in making their lives safe and happy. Wonderful inventions have solved some of these problems for us, but many problems remain. When you read in books and newspapers about the nations of the world today, you will see that many of their problems are the same ones we have been reading about in this story.

One of these old problems is to make a government that works well. Many people in various countries are not satisfied with the kind of government they have today. When we read about this problem, we remember the story of the great uprising of the plebeians in Rome, almost twenty-five hundred years ago. And we remember King John of England and the Great Charter, and the story of the French Revolution.

Another problem that still troubles people is how to get good prices for the things they raise or make. Today farmers in many countries complain that they cannot get enough money for their produce, or that farmers in other lands are sending in produce at low prices. Then we remember that the Roman farmers complained because Egyptian farmers sent cheap grain to Italy. And two hundred years ago sheep-owners in France and Germany suffered because great quantities of English wool were sold in the cloth towns of the Low Countries.

Hudson Historical Bureau

Compare this picture of a fast sailing ship with the pictures of older ships that you have seen in this book. Can you think of reasons why the steamers gradually replaced the sailing ships, even though a steamboat costs more to run than a sailing vessel?



Keystone View Company

When the first steamboats were made to cross the ocean, people were afraid that they would break down. The boats also had masts and sails to help them along. This is a picture of the "Sirius," one of the first steamboats. Do steamers have sails today? Can you think of a reason why people are willing to build boats with no sails and to go to sea in them?

We read today of workers who want higher wages and of others who cannot find work to do. Then we remember how old these problems are. For we know that Rome was once filled with idle men who could not find work because slave labor was cheap. And we have read how the English towns were crowded with men who left the farms because they could find no farm work to do.

People all over the world have had such problems for many centuries. Little by little we are finding ways to meet the problems. All of them have to do with making life more comfortable. All of them have to do with getting along with other people. And so, as you read about the modern nations in the Old

You can locate the coal-fields and the iron mines of Europe on this map by looking for the letters C and I. Three of the largest coal-fields are marked COAL. Look carefully at the regions where there are neither coal nor iron mines. What have you read about the people who live in those regions?

World, think of them as being made up of people who are very much like ourselves. People everywhere need to get along peacefully with one another if they are to lead happy, useful lives.

The European countries of today. Before we read about the different nations of modern Europe, we should look at the map on page 230. Notice the different countries which make up the continent of Europe today. How many of them have we read about so far in our story?

Farthest west on the map we find the British Isles, which consist of Great Britain, Ireland, and many small islands. We must be careful to call this country by its right name. It is the United Kingdom of Great Britain and Northern Ireland. It includes England, Scotland, Wales, part of Ireland, and a number of small islands. It does not include the southern part of Ireland, which is the Irish Free State, now called Eire.

Across the English Channel from the British Isles is France. Find it on the map on page 230. Compare modern France with France in the time of Charlemagne and in the time of Napoleon. See the maps on pages 207 and 350.

Now find the small countries of Belgium, the Netherlands, and Switzerland on the map on page 230. These were not separate nations in medieval times. Next, look to the east. There you see that Germany and Austria are not so large as they once were. East of Austria is Hungary, and to the north and south of these two countries are two new countries. They are Czechoslovakia and Yugoslavia. Find Poland on the map. Compare it with the Poland of medieval Europe by looking at the map on page 293.

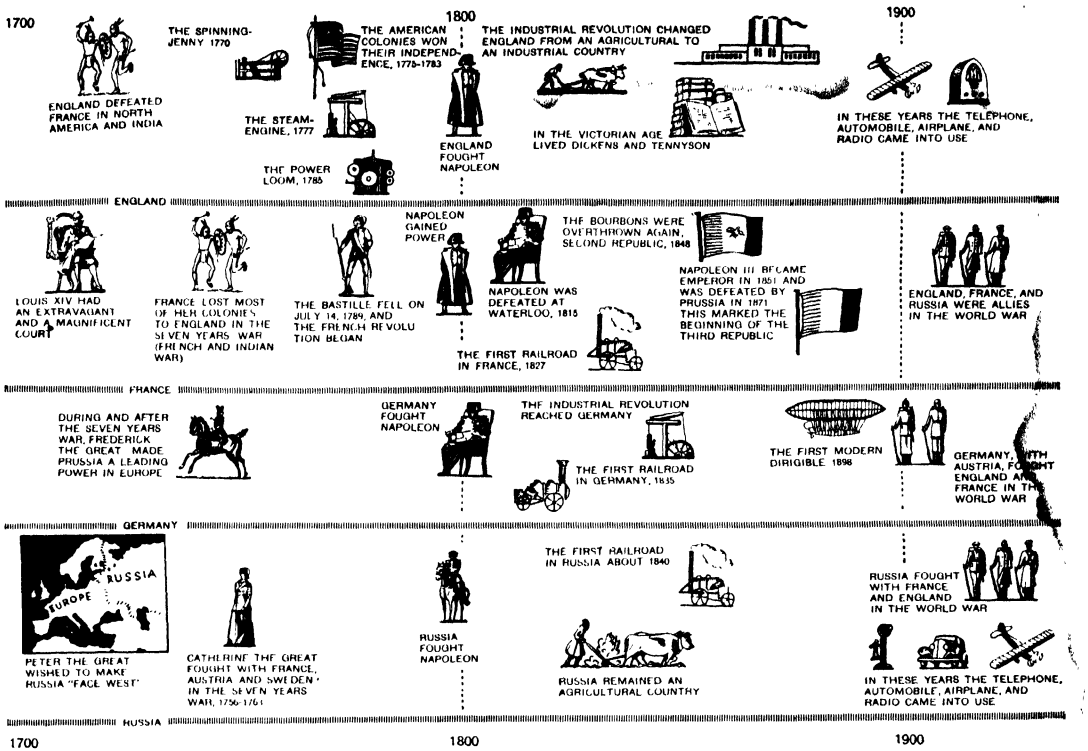
Bordering the Baltic Sea are other new countries—Lithuania, Latvia, Estonia, and Finland. Once they belonged to other countries. But Norway, Sweden, and Denmark have almost the same boundary lines they have had for many centuries.

Directly east of these countries you will find the country which used to be called Russia. Now it is known as the Union of Soviet Socialist Republics, or sometimes just the Soviet Union.

Moving southward on the map we come to Romania on the shore of the Black Sea. Farther south, in the rough highlands of the Balkan Peninsula, are the Balkan countries—Bulgaria, Albania, and Greece.

That brings us to the Mediterranean Sea, and we have already become acquainted with the principal countries of that ancient part of Europe. Find Italy, Spain, and Portugal on the map on page 230. Then look at the map on page 293 and see if the boundaries have changed much since medieval times.

As you become better acquainted with the European countries of today, in the following chapters of this book, you will see how much the land still influences the people. For the mountains and lowlands, rivers and seas have as much influence on the occupations of the different peoples today as they did in the early centuries.



PICTURE HISTORY

In this Picture History you can see when some of the countries of Europe began to change and become what we call modern countries. Notice the ones which changed first.

You will also find out, as you read on, that the nations have to depend on one another in many ways. In olden times, farmers raised and made everything they needed. But today the factories of many cities manufacture goods that must be sold somewhere. One nation may not raise enough food for its people and yet manufacture more articles than its own people can use. Another nation may raise plenty of food but may have no factories to make the things its people need. These nations may come to depend upon each other so that the people of both may be comfortable and happy.

Talking Things Over

1. Again and again we have read that the geography of a land has a great deal to do with its history. The geography determines what crops can be grown and whether the people can live easily or with difficulty. This has been true of every civilization. Decide how the geography of England made it a good place for the Industrial Revolution to begin. Give as many reasons as possible.

2. In some parts of our country there are industries which still use the "domestic system." Do you know anything about them? If not, have your teacher help you to find something about the mountain regions in southern states where a great deal of weaving is still done by hand. The same system is used in some large cities by people who manufacture certain kinds of clothing.

3. Manufacturers will not buy expensive machinery if they can secure large numbers of people who are willing to do the work by hand for small wages. With this in mind, can you explain why the southern part of the United States was slower in becoming an industrial region than the northern part?

4. Talk over the ways in which the Industrial Revolution has helped to keep the British Empire together. The colonies have food and raw materials

to send to England. England has manufactured goods to ship to the colonies. Do you think these different countries would be able to get along if they did not trade with each other? Would more trade between them be a help? Would more trade be a good way to keep them friendly with each other?

5. Do you think that railroads and other means of communication and transportation in the United States have helped us to stay a united country? Discuss various ways in which these things have helped us to have the same interests although our people are scattered over a wide country.

Doing Things Together

1. Try to find pieces of homespun that were woven in some of our mountain regions. Perhaps you can find coverlets or a small hooked rug that you might borrow for a day or two. Bring these things to school so that the class may get an idea of the interesting work that is still being done by hand.

2. Is there some place where you can get a few cotton-bolls? Perhaps you know people in the south who could send you a few. Then the class can examine the cotton and try to pick out the seeds by hand. That will help you to understand how much the invention of the cotton-gin helped the manufacturers of cotton thread.

3. Weaving by hand is fun, if you don't have too much of it to do. Perhaps your school has some small hand-looms. If not, some of the boys who are clever with tools could very easily make some simple hand-looms that you could use. You can use them to weave small pieces of cloth.

4. It is always interesting to see pictures of trains. See how complete a collection of train pictures you can make. You might begin with the first locomotives of a century ago and include the most modern stream-lined trains.

5. In our trade with other countries we export some things and import others. Make two lists on the blackboard. In the first one, list all the things you can think of that we export. Your list may contain raw material such as wheat, or manufactured articles like automobiles. In the other, list the things we import, such as olive-oil from Spain and rugs from Persia. Make the items on your lists as varied as possible. There are books in your library from which you can obtain this information.

6. Ask the librarian to help you find the stories of Richard Arkwright and James Hargreaves. After reading them, select a small group to show the class what happened when Arkwright visited the cottage of Hargreaves. Practice the conversation several times before giving it in front of the class.

H. C. Combs

The Houses of Parliament are on the bank of the Thames, in London. The clock in the tower at the right is called Big Ben. Perhaps you have heard it strike the hours over the radio. In these buildings are many government offices, and halls where the House of Commons and the House of Lords meet to make the laws of Great Britain and of many parts of the British Empire.

XXIV. THE BRITISH PEOPLE AND THEIR LAND

A Great Industrial Country

IN THE last chapter you read how the invention of machinery and the making of goods in factories changed the lives of many people in the different nations of Europe. In countries where there was plenty of coal and iron, some of the towns grew into cities filled with factories that needed more and more people to work in them. In England, as you know, many thousands of people began to earn a living by working in factories and mills instead of by working on farms.

Today England is a great industrial country with dozens of manufacturing cities. Out of every hundred people who earn a living, only six work on farms, on fishing boats, or at the business of producing food. Suppose we see how England is able to keep so many people at work in cities, with so few people at work on farms.

Britain's earliest miners. When we go far back in the story of this little island of Britain, we remember that even in the days of the Phoenicians some of the Britons worked in tin mines. Phoenician traders, looking for tin to mix with copper in order to make bronze, discovered the "Tin Islands," as they were called. Today they are known as the "Scillies." Find them on the map on page 195, near the tip of England that is called Cornwall.

Later the Romans found tin in Cornwall itself. The old mines are still there, but they are no longer important. The Romans were interested in tin, but they were particularly eager to get supplies of food from the farmers of Britain.

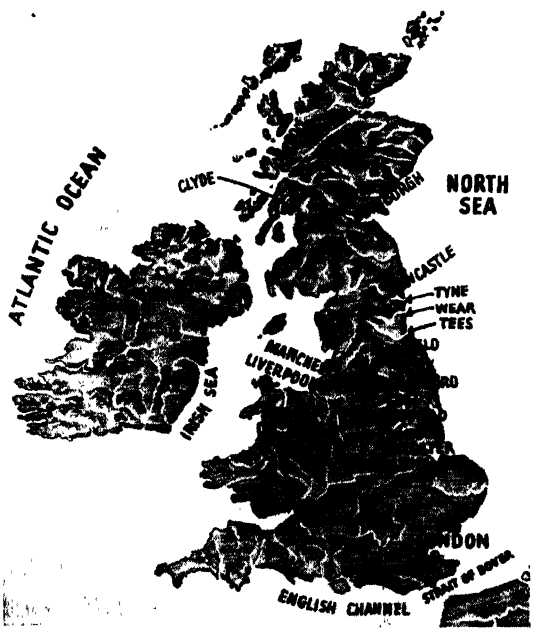
Advantages for farming in Britain. Food was not hard to raise in England, even in the days when people did not know how to farm very well. Wet westerly winds, blowing across the Atlantic Ocean, drop most of their rain on the western highlands of Britain. On

the eastern side, across the Pennine Mountains, not so much rain falls, but there is enough for crops. Look at the map on page 195 and see how the mountains of Britain divide the land. Notice the lowland regions and the number of river valleys and plains. All these are well-watered farm-lands.

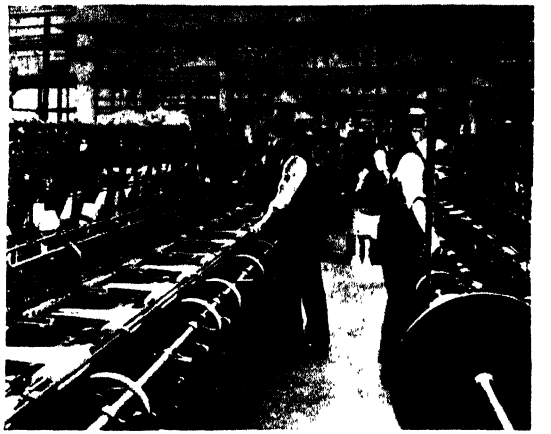
The hills and higher lands make good pastures for sheep, and you have read how sheep-raising became important in England. Wool made England a rich and busy nation, and today weaving woolen and cotton textiles is a very important industry.

Some of England's natural resources. You also read, in the last chapter, about the coal and iron mines that supply so many factories with the necessary raw materials. Out of the ground also comes the fine clay which the potteries make into china and earthenware.

Why Britain builds many ships. When you looked at the map on page 195 and saw how many rivers and small streams flow into the sea from the well-watered plains, did you notice how many bays there are? The British Isles have many good harbors where ships can be sheltered. A manufacturing nation must have ways to send its goods to other countries. Since Britain is an island, the markets of Europe and the rest of the world must be reached by boat. And so shipping and the building of ships require the work of many people in the British Isles.



The arrows point to four of the great ship-building centers of Great Britain. On the map are some of the great manufacturing cities and trade centers. Notice how they are located close to the Pennine Mountains in which are the principal coal regions.



Ewing Galloway

Thousands of men and women are employed in the textile factories of England. These men are tending automatic spinning machines. All they have to do is to watch for broken threads. Each machine is doing work that would take several hundred spinners to do by hand. Such machines help to make cloth cheaper.

British industries, a source of great wealth. Now that we know the important industries of this nation—shipping, mining iron and coal, and manufacturing steel, textiles, and pottery—let us find out more about them. They are very important to the British people. Ever since the Industrial Revolution these industries have been producing a living for most of the people. All the time Europe was busy fighting in the wars of Napoleon, England was busy building factories and ships. No wars were fought on British soil, and so the workers at home were not disturbed in their tasks. They wove millions of yards of woolen and cotton cloth, shaped millions of tons of iron and steel into tools and machines, and molded fine clays into millions

of dishes. For more than two hundred years these articles have been shipped out of the British Isles in British ships which bring back raw materials and food for the millions of workers.

Why Britain makes textiles. Since the days of the great guilds, England has always been the home of many weavers. British workers have become very skilful spinners and weavers. Factories are usually built where plenty of skilled labor can be had, and for that reason there are many textile factories in the British Isles.

Another reason for the many textile factories is the climate. It used to be hard to weave cotton goods in dry weather. If the thread dried out, it kept breaking in the looms. The British Isles have little dry weather. The damp air keeps the threads from breaking. Of course, in the most modern mills, machines keep the air filled with just the right amount of moisture.

A third reason for the many textile factories is that Britain has hundreds of ships to bring in fresh supplies of raw silk, cotton, and wool. The British raise some wool, but much of it comes from far-off Australia and other countries. The climate of England is too cool for raising either cotton or silkworms. Raw cotton must be imported from the United States, Egypt, and India. Silk comes mainly from China and Japan.

Ewing Galloway

In this coal-mine in Yorkshire, England, ponies haul the coal to the surface. Tracks lead down a slope to the coal workings below.

Aerofilms from Ewing Galloway

The large buildings in the center of this picture are part of a great textile factory in one of the cotton towns of England. Notice how the factory is surrounded by hundreds of two-story houses where the factory workers live. The houses are so crowded that there is no space for yards, parks, or playgrounds.

The cloth towns of England. Mills making one kind of cloth usually locate near each other. That makes it easier to obtain skilled workers. If you were a wholesale merchant buying woolen cloth or carpets, you would go to the county of Yorkshire, which is famous for its woolens.

The cities of Leeds, York, Huddersfield, and Bradford in Yorkshire are famous for their mills. The weavers settled there because they could get pure water from the streams for washing and dyeing the cloth. When the early mills were built, the streams furnished power for the mill-wheels. Later, when coal was discovered near these towns, steam was used to turn the machinery. The mining towns and the mill towns grew into the large cities we see today. Look at the map on page 368 and find these cloth towns. Notice how close they are to the coal-fields on the east side of the Pennine Mountains.

On the west side of the Pennines, in the county of Lancashire, are the cotton towns. Find them on the map on page 195 by locating the great port of Liverpool. At Liverpool ships unload cotton from India, America, and other countries. Most of it goes to Manchester, the greatest cotton-manufacturing city in the world. That city lies in the midst of a group of towns, each doing some special part of the work of making different kinds of cotton cloth. In one town are mills for spinning thread. Other towns specialize in weaving. Cotton is dyed in one; calico is printed in another. The whole county is busy making cloth from imported cotton. Look again at the map and notice that the cotton towns, like the woolen towns, are near the great coal-fields.

The steel towns. The second great industry of the British people is manufacturing all kinds of goods from iron and steel. Besides her great coal-fields, Britain has rich deposits of iron ore. Fortunately these are near the coal-fields, so that the ore does not have to be carried far to be smelted.

Find Birmingham on the map on page 368. It is in the midst of both coal-fields and iron-ore deposits. Birmingham is the chief center for making heavy iron and steel goods. Just as cotton towns cluster around Manchester, so towns that specialize in iron or steel work center around Birmingham. Sheffield, for example, is famed for knives, razors, scissors, and other cutlery.

The Black Country. Once this whole region was covered with thick forests of oaks and beeches. Only a little iron came from the mines, and it was smelted in small charcoal furnaces. This was before the Industrial Revolution. When the steam-engine was invented, the iron business grew rapidly. Steam-engines have to be made of stronger material than the old wooden water-mills. Soon there wasn't enough wood left to make charcoal for smelting all the iron that was needed. Coal was then used, and that meant opening more and more coal-mines.

Now the forests are all gone, and the bare fields near the mines are dirty and black. Chimneys of hundreds of factories belch forth smoke and flame. Car-loads of cinders and refuse are carried out and dumped in huge piles. Most of the towns are dirty and noisy, and the factory workers have to live in dingy houses. No wonder the people still call this the Black Country.

Where British ships are built. Ship-building is also an important business in Britain.

Travel and Industrial Development Association

This is a scene in the Black Country of England. You can make out the buildings of the mine, but the town in the background is almost hidden by smoke. In the foreground you can see a canal. The mountain-like pile is a heap of refuse from the mines.

Ewing Galloway

Here you see the "Queen Mary," a great ocean liner, being built at a shipyard on the river Clyde in Scotland. Of course, most of the material that goes into a ship is made in factories and mills at a distance.

The Clyde Valley in Scotland, and the banks of the Tyne, Wear, and Tees rivers in England are famous for their shipyards. Ships are also built at Belfast, Ireland. Find all these places on the map on page 368. The ship-building towns in each of these places are so close together along the rivers that they are like a single, long-drawn-out city.

Britain, with all her manufacturing cities, needs many ships to carry out the goods to other countries and to bring back food, since she cannot raise enough food for her people. For hundreds of years Britain has used her own ships instead of depending on ships of other nations. You can see why thousands of men make a living building and operating the ships.

British potteries. The British are famous for another industry. Years before factories were built, farmers in central England dug clay from their fields, mixed it with water until it was soft enough to work, and then shaped it into jugs and dishes. These were baked in crude ovens until they were hard. Like all other kinds of manufacturing, pottery-making also moved to town, and factories were built. Farmers who had become skilful in making dishes became the potters in the new factories.

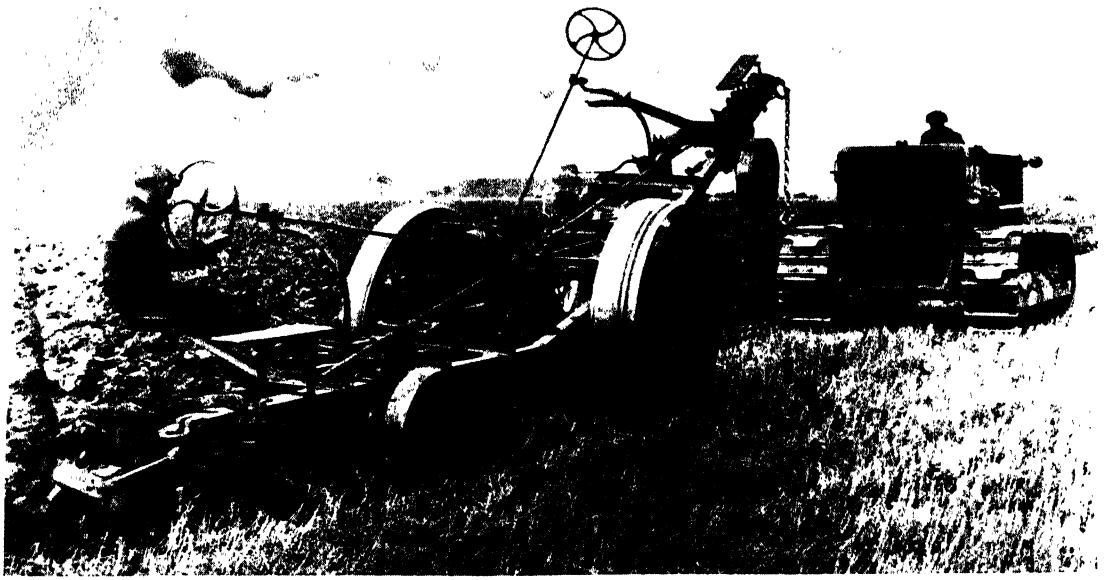
Dishes were made more carefully. Finer clays were found, and thinner ware was made. The glaze, which gives dishes a hard, smooth surface, was improved in many ways. Because there were banks of especially fine clay near certain towns, these places became the centers for pottery. Stoke-on-Trent, south of Manchester, and the towns around it are the pottery centers of the British Isles.

Other industries. There are many other industries in the British Isles. Leather goods are made in Stafford and Leicester. Find these towns on the map on page 368. Why are these places called "Midland" towns?

Paper is made in north Kent and also in towns along the mouth of the Thames. Find this paper region on page 195. Paper-making requires an abundant supply of pure water, and this can be found in these places. But the factories must also be near a source of raw

Ewing Galloway

This potter is applying the white garlands and figures to Wedgwood, a famous English ware. Although there are modern teapots on the shelf above the workman's head, most Wedgwood is made in ancient Greek designs. This pottery gets its name from Josiah Wedgwood, who invented it. Plates, cups, and other pieces for table use are also made of Wedgwood.



Courtesy Caterpillar Tractor Company

Many of the English farms are small, like those on the continent of Europe; but there are also large farms where it pays to use modern machinery. Much more machinery is used on English farms than on the farms of France, Germany, or any of the other European countries except Russia.

materials. A great deal of paper is made from wood-pulp. As England has few forests left today, the wood-pulp must come from other countries. That explains the location of the paper-manufacturing towns. They are close to harbors where ships from Sweden, Norway, Finland, and Russia can bring the raw material.

What Britain's farms produce. Although so many people earn livings in factories and other businesses, there are still thousands of farmers in the British Isles. We know, though, that there are not enough of them to feed all the people. Suppose we see where these farmers live and what they raise.

In the southeastern part, on the plains that are not too wet for good crops, the farmers raise a variety of foods. On the plains northeast of London the climate is dry enough for wheat. The farmers plant the wheat in the autumn and harvest the grain in early summer. The British summers are usually so cool and moist that wheat-growing is difficult. Hay and different kinds of grasses do well, and in this region many farmers fatten cattle that are brought in from Scotland, Ireland, and from the highlands of England.

In the plains of the Midlands and in the southeastern part of England, more than half of the farm-lands are used for pastures. Here cattle are raised, both for milk and for meat. In Cornwall, at the southern tip of England, the winds are so wet that the meadows are thick with heavy grass. There is abundant pasture for cows in this region. The Cornish farmers are the chief dairymen of England.

Oats can stand the wetness of England and Scotland better than any other grain. Oatmeal is the principal cereal for the Scots. Once an Englishman, joking with a Scot about eating oatmeal, said, "Oats are a food for horses in England and for men in Scotland." "Yes," replied the Scot, "but where else can you find such fine horses, or such fine men?"

The hilly western counties of England, Wales, and large parts of Scotland have much moorland, or rough hill pasture. There are few plowed fields, and most of the land is

used for grazing sheep. Some of the more famous sheep pastures are the "Downs," which are low ranges of hills in the southern and eastern parts of England. There the soil beneath the grass is chalky and so does not hold moisture well. The only plants that grow are kinds that flourish in a dry climate. Doesn't that seem odd in a land with all the moisture England has? This pasture land is poor, but it is good enough for sheep.

The fishing industry. In very early days the British filled their boats with fish-lines and nets and sailed into the North Sea. The shallow waters, especially above the Dogger Bank, are good feeding-grounds for fish, and so Dogger Bank has been a famous fishery for centuries.

Only sturdy men can endure the dangers and hardships of the life of these North Sea fishermen, for the waters are stormy much of the time. A few small sailing vessels still put out each morning, but most of the fishermen go out in good-sized ships that use steam or gasoline for power. Many of these ships are equipped with engines to haul in the nets.

Grimsby, Aberdeen, and Hull have been famous fishing ports for many years. Find them on the map on page 195. London is also an important fishing port because the city has such a big market for the sale of fish.

Why England became a seafaring nation. The map tells us that Britain has a large number of good harbors along her coast. Many of the rivers are wide and deep and run far inland. Good ports in these rivers and harbors have helped England to become important as a seafaring nation.

Across the North Sea from Britain are the coasts of the northern European countries. They, too, are notched with harbors and rivers that lead far inland. Voyages fr British coast towns to European ports short and can be made cheaply.

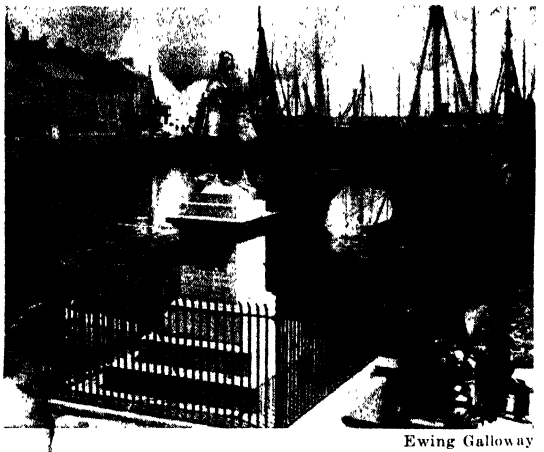
Now turn to the map on page 198 an how Britain lies in the path of ships saili northern Europe from North America, S America, Africa, and Asia. Trace some of these routes. Ships can easily call at ports for cargoes without going far out of their way.

The "Mistress of the Seas." Britain is often called the "Mistress of the Seas." You have learned how the British sailors defeated the great Spanish Armada in 1588. Since that battle few fleets have tried to fight the British navy. Britain has a large navy to protect her thousands of merchant ships and to make sure that the sea routes from her colonies are kept open and safe for trade.

More than a third of all the ships and steamers that sail the seas fly the British flag.

Hudson Historical Bureau

There are many fine farming regions in England like this one on Salisbury Plain. The land is rolling and fertile, and there is plenty of rain for growing crops. The picture is like a scene in our own country, except that we do not often see two-wheeled carts like the one at the right.



Ewing Galloway

There are many fishing towns and villages along the coasts of England, Wales, Scotland, and Ireland. Some of the busy ones look like this one, which is Brixham. The statue on the dock is of William III, who landed here when he came to England from the Low Countries to be the English king in 1688.

So you can see that sea trade is very important to the British. You would expect an energetic people living on an island to carry on a great deal of trade with other countries.

British exports and imports. British ships carry products of British factories and mills to all parts of the world. Nearly half of these cargoes are textiles. Other large shipments are iron and steel products. What do these ships bring back?

As England has more coal than she needs, and as much of the coal is near the coast, other countries not so well supplied buy it. The coal that is exported helps to pay for some of the food that must be imported into Britain. Newcastle on the northeast coast, Cardiff in South Wales, and Glasgow in western Scotland are cities close to coal-fields. Much coal is exported from these cities.

Ships that enter every port of the world bring back to London, Liverpool, and other ports every imaginable kind of material. London is a center of trade between England and her many colonies in all parts of the world. To this mighty port, with its miles and miles of docks, come products from Asia, Africa, Europe, Australia, and the Americas. Some of these cargoes are transferred to smaller coasting vessels which carry them to other British ports.

Some of the materials that are handled in this way are wool from Australia and South Africa, rubber and tin from the Malay region, hides from Asia and Africa, cotton from India and the United States, tea from the Orient, vegetable oils from Asia and Africa, and petroleum from Russia and America. An amazing number of other materials come from all over the world.

You remember reading of other ports which have been famous for carrying on trade. Perhaps Tyre was the very first, when the Phoenicians ruled the Mediterranean. Later, Carthage took her place. When Italy was the center of trade, Venice imported goods and sold them to other lands. Lisbon was such a port when the sea route to India was opened. Bruges, Antwerp, and Amsterdam were similar ports in the days of the Hanseatic League. Now, since the Atlantic is the front door of Europe, London is the great center of commerce.

James Sawders

Taxicabs, buses, subways, and steam railroads provide transportation for London, the world's largest city. As there are no "sky-scrapers," the city is spread out more than an American city. This view is in the banking section of London. The building at the left is the famous Bank of England. Sometimes it is called "the Old Lady of Threadneedle Street," for that is the name of the narrow street. On English roads the automobiles and other vehicles keep to the left.

Two of Britain's many great ports are marked on this map. Notice that they are not far from the important cities along the coast of Europe. Good harbors located close to the large ports of many countries have helped England's trade. British ships loaded with manufactured goods can reach European markets in a short time.

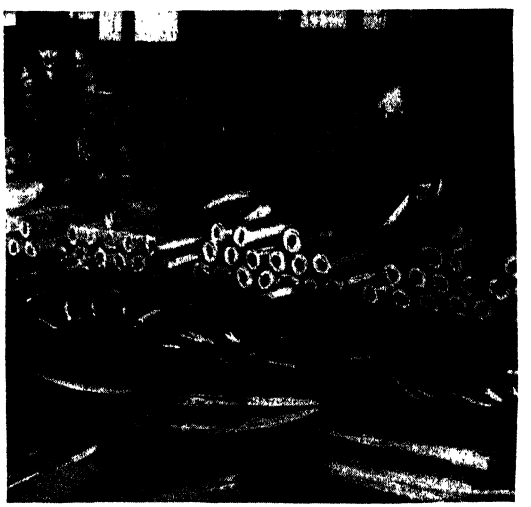
The world's largest city. Suppose we enter London by way of the Thames. For centuries this river has been the "heart" of the city, for its stream supplies life to London. All day long ships sail up and down the Thames. Long ago the river banks became too small to accommodate enough ships for the trade, and so other docks had to be made. Marshes along the river were dredged out and made into docking basins. Ships enter them through narrow channels leading from the river.

Beside the docks are meat-packing plants, tanneries, soap factories, breweries, shipbuilding plants, potteries, and chemical works. These are only a few of the many industries located in what is known as the East Side of London. When you see these great factories and the huge warehouses filled with goods, you realize that London is the greatest manufacturing center of England. Can you tell why this is so, in spite of the fact that there are no coal-fields or iron mines near?

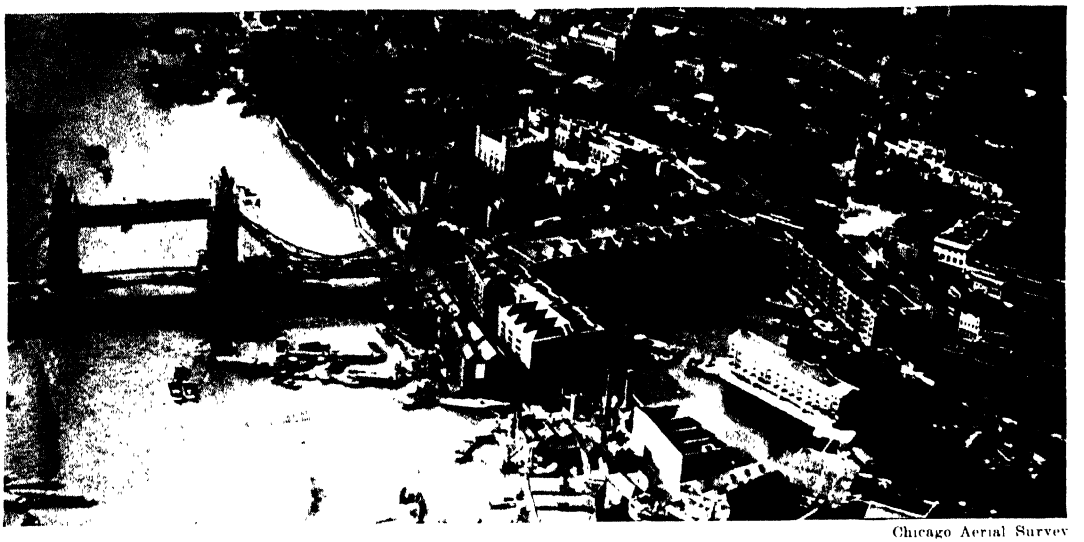
You cannot go far from the river before you realize that London is an immense place, and that it is a very old place, too. Long ago it outgrew its walls. But the old part, which once was the walled town, is still called "The City." Now it is crowded with important business places. Here, in a modest stone building, is the oldest and perhaps the greatest bank in the world, the Bank of England.

The old city of London has grown until many towns near by have been swallowed up. One of these, now included in the city, is Westminster. In this famous river town is Westminster Abbey, which was begun by Edward the Confessor, before the Normans came to England. Most of the Abbey was finished in the thirteenth century. Many of England's greatest men are buried in this church.

Famous buildings. Facing the Thames, just beside the Abbey, are the Parliament buildings. In them meet the men who make England's laws. During the day, when Parliament is meeting, the British flag, or Union Jack as it is called, floats from the great tower. In that tower is "Big Ben," a famous old clock with a large, deep-toned bell.



Strange merchandise from every part of the world can be found on the London docks. Here is a warehouse scene in the great London dock, where ivory is stored. Almost all the ivory used in the world is first sent to London, where experts sort and grade it. Do you know some of the uses of real ivory?



Chicago Aerial Survey

The bridge you see is called the Tower of London Bridge because it is near the walls and the round towers of the Tower of London. The Tower is in the center of the picture. In front of the Tower you can see a row of warehouses at one end of a dock. The docks of London have been dredged out of the low land along the banks of the Thames. The one you see is connected with the river by a narrow channel through which the ships pass. You can see boats tied up beside some of the warehouses, and other ships in the Thames. There are dozens of such docks on both sides of the river.

Another famous old building beside the river is the Tower of London. The Tower was built just within the old wall, not far from London Bridge. Parts of it are open to the public as a museum. There you can see some of the crowns and jewels of the English kings.

A church that is dear to the hearts of Londoners is Bow Church, named from its bow-shaped arches. It used to be said that a true Londoner, or "cockney" as he is sometimes called, had to be born within the sound of the bells of this old church.

Not far from Bow Church is St. Paul's Cathedral, one of the largest churches in the world. The famous architect Sir Christopher Wren designed it, as well as many other London churches. Near St. Paul's is the old Guildhall, where every year the British Prime Minister makes a speech in which he tells the people what the government plans to do in the coming year.

In the West End of London are many handsome buildings. One of these is Buckingham Palace, where the king lives when in London. There are many splendid hotels and residences. Hyde Park, where the people take walks, Rotten Row, where bridle-paths are filled with horsemen, and Kew Gardens, where you may see plants from every corner of the world, are all in the West End. But these are only a few of the famous spots in this old city.

Outskirts of London. London has spread out into the surrounding country, as all large cities do. Many factories left the crowded sections of the city and moved to small towns near by. And so you find London surrounded by little factory towns and many suburban towns where London workers live.

To help feed London are the truck farms and market gardens of Kent. Essex is a dairy county that supplies London with milk. Look at the map on page 195 and see how these counties lie about the great city.

The British Commonwealth. As the English nation grew, new lands were added from time to time. To England were added Scot-

land and Wales, and these three together were called Great Britain. When Ireland and the small islands near by were added, the name became the United Kingdom of Great Britain and Ireland.

Gradually more lands were added—Canada in North America, India in Asia, lands in South Africa, Australia, and many islands. Together these lands were called the British Empire.

This great empire, on which the sun never sets, is now called the "British Commonwealth of Nations." The word commonwealth means "common weal" or "for the good of all." Within this empire or commonwealth are 450,000,000 people, nearly one-fourth of all the people in the world. The empire covers one-fifth of all the land on the globe.

This commonwealth of nations is altogether different from the empires of earlier days. It is really an association of nations. Many of the nations that form the British Empire are really independent and manage their own affairs. All of them, however, acknowledge the king of England as their king, although they may have their own governments.

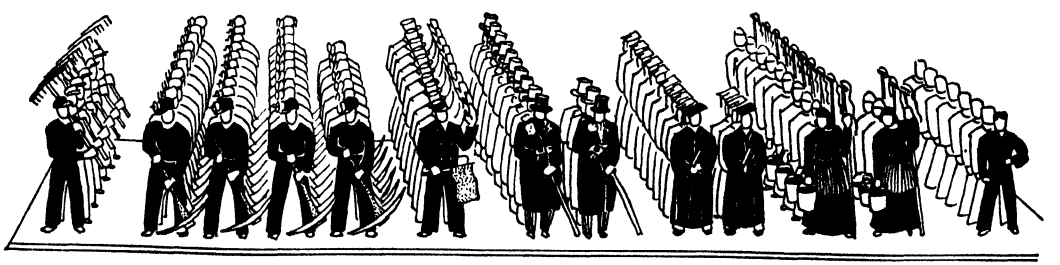
Associated British & Irish Railways

North of Manchester, in the Cumbrian Mountains, is a region called the "Lake District." There are many little valleys and several large lakes. Some of the lakes supply pure water to English cities. The poet Wordsworth made his home in the Lake District.

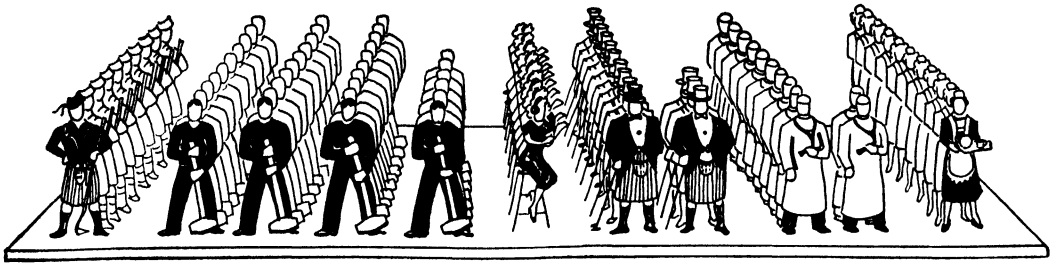
Scotland

The cities of Edinburgh and Glasgow. If we leave London in the morning on a train called the "Flying Scotsman," we reach Edinburgh, the capital of Scotland, before dusk. In the days when Scotland was a kingdom by itself, this beautiful city was the home of the Scottish kings and queens. For centuries it has been a center of learning. Many books, magazines, and atlases are published there. The University of Edinburgh is famous for its professional schools, that is, schools where students learn the professions of law, medicine, and engineering.

Edinburgh is at the eastern end of the fertile midland valley, the lowland belt which cuts through the highlands. This midland separates the north from the south of Scotland. The midland valley is the prosperous



Only six out of every hundred workers in England and Wales are engaged in farming. Thirty-seven work in factories, and ten are engaged in transportation and communication. Thirteen out of each hundred work in stores or banks, and thirteen work for the government or follow some profession like that of medicine. Thirteen do domestic work. How many out of every hundred are engaged in other kinds of work?



This chart shows how ninety-one out of every one hundred workers in Scotland earn a living. The first group are farmers; the second, miners and factory workers; the third are those engaged in transportation and communication. Then come those who work in banks and offices. Next are lawyers, doctors, and government employees. Last of all come those who work in homes. How many out of every one hundred workers are left for other occupations? Can you name some of these other occupations?

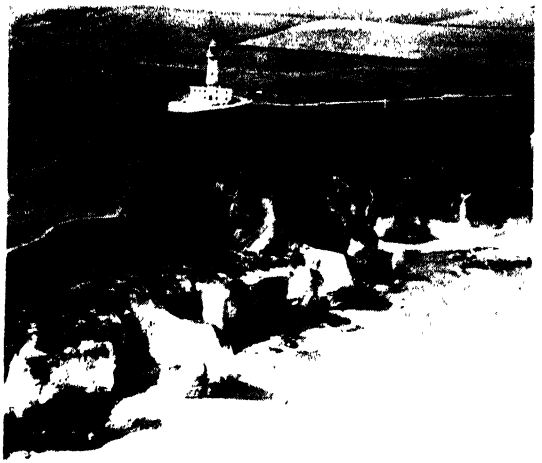
part of Scotland. It contains not only most of the land suitable for crops or for pastures, but also some of the best coal-mines in Britain.

At the western end of the midland valley is Glasgow. Once this city was just a little town on the banks of the Clyde River, then a small stream, scarcely more than fifteen inches deep. The place was just a market-town for the surrounding country-side. But when coal was discovered, the business of the town grew. A bigger harbor was needed, and so the Clyde was dredged out until it had a deep channel. Today Glasgow is the second industrial city in the British Isles, and the Clyde is a busy river. On its banks are ship-building yards, and within the city are iron and steel mills, textile mills, and other factories.

The highlands and northern islands. As you have read, the highlands are cut in two by the midland valley. The grassy slopes of the southern highlands belong to the sheep-raisers, and wool is the chief product these people have to sell. Some of the villages are also noted for fine woolen cloth made on old-fashioned hand-looms. In earlier times the shepherds, aided by their collie dogs, not only tended their flocks, but drove them all the way to wool markets in England. Today the sheep are driven to the nearest market in Scotland and from there shipped to London.

James Sawders

Away from the railroads, in the farming regions of England, can be found old villages like this one. The thatched houses are usually clustered together, and a single narrow roadway winds its way through the village and on to the nearest town. Probably these villages look much as they did two hundred years ago.



Chicago Aerial Survey

Here are the rocky cliffs of the English coast at Flamborough Head where there is a lighthouse to warn ships away from the dangerous shore. You can see how the waves of the North Sea have worn the soft limestone into queer shapes.

The highlands of Scotland are the homes of large family groups called clans. Once each clan had its own mountain stronghold, surrounded by deep canyons and high mountain walls. Each had its leader, and the men were always ready to keep strangers out of their land. There were Gordons, Campbells, MacDonalds, and many others. Sometimes they made war on each other. Today, of course, the clans are at peace, but the members are still loyal to each other. Each clan has its own plaid, or tartan. Have you seen any?

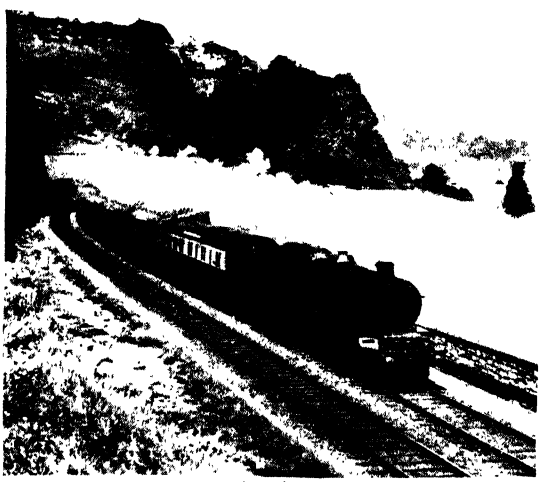
Most of the Scots in the northern highlands today live in the valleys of the Dee and the Don rivers on the eastern coast. On the western slopes many of the people are very poor, because the land is not fertile. Near the coast are the Shetland Islands. Very little will grow on their bleak hillsides except oats and potatoes. The men help out that bare living by fishing for herring. These northern islands, the Shetlands, the Orkneys, and others you will see on the map, are rather desolate. There are few trees, the growing season is very short, and the strong winds are cold.

The peat bogs of Scotland. In the rougher parts of Scotland there are no railroads to carry coal. Even if there were, the people would be too poor to buy fuel. But Scotland is cold in winter, and the people must find some way to keep warm. In the swampy valley bottoms, where the water does not drain away quickly, are large areas called peat bogs. In these bogs a layer of spongy decayed matter is formed each autumn as the plants die and fall. After many years the layers become several inches thick. People dig out blocks of this material, dry it in the sun and air, and burn it as we burn coal. It is called peat.

The people of Scotland. Scotland is the home of hard-working, thrifty people. Many of them are very poor, and all of them have to work hard to make a living in this rough country. But all of them are loyal to their beautiful land.

Wales and Its People

A mountain land of mines and farms. Wales is the mountain land in the western part of the island of Britain. You know that



Associated British & Irish Railways

The rocky coast of Cornwall is lined with summer-resort towns which can be reached by train from London in a few hours. The cars are divided into first-, second-, and third-class compartments. It costs less to travel third class, but the traveler will be more comfortable if he buys a first- or second-class ticket. The seats are more comfortably upholstered and are much wider.

DeCou from Ewing Galloway

These neat buildings belong to a Welsh farmer. The house and barns are whitewashed regularly. The vine-covered stone wall encloses two gardens, one for flowers and one for vegetables. Can you think of reasons why farms in this mountainous land are fertile and produce good crops?

the early Britons retreated to this country when the Angles and Saxons drove them from the uplands and valleys of central and southern England. Wales was the land of King Arthur, and his famous city of Camelot was there.

Wales is now a land of small farms and of mines as you would expect in a mountainous country. A fifth of Britain's coal comes from Wales. The mountains also produce iron, copper, tin, zinc, and lead. Some of the copper and tin mines are so old that no one knows who first worked them. In the city of Swansea copper-working is a very old industry. Both brass and bronze goods are made there.

Farmers in Wales work their land in the modern way, and there are many thriving little farms. The traveler sees well-kept roads, neatly trimmed hedges, and quaint farmhouses in the lowland valleys. There are villages with such tongue-twisting names as Aberystwyth and Llangllothllyn. These names are in the ancient Celtic language that was spoken by the Britons who inhabited the islands before the Romans or the Angles and Saxons came. It is a language somewhat like Gaelic, which is the language of the ancient Irish and the Scottish Highlanders.

Ireland and Its People

An island divided. Across the Irish Sea from Great Britain is the island of Ireland, another beauty spot in the British Empire. Ireland is about the size of Scotland or of our state of Maine. The island is low in the center and is bordered by an irregular rim of mountains.

Ireland is divided into two parts. Northern Ireland, like Wales and Scotland, is part of the United Kingdom of Great Britain and Northern Ireland. The southern part is called the Irish Free State. It is part of the British Commonwealth of Nations, but the people govern themselves.

The Irish Free State. The Irish Free State is about half the size of England. Its hilly upland region is covered with rich, green grass, for heavy rains are brought by the westerly winds. Because of these green pastures Ireland is often called the "Emerald

Isle." The official Irish name of this country is Eire.

On most of the farms in the southern part of Ireland about one-fourth of the land is in crops, and the rest is in pasture. Dairying is a large industry in Irish Free State. The more important crops are potatoes, oats, and vegetables, and of course hay for the cattle during the winter. Droves of pigs provide bacon, which the Irish sell in England.

There are many lakes in this region, and much of the lowland ground is too swampy for crops. Almost one-seventh of Ireland is covered with peat bogs. As in western and northern Scotland, the people use peat for fuel and for fertilizer.

The capital of Irish Free State is Dublin. This city is also important for many other reasons. Trinity College is old and famous. St. Patrick's Cathedral is a noted building. Dublin has been famous for its horse shows for many, many years. It is also a cattle center, and many cattle are shipped from Dublin to Great Britain. Cracker-making is a large industry in this city, and there are many breweries there, too.

Associated British & Irish Railways

Many fine cattle are raised in Ireland. In the lake region many herds graze on the slopes of the mountains and beside the streams. There is enough rain to furnish good crops of grass and other fodder. Some of the farmers also raise hogs and poultry.

Associated British & Irish Railways

Many cottages in Ireland, and in England, too, still have thatched roofs. It is not easy to fasten straw to a roof so that it will shed rain, and men who can do the work are in demand. This thatcher is repairing the roof of a farm-house in county Galway, Ireland. The cottage is built of stone.

Northern Ireland. Northern Ireland is a country of factories, linen mills, and flax fields. The Irish people have been skilled for many years in making fine linen. They raise flax, but not nearly enough to supply their mills. Much of it has to come from Russia and other countries of northern Europe. The Irish bleach their linen to snowy whiteness by soaking it in clear, pure water and spreading it out on the grass to dry in the sun. Other countries send their woven linens to Ireland to be bleached. Most of this work is done by women and girls.

Many men are employed by the ship-building yards in Belfast, which is the capital of Northern Ireland. There are many factories there that make whisky and tobacco products.

On the northern coast is the old town of Londonderry, a center for salmon-fishing, shipyards, tanneries, flour mills, and linen mills.

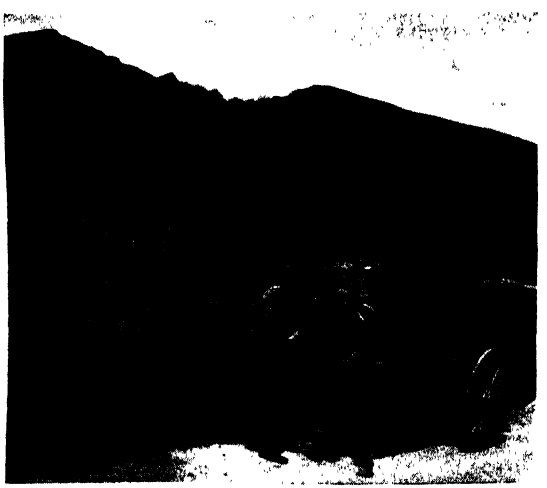
Since Ireland has little coal, it is not a great manufacturing country. The industries are mainly those that use the products of the farm. But we do not think of industries and factories in connection with Ireland. We

think, instead, of the kindly people and their beautiful, green land of lakes, hedge-bordered roads, and rugged mountains.

The Channel Islands

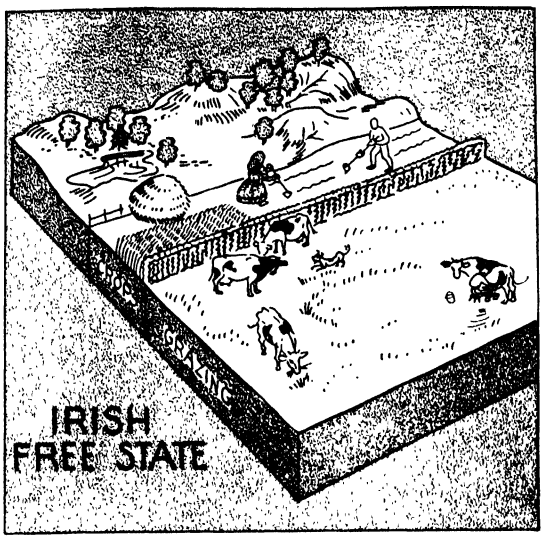
Why these islands are interesting. Before leaving the British Isles, we should look for a moment at the Channel Islands. These are a group of small islands close to the coast of France. Find them on the map on page 195. Many of them are rocky little spots and uninhabited. But we are interested in four of them because some of our famous breeds of dairy cows first came from them. These are the islands of Jersey, Guernsey, Alderney, and Sark.

Although these islands belong to Britain, the people speak French. These islands were a part of the lands of William the Conqueror and since his time have been ruled by the king of England. Another interesting thing about the Channel Islands is that the people still hold their land in the way people did in feudal times. One farmer pays the owner of the land a chicken each year as rent. Another has to give a cake made out of a bushel of wheat.



Associated British & Irish Railways

The cart is loaded with blocks of peat from the pile beside the road. On page 419 you can see how peat is cut in Germany. In Ireland this fuel is dug and dried in much the same way. It is a common fuel for the farmers in many parts of Ireland.



Almost half of the land in Irish Free State is used for pasture. A fifth of the land is used for crops that are cultivated. How much is left for forests, lakes, peat bogs, and waste land?

The farmers of the Channel Islands raise large crops of fruit and vegetables. These ripen much earlier than in England, and the farmers find a good market in London for their grapes, tomatoes, and other produce. The land is kept rich and productive by fertilizing it with ashes made by burning great quantities of seaweed.

Other Parts of the British Commonwealth

An empire in many lands. The United Kingdom of Great Britain and Northern Ireland is not the largest part of the great British Commonwealth of Nations. It is the most important part, but as you know now, it could not exist if other parts of the empire did not send food and raw materials. In exchange are sent manufactured goods of many kinds.

In the New World is Canada, a vast land stretching from the Atlantic to the Pacific. Much of Canada has not yet been developed. Parts of it are very cold. Can you explain why Canada is colder than Great Britain, which is in the same latitude?

In the Old World are other lands which belong to the British Empire. Later in this book you will read about densely populated India, the huge island of Australia, which is really a small continent, and the British colonies in Africa. Besides these there are, in the Pacific, Atlantic, and Indian oceans, many islands which are a part of the empire.

This empire is larger than any of the earlier empires you have studied. But it is a different kind of empire. It is not held together by a huge army or navy or by a system of military roads as some of the old empires were kept together. The people in many parts of it, as you will read later, govern themselves. They stay together in an empire because they have come to depend upon each other.

Talking Things Over

1. The Bank of England is one of the oldest banks, but it is not yet three hundred years old. How did people take care of their money before there were banks? Where could people borrow money?

2. The British Empire is not the first great empire we have studied. What were some of the others? Discuss how the empire of the Greeks was governed and compare it with the Roman Empire. Which one do you think was like the British Empire? Do you think that an empire which is held together by trade is more likely to last than one which is held together by military force? Why?

3. You know that the geography of a land has always had an effect on that land's history. What effect did the geography of Greece have on its history? You learned in an earlier chapter that England became a seafaring nation with a strong navy. Can you explain what the geography of England had to do with bringing about this condition?

4. What sort of land do you find in Scotland and Wales? What people settled there in early days? England had a great deal of trouble in making both of these countries part of her kingdom. Why?

5. Talk over together how the desire for trade caused England to build an empire. Also discuss the reasons why trade helps to keep the British Empire together today.

A little more than one-fifth of the land in England, Scotland, and Wales is plowed for crops. Almost two-fifths is used for pasture. The remaining two-fifths is used for factories and mines, for cities and towns, or is unused land.

Doing Things Together

1. See if you have any English china at home. Perhaps one of you may be able to bring a piece of Wedgwood to class. Notice the picture on page 79. The figures in it are similar to those on Wedgwood.

2. Find out something about the history of Westminster Abbey and make a report to the class. You might include brief talks about some of the famous people who are buried in the Abbey. Find some pictures to illustrate your talks.

3. Scotland has a history and literature that is separate from the history and literature of England. Members of the class can tell stories of Scotland's past and of some famous Scottish people. Include Robert Bruce, Mary Queen of Scots, Robert Burns, and James Watt.

4. In this chapter you read about the plaids, or tartans, that belong to different Scottish clans. Try to find, in the library, a book that tells about plaids. Collect as many different plaids as possible for a small exhibit.

5. Wales was the home of King Arthur and his knights. Do you still have the collections of stories that you made for an earlier lesson? This would be a good time to tell again some of the stories you liked best.

French Government Tourist Bureau

Travelers may motor for miles along well-paved French roads through rolling country such as you see in this picture. The farms are carefully tended, almost to the edge of the road. It is hard to realize when seeing such wide expanses of farm-land that France has a population of more than forty million in a land smaller than our state of Texas. But there are many regions where cities and towns are crowded closely together.

XXV. FRANCE AND ITS PEOPLE

A Land of Small Farms

ALTHOUGH there are regions in France where great industries flourish, the French are not in the main an industrial people like the British. More Frenchmen are engaged in farming than in any other work. Almost two-thirds of France is plowed for crops, used for pastures, or planted in grapevines.

The climate of France. Almost everywhere in France the farmers have good soil and a favorable climate. The westerly winds bring rains and keep the winters from being very cold. These winds blow over the warm waters of the ocean current called the North Atlantic Drift. All of France, as you can see by the map on page 196, is farther north than Boston, Massachusetts. Yet the climate is much milder than the climate of our New England.

The climate of the northern and western parts of France is like that of England. In the south the climate is like that of the Mediterranean countries. Because of this varied, warm climate French farms grow many different products. There is very little French land that does not produce something. Because of this, the French are able to raise almost all the food they need. You have read that the English cannot do that.

Farming for world markets. France grows some things that are sold in the markets of other countries. Among these crops are sugar, grapes, olives, and flowers. Enough wheat is grown in France to make it an important wheat-producing country. From French grapes come many famous wines that are sold all over the world. Perfumes from French flowers are also found in stores in many countries. Some of our olives come from France.

Grapes and olives, as well as flowers, grow

well in southern France. This is one of the important agricultural sections of France. Of course it is a part of the great farming country that borders all the Mediterranean Sea. You remember that the rainfall here comes in the winter, which is generally mild, and that the summers are dry and hot.

As in other Mediterranean countries, wine and olive-oil are important products, especially around the city of Nice. Much of the olive-oil is used in making fine soaps. Near Grasse are many acres of flowers. The fields are ablaze with the bright blossoms from which perfumes are made. Grasse is the center of the perfume-making industry.

Tourists make business for France. Another important business of this Mediterranean part of France is the entertainment of tourists and vacationers. The coast extending into Italy is called the Riviera. It is one of the great pleasure resorts of the world.

Wine lands of the river valleys. The wine lands of the river valleys make up another agricultural region. On the map on page 161 find the valley of the Garonne River. Here the famous red wines of Bordeaux are made. After the wine is made from the grapes, it is kept in casks stored in underground caves. Other wines come from Burgundy in southeast France. The Loire River Valley produces white wines. In the northeastern part of France, near Reims, champagne is made. Find these places on the map on page 161.

French Government Tourist Bureau

Along the shores of the Mediterranean are many French cities where people go to spend their vacations. This holiday land is called the Riviera. In the winter people from northern Europe go to the Riviera, because the climate is mild and sunny. The picture shows the city of Nice, a famous resort town.

French Tourist Information Office

Travelers visit the château country, which is a region of France where there are many old castles, or châteaux. This one, at Chantilly, was built during the Renaissance and then enlarged in the seventeenth century. Chantilly is noted for its fine laces.

Europe's first planted forest. Along the Bay of Biscay, reaching from the Garonne River southward nearly two hundred miles, is a huge forest belt. This forest was planted by the French to keep the ocean winds from blowing the sand dunes over the land. The westerly winds had blown sand over good farm-lands for many years. Sometimes the dunes covered even the houses and trees. But the French discovered that they could prevent the sand from shifting by planting pine trees on the dunes. Now the dunes shift no more, for the low hills are covered with forests.

This forest is known as the Landes. It was the first planted forest in Europe. Today "scientific forestry" is being tried in many countries. That means growing trees and taking care of them just as any other crop is cared for. Of course it takes longer for a crop of trees to grow than for any other crop. But

countries that take care of their forests and plant trees to replace those that are cut down have discovered that scientific forestry pays. The pine forest of the Landes produces turpentine and lumber for ship-building and for export. There are strict rules about cutting down the trees.

Other agricultural regions. One of the richest agricultural regions of France is the great lowland section named the Paris Basin. It is shaped somewhat like a basin, with highlands encircling it on the east, southeast, south, and northwest. In the northern part of this basin sugar-beets are the chief crop. In the southern part the farmers grow wheat.

Corn is raised in only a small part of France. This is in the Garonne Valley, where the soil is deep and very fertile and the climate is warm and moist. In northern France the summers are too cool for corn, and in southern France the summers are too dry.

Dairy lands of France. On the map on page 161 find the central plateau of France. This is an upland region where the important rivers have their sources. As the land is hilly and most of the soil is too poor to be used for farming, this is a cattle, sheep, and goat country. The famous Roquefort cheese, made of sheep's milk, comes from the southern part of this region. The cheese is stored in limestone caves in order to ripen and mellow.

French Government Tourist Bureau

This is a scene in the Landes—a region of sand dunes, where the first forest was planted by men. The French method of taking care of forests has been so successful that many other countries have followed their example.

French Tourist Information Office

The pine trees in the Landes region of France supply quantities of resin and turpentine. This workman is notching the tree so that pitch will run into the cup fastened to the trunk. Do you know how turpentine is made and what it is used for?

Across the Rhone Valley is another upland region that is also used for grazing. Find it on the map on page 161. Here is the place where the great Alps extend into southeastern France.

Normandy and Brittany. Another important dairy section is the upland in the northwest corner of France—the region called Normandy and Brittany. Normandy is a rich farming country with fields of oats and sugar-beets, truck-farms, and apple orchards. The air of Normandy is too damp for any fruit except apples and for any grain except oats and a little wheat. In the valleys among the highlands of Brittany are green pastures where herds of cattle and droves of hogs feed.

These low coast lands are warmed by the sea winds and so have an early spring. The winds are moist, and grass grows abundantly

through most of the year. From the many gardens in this region come the early vegetables that appear in the markets of London and Paris long before the home crops are ready.

Why the French farmer is important. The French farmers are important, even though their farms are small. These farms usually surround the villages in which the farmers live. Most of the owners work their little farms so as to get the most out of every foot of soil. Not only the farmer, but his wife and children work.

The farmer's cottage is usually built of stone, plastered or whitewashed, and is kept very neat. The low, one-storied cottage is close to the cobblestone road on which the produce is hauled to market. Sheds for the cow, chickens, rabbits, and other live stock are joined to the house, so that all seem to be one building.

The French peasant is satisfied with his little farm. Has it not been in his family since the glorious days of the French Revolution, when the land was taken from the rich lords and divided among the common people?

French Tourist Information Office

In that part of the Landes where the ground is marshy and shrubbery grows high, the French shepherds wear stilts. Can you think of reasons why the men watch their flocks from stilts?

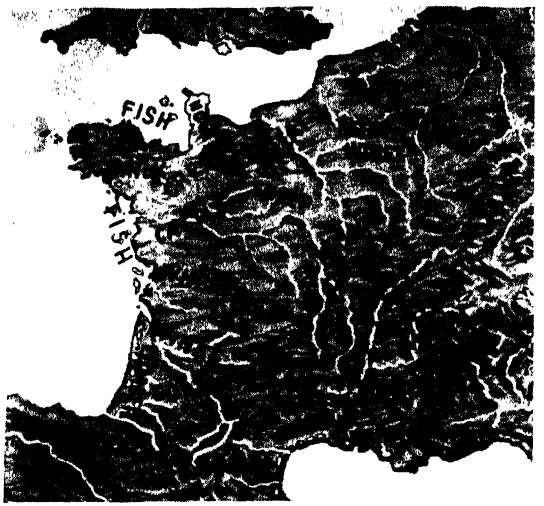
Jean François Millet was a French artist who lived during the last century. He spent most of his life among the peasants of France and painted many scenes showing them at work. This picture is called "The Shepherdess." Perhaps you have seen a copy of "The Angelus" or "The Sowers." There are many of Millet's pictures in American Art galleries.

French farmers know that they are the backbone of France. Without them France would not be a strong country.

Fishermen of France. Along the coast of Brittany live many of the French fishermen. This coast is dotted with hundreds of tiny villages. Every morning many men put out in their sail-boats to catch tuna fish and sardines. Some of the Breton fishermen go on long trips —as far as Newfoundland and Iceland for cod, and to the North Sea for herring. Many of the Breton women work in the factories, where sardines are cooked and canned in olive-oil. There are also many fishing villages along the Bay of Biscay and on the Mediterranean coast.

French Mills and Factories

Three great industrial regions. Of course there are some Frenchmen who work in mines, factories, and mills. There are three important manufacturing regions in France. Each is close to coal-fields. On the map on page 161 find Lille, in the northwest corner near Belgium. Then locate the Saar region, to the southeast of Lille. Near the Rhone



The principal products of France are shown on this map. Knowing what you do about these products, can you tell by looking at this map any facts about the land in different regions?

River, toward the south, find St.-Etienne. These are the great industrial regions of France.

The northern industrial region. The most important of these regions is the northern one. It is part of a great belt of manufacturing cities that extends from England, through Belgium, into the heart of Germany.

The great coal-field that centers about Lille extends into Belgium. This is part of the country in which the "cloth towns" were located during the Middle Ages. Even today there are many mills in this district that make cotton, linen, and woolen goods. Before coal was discovered, the land was used to grow flax, and nearly every home had its own spinning-wheel and hand-loom, for each family made its own linens. The skill which the weavers had developed was of great value when coal was discovered and textile factories built. Today most of the materials are imported. Good railroads and canals connect the manufacturing towns with seaports.

There are three times as many people making textiles or clothing in France as there are in any other manufacturing industry in the country. France ranks first among all European countries in the manufacture of silks, and third in the manufacture of cotton and woolen goods.

There are large iron and steel mills in this district, as iron ore can easily be brought from the mines of Lorraine. Since coal is plentiful and the beet fields are close, it is also a center for sugar refineries.

The Saar region. The second great industrial region lies partly in Germany and partly in France. It is usually called the Saar region. Coal-fields are there, and close by are the iron mines of Lorraine. These mines are so rich that France holds second place to the United States as a producer of iron ore.

Streams which flow down the Vosges Mountains that border the Rhine Valley at this point furnish power and water for bleaching and dyeing cotton goods, and a large cotton-manufacturing industry is found here. Not far away are rich deposits of potash, which is used in manufactures and as fertilizer.

The industrial region of the south. On the map on page 161 find St.-Etienne, Grenoble, and Lyon. These cities are in another coal region. Ore from the Lorraine mines is

Burton Holmes from Ewing Galloway

In southern France there are fertile, sloping farmlands stretched along the foot-hills of the Pyrenees. You can see how all the land, except that which is too steep, is cultivated. Notice that the farm-house is a combination of home and barn.

French Government Tourist Bureau

This is not a picture of Venice, but of a French town. It is located on one of the canals which connect many of the French cities. These canals, some of which were dug during Napoleon's time, furnish cheap transportation for the products of French farms and factories.

shipped in for the factories that make many iron and steel products. St.-Etienne also manufactures china, silk ribbons, and automobile tires.

Lyon is the center of silk manufacturing for all Europe. It is a very old city. When Roman legions marched up the Rhone, they found a town by the river, inhabited by Gauls and Greeks. The Romans made it the center of a road system, and it became the most important city of Roman Gaul.

To the east of Lyon are valleys where mulberry trees flourish. Women and children pick the leaves and feed them to the silkworms, while men work in the silk factories. Making silk has been an important business here ever since the Middle Ages. But the French cannot raise all the raw silk they need, and so they import great quantities of it from Italy, China, and Japan. Lately the French have been teaching the Syrians to raise silkworms in order to have a supply closer to France than the Orient.

The silk factories, which weave silks and dye them, are run by coal from the near-by mines. Some of them use power furnished by the swift streams of the Alps and the Cévennes. The pure water from these streams is also needed for making dyes and for dyeing the silks.

Lyon is often called the "City of Roses," as it is surrounded by nurseries that supply millions of roses for the Paris market.

A short distance to the southeast of Lyon is Grenoble, famous for gloves. It is located on a swift stream in a valley of the Alps. In the mountain valleys close by, the chief business of the people is raising cattle and goats. The hides find a ready sale at the factories that make leather goods.

Paris

How Paris prospered and grew. Paris, the most important city in France, ranks only fourth in France as a manufacturing city. Like London, Paris is not near any great coal or iron field but is in a rich agricultural region. But Paris is important for other reasons than manufacturing. It is the capital of France, and the Chamber of Deputies and the

James Sawders

In the northern province of Alsace, France, there are many factories, and the waterways are filled with barges like those you see in this picture. There are coal and iron near, and factories can get their raw materials by water as well as by rail. Do you know which way is cheaper? Which way is quicker?

H. Armstrong Roberts

This scene is a common one in many French towns. The women are washing clothes in the river. Do you think that the houses in such towns have plumbing? Those we see here do not look modern.

French Senate meet there to make the laws for the French people.

Paris received its name from a tribe of Gauls who settled on an island in the Seine River many years before the Romans came into Gaul. Because it was in the midst of the fertile basin and because it was a river port, the town prospered and became a trading city. As time went on, many roads extended from Paris into the surrounding country.

In the days when ocean ships were small, Paris was a seaport. Once the raiding Vikings came up the Seine River in their boats and plundered part of the city. The Parisians then put heavy chains across the stream to keep out unfriendly ships. Even after the city became a railroad center, it remained an important river port.

With such good transportation, Paris was certain to develop as an industrial city, even though it is not close to coal or iron fields. Smaller streams and canals provide waterways for many barges and canal-boats carrying goods. These and the railroads furnish cheap transportation for thousands of tons of coal needed by the various industries. The factories are located in Paris and in the suburbs. The city has long since outgrown the island where it began.

The most important industry in Paris is the manufacture of women's clothing and hats. For many years Paris has seemed almost a huge dressmaking shop. French dresses, and things that go with them, such as gloves, purses, hats, buttons, and the like, are famous all over the world.

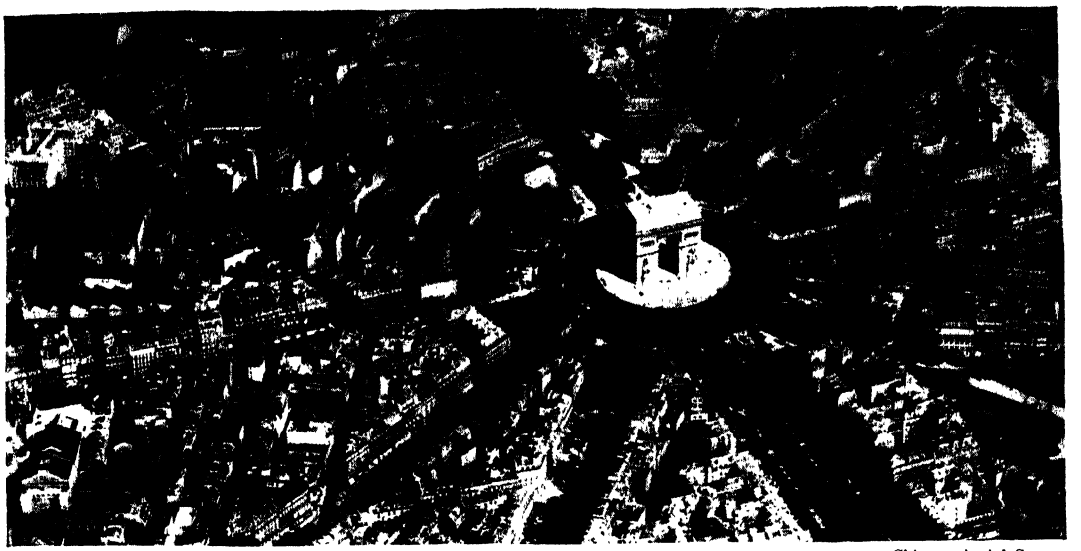
The sights of Paris. Visitors to Paris are impressed by the tree-lined boulevards. These great, wide avenues are brilliantly lighted at night and help to make Paris one of the beautiful cities of the world. Then there are many lovely gardens, fountains, public squares, museums, and art galleries.

Paris has one of the most famous museums in the world—the Louvre. Many celebrated paintings and statues are to be seen there. Next to the Louvre are the Gardens of the Tuileries, which were the playground of royalty in the days of the Bourbon kings.

On the little island where the city began is the famous cathedral of Notre Dame. Not far from this is the little blue chapel known

French Government Tourist Office

Grenoble, France, is located in a busy industrial region. It is located on the Isère River, which flows into the Rhone. Once it was a fortified town with a wall around it. Now it is filled with many factories. Most of these make kid gloves. Where do the factories secure their raw materials?



Chicago Aerial Survey

Many parts of Paris have been carefully planned in order to make the French capital a beautiful city. This air view shows the Arch of Triumph with the wide boulevards leading toward it from all directions. New buildings must be in a style and of a size that will fit into the plan.

as Sainte Chapelle, which many people consider the loveliest building in Paris.

On the left, or south, bank of the Seine is the "Latin Quarter," where many students live. They come to Paris from all parts of France and from many other countries to study at the University of Paris or other schools for which Paris is famous. The art, architecture, and music schools of Paris are noted all over the world.

Just outside Paris are many beautiful country homes. There are also market gardens which supply Paris with vegetables. A little farther away are the dairy farms that supply the city with milk, butter, and cheese.

Transportation and trade. Paris is the center of a whole network of transportation. Not only are the rivers around Paris connected by canals, but many other rivers have been united in the same way. There is excellent transportation by means of canals, rivers, roads, and railroads between the French cities.

Over this network the French people carry on an active trade in home products. They also have a foreign trade almost half as large as that of England. But more than three-fourths of their buying and selling is done among themselves, for the French produce almost everything they need.

Since that is so, the French people often say, "Why should we travel? We have everything in our own country." This is nearly, but not quite, true. The French have colonies that send them tropical products and raw materials. France also imports wool, cotton, copper, and petroleum.

Ports of France. These imports come into France chiefly on ships, although railways connect France with other European countries. Each ship unloads at the harbor closest to where its raw materials are to be used. Look at the map on page 161 and find the three coasts, south, west, and north, where these ports are located. There are not many for so large a country. This is because much of the coast of France is too rocky for safe harbors or too sandy for deep ones.

Marseilles, which you remember was a Greek trading city called Massilia before

French Government Tourist Bureau

There are mountainous regions of France where little farming can be done. The milk-can tied to the rack on the donkey's back tells you what the people do for a living. Find the mountainous regions of France on the map on page 388.

Rome was founded, is the most important French port. It carries all of France's trade with the Mediterranean countries and most of the trade with the Orient.

On the west coast the principal port is Bordeaux. It is the shipping-point for the fertile valley of the Garonne River and for the great pine forests to the south. A second port on this western coast is Nantes, which is as busy at building ships as at receiving cargoes.

On the northern coast, facing England, the most important ports are Calais, Boulogne, and Havre. On the Breton coast of Normandy and Brittany are Cherbourg and Brest.

French Foreign Possessions

The French people, like the British, own lands in other continents. You remember that for a long time they owned much of North America. Today most of their possessions are in Africa, across the Mediterranean Sea. The French colonial empire covers a territory much larger than France itself.

The colonies of France send raw materials to the factories of the mother-country. In turn, France has built roads and railroads, telegraph and telephone lines, irrigation dams, and systems for supplying water in her colonies. The people in the colonies are trained in modern ways of doing things and live under a strong government. In such ways France contributes to the spread of civilization.

Talking Things Over

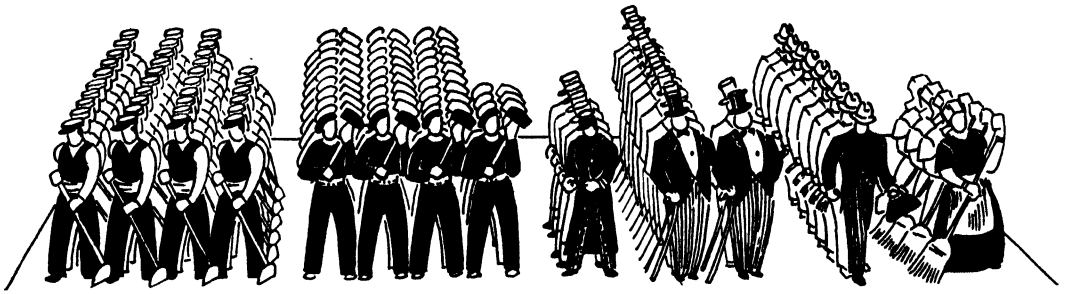
1. Can you explain why France has not turned from farming to industry as much as England? Discuss the geography and climate of France. What effect have they had in the development of the country?

2. Many fine, expensive soaps come from France. Some of these soaps are made from olive-oil. Do you know what is used in place of olive-oil in other soaps? Do you know of any soaps that are made from olive-oil?

3. France depends on tourist trade for a great deal of business. That is true of several European countries, but probably France has a larger number of tourists than any other nation. Why do you suppose this would be? Are there regions in our country which have a great deal of tourist trade?

Burton Holmes from Ewing Galloway

Visitors to Paris are always interested in the outdoor cafes. In nice weather the tables are set outside the restaurants on the sidewalk. This cafe seems so crowded that you wonder how the waiters are able to serve the people.



Thirty-six of every hundred French people who work for a living are engaged in farming or in fishing. Thirty-four of every hundred work in factories, while only five are in the business of transportation and communication. Twelve are engaged in commerce and banking, nine are in such professions as law and medicine, and the remaining number do the kind of work which is called domestic service.

Are any of them near your home? What are some of the interesting things that people from foreign lands might see in the United States?

4. Why is it important that we keep our forests? There are places in the United States called national forests. What does that mean? There are also state and county forest preserves. If you have been in one of these forests, talk over the ways in which the trees are planted, cared for, and protected. In what way are the forest preserves like the Landes of France?

5. The French carry on a great deal of trade. Only one-fourth of it is with people of foreign nations; three-fourths of the buying and selling is done in trade among their own people. Why do you suppose this is true? Why does England trade so much with countries outside the British Isles? Do you think France could get some of this trade?

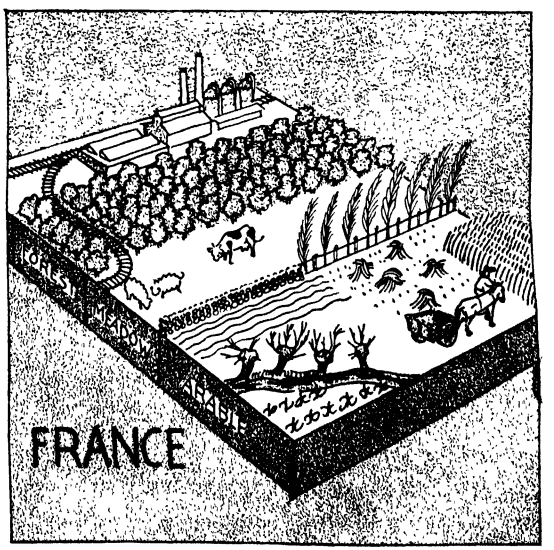
Doing Things Together

1. Make a list of the chief farm products of France. Mark the ones that are grown in the Mediterranean nations with an M and those that are grown in England with an E. After looking at your list you may be able to give reasons why we often think of France as one of the Mediterranean nations.

2. Probably you have seen copies of a famous picture, "The Angelus," by Millet. Many of this artist's pictures are in museums and art galleries in America. Perhaps there is one near your school. Visit it and see if you can find any of Millet's pictures or copies of them. Perhaps you might find pictures by other French artists, such as Rosa Bonheur. You can find some French pictures reproduced in books in your library.

3. It would be fun to plan a lunch which consisted of things grown or made in France. Probably you will have to use some things which were raised in America, but be sure they are things which can be grown in France. Plan to have things which you do not usually eat. You can get many suggestions by reading over this chapter.

4. Paris is one of the most beautiful cities in the world. Look in magazines, newspapers, and travel folders for pictures of Paris. Include pictures of Notre Dame, the gardens of the Tuileries, the Arch of Triumph, the Eiffel Tower, and pictures of some of the boulevards and streets.



This chart shows that two-fifths of the land in France is used for crops that are planted. Another fifth of the land is pasture and meadow. Another fifth is forest land. Only one-twentieth of the land in France is used for orchards and vineyards. How much is left?

Courtesy Netherlands Railways

The Low Countries, Belgium and the Netherlands, are crisscrossed with a network of canals and rivers. Loaded barges move along these waterways carrying produce from the farms to the cities, and goods from the cities to the farms. This scene shows a vegetable market near the city of Rotterdam, the Netherlands.

XXVI. TWO LOW COUNTRIES AND A MOUNTAINOUS ONE

Belgium, the Netherlands, and Switzerland

THE next-door neighbors of the French, to the north, are the people of the Low Countries—Belgium and the Netherlands. If you will look at the map on page 266, you will understand why these lands have been called the Low Countries for many centuries. They are in a region of river deltas. Find and name the three great rivers that flow into the North Sea through the Low Countries. These rivers rise in the mountains of central Europe.

For many centuries these rivers have brought down silt and deposited it at their mouths. Like our Mississippi, they have built up new land along the sea. Notice on the map the many islands that have been made. At first these "made" lands were marshes. They gave the whole region its name.

How the Low Countries became independent. The Low Countries were once a part of Charlemagne's empire. In feudal times a part became known as the county of Flanders. Powerful counts, you remember, divided up the land during the Middle Ages and ruled like kings.

Later, when kings struggled to make large nations, the Low Countries suffered heavily. They lay right in the path of warring nations, and many battles were fought there. At last Spain, which owned a great part of what is now the Netherlands, gave the people their independence. The Spanish king wanted to fight France and took that way to keep the Dutch people from taking sides against him.

For many years the people of the Low Countries were under one rule, but now for more than one hundred years Belgium and the Netherlands have been separate and independent.

Although both nations are in the Low

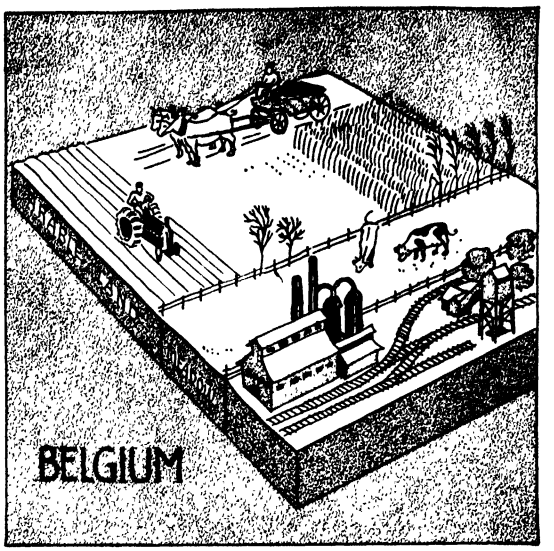
Countries, they are not alike. They have developed differently, chiefly because of differences in the land. Suppose we see what these differences are.

Belgium and the Belgians

Belgium is almost like two countries. In the northern part the land is low and flat along the coast, rising to low hills. Here are the best farm-lands. The people speak Flemish, a language very much like Dutch. In south Belgium the land is hilly and much higher, and the people speak Walloon, which is somewhat like French.

Belgium's great workshop. In the southern part of the Walloon country is a plateau of hard rock called the Ardennes. On it grow valuable pine forests, although much of it is covered with sheep pastures. But the southern margin of the Ardennes is a very rich iron field, which is a part of the great iron field that extends through northern France. Stretching across the country from east to west there is also a long, narrow strip of land under which lies the richest coal-field of Europe. This strip is the great manufacturing region of Belgium.

Because of her great wealth of coal and iron, the most important industry in Belgium today is the manufacture of iron and steel. As long ago as the days of the Romans, iron was mined by natives of this region. They made weapons and tools in the region around Liége. For centuries the people followed that business. Almost every home had its own forge. Whole villages specialized in one thing —such as making nails by hand.



Three-fifths of the land in Belgium is planted to crops. Another fifth is used for pasture and meadow land. Only one-fiftieth is used for orchards. The rest of the land is either waste land or is used for other purposes. Can you name some of these purposes?

Cities of Belgium. Liége is still the center of the steel industry, but now most of the iron ore must be brought in from outside. The plants are much larger than Belgian mines can supply. Liége is noted for its manufacture of arms and ammunition. Charleroi is another important city, famed for its glass-works. More plate-glass is made there than in any other city of the world. All along the banks of the Meuse River are huge workshops.

Only seventeen out of each hundred Belgians who work for a living are engaged in farming or fishing. Forty-eight work in factories, seven in transportation and communication, and thirteen in banks and stores. Eight of the hundred are professional men, and five are engaged in domestic work. How many are left?

The most important city of Belgium is Antwerp. Canals, rivers, and railroads connect it with other cities of Belgium. It is one of the world's great seaports because it lies like a cross-road in the heart of land and ocean travel.

Farming in Belgium. Like the French peasants, the Walloons of southern Belgium live in villages and go out each day to work on their farms. But in the Flemish part of Belgium this is not the case. There the farmhouse is more likely to be built right on the farmer's land. Sometimes three or four farmers may have their houses built close together.

The Belgian farms are rather small, and each farmer must work hard to get all he can from the land. Belgium is the most crowded country of Europe, for it has more than seven hundred people for every square mile of land. You can see, then, that no land can be wasted or allowed to lie idle.

The soil is carefully fertilized, and the farmers grow rye, oats, wheat, potatoes, and sugar-beets. In the low regions along the coast, where the farmers have built dikes and drained marshes, they also raise flax and hemp.

The home of the textile industries. Linens are not the only textiles made in Belgium. As you have read, the great cloth towns of the Middle Ages were in Flanders, or Belgium. The guilds of the weavers made thousands of yards of cloth, especially woolens. Bruges was the greatest wool market of Europe. It was also an important seaport more than four hundred years ago.

The cloth of Bruges and other Flemish towns was unequaled, and it was sent to many other countries during the Middle Ages. Magnificent tapestries were woven on the looms of Flanders, and silks, linens, and laces were made for the rich merchants of Europe. Ever since then many of these towns and cities have been noted for their textiles. Today we speak of Brussels carpet, even though it does not always come from Brussels. Belgian lace is known almost everywhere. Bruges is the center of the hand-made lace industry.

Years ago more than a hundred ships a day came to Bruges from Asia, Africa, and

Underwood & Underwood

You can see here what happens in the Low Countries when dikes, or sea-walls, break. Heavy waves have battered down the earthen dike, and salt water is still rushing through the gap. In flat country, such as you see in the picture, the water will spread over a great deal of territory. The farmers will have to repair the dike and then pump out the sea water. The flooded land will have to be fertilized. Do you know why? If you do, you can realize why the farmers of the Low Countries are willing to work day and night to repair broken dikes.

Underwood & Underwood

When the flax seeds begin to ripen, the stalks are cut and tied in bundles. The bundles are laid in the Lys River and weighted down with heavy stones, as you see in this picture. The flax is left in the water until the woody part softens and breaks away from the fiber so that it can be combed away. When the woody part is combed away, the fibers are cleaned and prepared for the spinning mills, where they are made into linen thread. Linen must be bleached to make it white.

Europe, bringing wool, hides, coal, wines, and other goods, and carrying away textiles. But mud and silt gradually choked up the little river leading from Bruges to the sea, and now ships cannot reach the city. Much of the trade moved to Antwerp, and Bruges lost all of its importance.

Belgium's inheritance from the past. Belgium is filled with reminders of the Middle Ages. There are many beautiful Gothic churches, town halls, and belfries. We must remember that once this was the richest part of Europe. The trade of the great cloth towns, and the other business that came with it, made the merchants rich. Much of the money was spent on fine buildings.

One result of this period of wealth was that rich men helped many artists by purchasing their works. Two famous Flemish artists were Peter Paul Rubens and his pupil Van Dyck. Perhaps you have seen copies of some of their paintings.

Not all of Belgium is old, however, for some of the cities appear very modern. Ostende, a seacoast town, is a great seaside resort. Brussels, the capital, is a thriving city. The king of Belgium has his palace there, and the men who have been elected by the people to make the laws of Belgium meet there.

Belgian women are famous for the lace they make in their homes. These girls are making "bobbin" lace. Fine thread is wound on a number of small, wooden bobbins. The threads are twisted and crossed over pins which are stuck into a pillow. The bobbins fairly fly in the girls' hands, yet lace-making is very slow and tedious. Many varieties of lace, such as Brussels and Mechlin, take their names from Belgian cities.

The Netherlands, Home of the Dutch People

The people of the Netherlands are called the Dutch. In early times most of them lived on the higher land away from the seacoast. But some of them lived on mounds and islands in the midst of the marshy lands. When high tides threatened to flood their homes, they built strong walls, or dikes, at the edges of the marsh to keep out the sea. Then they drained the land back of the dikes and raised crops.

Capturing a land from the sea. As the Dutch needed more land, they built more

Courtesy Netherlands Railways

In places where the ocean waves beat against the dikes, the Dutch have lined the banks with blocks of stone. As there are no quarries in the Netherlands, all the stone must be brought in from other countries. Stone is expensive to haul by railway, and so most of the stone for the dikes comes by ship from Norway.

dikes to shut out the sea. Little by little the Dutch enlarged their country by pumping out the water from the land enclosed by these strong walls. They dug ditches to drain the wet ground and pumped water from the ditches back into the sea.

The dikes are built of firmly packed sand, gravel, and clay. In places where the sea pounds hardest, granite from the Scandinavian Peninsula is used. These dikes are wider than the levees built along our Mississippi River. People constantly watch the dikes because small animals burrow into the walls and sometimes weaken them. But, fortunately, mice, worms, and frogs are the favorite food of storks. That is why the Dutch government carefully protects these birds.

Pumping water with wind. The Netherlands is often called the "land of windmills." The Dutch people need many pumps to drain the water from their lowlands. Long ago they learned to make the wind work their pumps, just as other people learned to make water turn their mill-wheels. The Dutch have no waterfalls to furnish power, but the wind blows rather steadily over their flat country.

The first windmill was brought to the Netherlands from the Mohammedan countries by the Crusaders. The Arabs in Palestine and Mesopotamia used windmills to pump water out of rivers for their thirsty land. But the Dutch had to pump water from their moist soil. So well did the windmills suit the Dutch that at one time there were thousands of them flapping their long arms in the wind. Today gasoline pumps take the place of many of the windmills. The pumps are often needed, for it rains often in this part of Europe, and only pumping prevents the flat lands from being flooded.

How the Dutch improve their land. The fields which the Dutch have taken from the sea are called *polders*. These are now the richest farm-lands of the whole country, but at one time these lands were much too sandy and wet to be fertile.

The Dutch discovered ways of making poor soil into fertile ground. They mixed fertilizers with the sandy soil to help the plants grow. They were the first people in northern Europe to use fertilizers and other methods of scientific agriculture. From the Dutch farmers the Germans learned how to fertilize their poor land.

Farming in the Netherlands. The polders make rich pasture land for cattle, for grass

grows fast in the Dutch climate. The country is farther from the North Atlantic Drift than England, and so the winters are colder. The summers are not so warm as the English summers. There is not so much rainfall as in the western part of England, although there is enough for many different kinds of crops.

Most of the crops are fodder crops for the cattle, which are exceptionally fine and well cared for. Friesland, a part of the Netherlands, is one of the greatest dairy sections in the world. This part of the Netherlands, and the adjoining part of Germany, is the home of a famous breed of dairy cows, the Holstein-Friesian. In this region great quantities of butter and cheese are made for home and foreign markets.

The Dutch people protect their cows with blankets from flies and mosquitoes. In April the big black and white cows are turned out to graze in the thick, soft grass. In November they are brought back to the stables to be fed all winter with hay and other feed grown on the farm. Often the stables are built adjoining the houses, and a door from the kitchen opens into a clean cow barn.

Dutch farmers also grow early wheat, flax, cabbages, potatoes, and other vegetables in the polders, where the cold winds are shut out by the dikes.

Courtesy Netherlands Railways

The windmills pump water from the low land into this canal. The house at the right is built on a sloping bank, and the land below is much lower than the level of the water in the canal.

The tulip land. Bordering the polders is a belt of sand dunes thrown up by the sea. This is the tulip land of the Dutch. Haarlem is the center of this business, and around it in the springtime are hundreds of acres ablaze with color. Millions of tulips are grown here, as well as hyacinths, daffodils, and other plants that grow from bulbs.

These flowers are grown especially for the bulbs. These are dried on racks and then exported to other countries. Perhaps in your garden you have tulips, crocuses, or other flowers grown from Dutch bulbs.

After the bulbs have been harvested, vegetables are grown in the same soil. These are shipped to market over the network of canals that covers the Netherlands. Like Belgium and parts of France, the country is criss-crossed with little waterways. The Dutch make good use of them, too, for they all carry both small and large freight boats.

Dutch fishing and trading. You would expect a people so close to the sea to be used to boats. From very early times the Dutch, like the English, have been seafaring people. It was fishing that led them to venture out

Courtesy Netherlands Railways

This milkmaid of Zeeland, in the Netherlands, works in the fields. It must be fly time, for the cow is blanketed, and the milkmaid has tied the cow's tail.

Courtesy Netherlands Railways

In the spring of the year the region around Haarlem is a beautiful sight. In the rich soil of these lowlands the farmers grow millions of tulips, narcissi, and other bulbs. At one time, many years ago, the Dutch farmers became so excited over tulip-growing that they paid large sums of money for bulbs of rare varieties. Now the Dutch export their bulbs to many parts of the world.

on the sea. Like the British, they became explorers and settlers of new lands. From this beginning they built up a great trading fleet that carried Dutch goods to all parts of the world.

Even today the Dutch are famous fishermen. Fleets of their boats bring in great catches of herring and other fish from the North Sea. A Dutch saying is that "Amsterdam is paved with herring bones."

But not all the Dutch ships are fishing-boats or canal barges. The Netherlands has many large ships that travel the oceans. There is a very good reason for this, as you will see if you turn to the map on page 266.

Where world trade routes meet. The Low Countries are a great cross-roads for world trade. Amsterdam, Rotterdam, and Antwerp are gateways, not only for their own countries, but for much of Europe. An enormous amount of trade is carried on the Rhine River. As the mouth of this river is in the Netherlands, you can see why Rotterdam, the Dutch port, is important.

In Roman times the Britons shipped grain into Europe by this route. Later the English used the Rhine to ship their wool to European weaving towns. All this trade passed the mouth of the river, of course. Today the Germans use the Rhine to ship out many tons of iron and steel products.

Large ocean steamers come to Rotterdam through a deep waterway that has been dug from the North Sea. Amsterdam has also been made a port by a canal to the North Sea. Through these canals an enormous amount of trade passes to and from the interior of Europe.

The Dutch as colonizers. For many centuries the Dutch have been an important trading nation. Very early they formed the Dutch East India Company to carry on trade with the islands of the East Indies. In time most of these islands came to be owned by

the Dutch. As wealth from these islands flowed back to the Dutch merchants, it was not hard to form the Dutch West India Company to find lands in the New World. You already know that for many years the Dutch had a thriving colony in America. They called it New Netherland, and its chief city was New Amsterdam. Today we call these New York State and New York City.

The Dutch have a colony in South America—Surinam, or Dutch Guiana. They also own several islands in the West Indies. But Java and Sumatra in the East Indies, besides smaller islands near them, are the chief possessions of the Dutch. From these colonies come many tropical raw materials which the Dutch use in their factories.

Manufacturing in the Netherlands. The Dutch factories refine sugar and petroleum from the colonies. Other products made from imported raw materials are roasted coffee, chocolate and cocoa, and vegetable oils. Amsterdam and Rotterdam are the chief cities for this kind of manufacturing.

Since there are no coal-mines in the Netherlands, the chief industries are those that require little fuel but great skill, such as diamond-cutting or the making of fancy cotton goods or artistic pottery. Delft, one of the best known Dutch cities, is famous for its potteries. As you would expect in a dairy country, manufacturing cheese and condensed milk is a large industry.

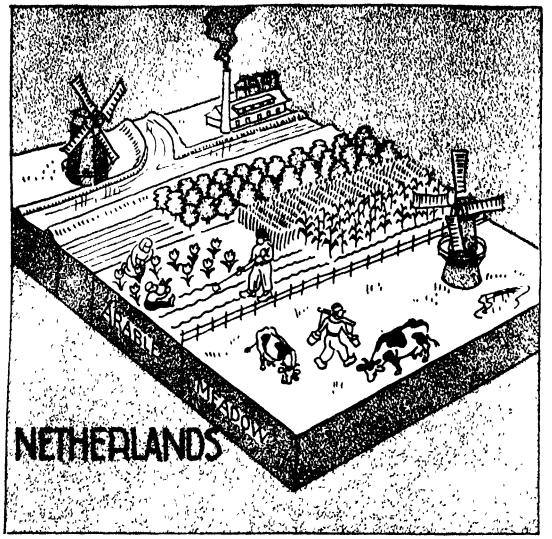
You can see, then, that the Dutch, though chiefly a farming people, are also manufacturers, though not to such an extent as the Belgians. Their country has few materials at hand, but they use what they have in the thriftiest possible way.

The Dutch people. A good place to see the Dutch people is at one of their fairs. At Leeuwarden, for example, people gathered from the country for many miles about may be seen carefully making their purchases. All are dressed well, some in very gay costumes. We see an astonishing number of things to eat offered for sale. Fried eels seem to be a favorite with many families.

The island of Marken is a favorite place for tourists. Here you can see Hollanders

Courtesy Netherlands Railways

These Dutch fishermen are busy at the everlasting job of mending the fishnets. After each voyage the nets must be overhauled and torn places mended. When the nets are ready, the boats will sail out to catch herring. When they return, the whole town will be busy cleaning and packing the catch.



This chart shows that only one-fourth of the land in the Netherlands is used for planted crops. Two-fifths of the land is meadow and pasture. Only one-twentieth of the land is occupied by woods. Another twentieth is devoted to truck gardens and bulbs. That leaves one-quarter of the land to be accounted for. Waterways take up a part of it, and, of course, there are many cities and towns which occupy a great deal of land.

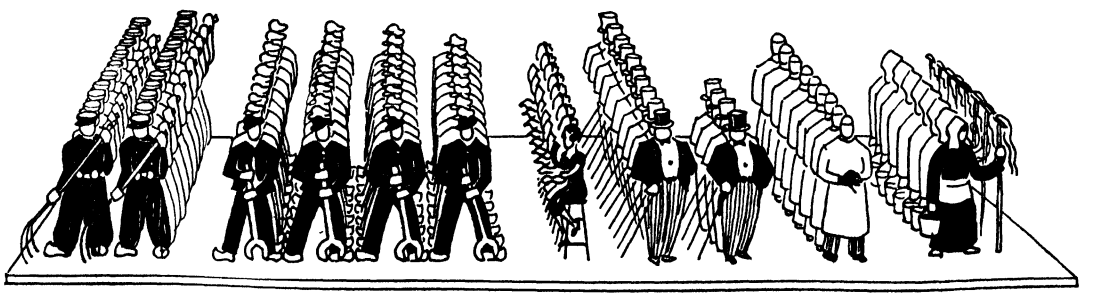
in baggy trousers and wooden shoes. The women and girls wear lacy caps and aprons. On this island the people take pride in keeping to old customs, even though most of the Netherlands is becoming modern.

The Dutch are fond of sports, particularly sailing, swimming, and skating. When the canals are frozen over, everyone skates. People skate to work; they skate for pleasure; even the postmen and doctors skate. It is said that the sports of yachting and skating first came from the Netherlands.

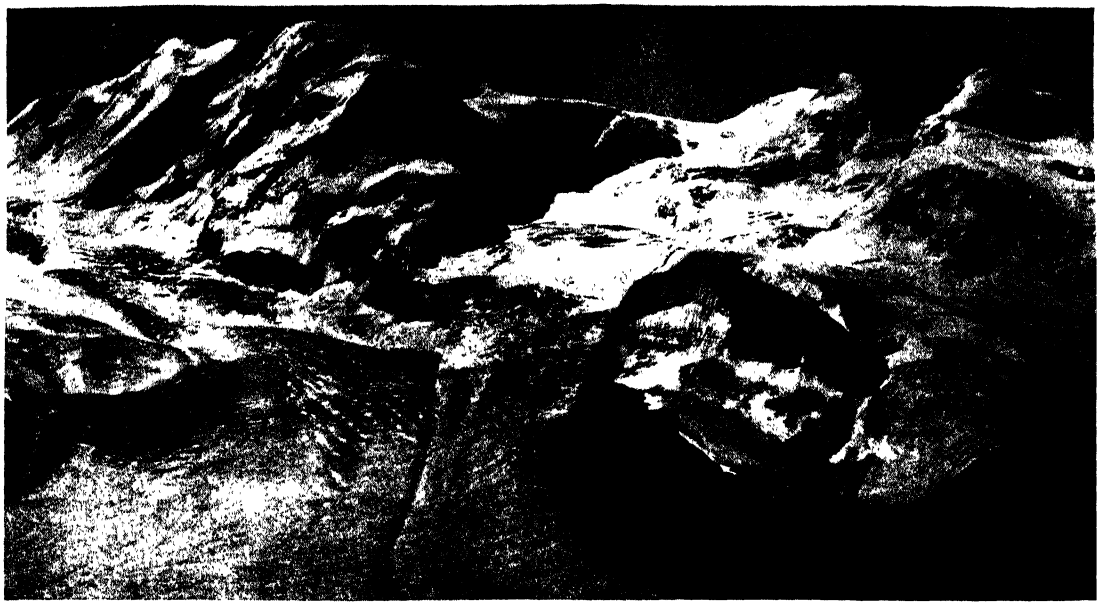
One thing always impresses the traveler in the Netherlands. Not only do nearly all the people know how to read and write, but many know two or three languages besides their own. Because the Dutch engage in world trade, many of the schools teach the students several languages. Young men who enter the export business expect to travel about the world. Since they will do business with traders of many other nations, they need to be able to speak these different languages.

Two famous Dutch artists. Just as in Belgium, the Netherlands had a period when many famous works of art were produced. Two Dutch artists are especially noted. Perhaps you have heard of Rembrandt or of Franz Hals. Many pictures by other Dutch artists show outdoor scenes of Dutch windmills, dikes, and grazing cattle, or the sunny interiors of snug Dutch homes with thrifty people living comfortably and happily in peace.

Another famous Dutchman who should be remembered is Anthony van Leeuwenhoek who developed the microscope. He was the first to discover that flies and small insects came from eggs. But the microscope helped us in other ways. Can you give reasons why this invention is important to us?



Twenty-one out of every hundred inhabitants of the Netherlands who work for a living are engaged in farming or fishing. Thirty-nine of the hundred work in factories. Nine are engaged in the business of transportation and communication. Fourteen work in banks, stores, or offices. Nine out of the hundred are professional men, and the rest work at tasks we call personal or domestic service.



Courtesy Swiss Federal Railroads

A glacier is a river of ice, sometimes many feet deep, but flowing more slowly than any river of water moves. When glaciers reach the lower, warmer regions at the foot of the mountains, they melt. Can you name any rivers of Europe that have their sources in the glaciers of Switzerland?

Switzerland and Its People

You have just seen that the Low Countries lie at one end of the important Rhine River trade route. At the other end of the Rhine is Switzerland, the highest country in Europe. For many, many centuries this mountain region has been the home of an independent people. Long ago men fled into the high Alps for refuge from oppression. Finally these freedom-loving people developed into the Swiss nation.

The Alps. If you will look at the map on page 300, you will see that the Alps form a central knot of mountains curving across the southern part of Switzerland. From this knot you can trace mountain-chains that branch off to the west, south, and east. Follow these chains into France and Italy; into Austria and Czechoslovakia; and into Yugoslavia and the Balkans. Notice that several of these branching chains are also called Alps, but have another name as well, such as Dinaric Alps, or Transylvanian Alps.

The glaciers and rivers of Switzerland. As the Alps rise to heights of 12,000 and 16,000 feet, in a region of abundant moisture, much snow falls on them. Banks of snow and ice cling high against the mountains, forming glaciers, or rivers of ice. Once there were even more of them than there are now. These old glaciers helped to carve out some of the beautiful valleys of Switzerland. As they pushed slowly down the mountainsides, the glaciers gouged out soil and rocks and cut wide valleys. Some of them are still doing this.

The water from the melting snow and ice of the glaciers trickles down the slopes in streams that grow larger and larger until they become rivers. Four important rivers rise in the Alps. On the map on page 161 find the St. Gotthard Pass. Near it you will find the sources of these four rivers—the Rhine, the Rhone, the Aar, and the Ticino. Trace them to their mouths.

The Rhine has its source in Switzerland. It winds around and flows through Lake Constance. After the river leaves this lake, it dashes over beautiful falls. It is fed by many smaller streams, called tributaries, but much of its water comes from Alpine snows.

The Rhone River starts from under a glacier among the peaks on the south side of the Alps. It flows southeastward and passes through Lake Geneva. In the quiet waters of that lake the silt of the Rhone settles. The clear river then flows on to become an important water highway for French traffic to the Mediterranean.

The Ticino River joins the Po, which you know is very important to the Italians. That river flows into the Adriatic Sea. The Aar is a tributary of the Rhine.

How Switzerland became independent. You can see from the map on page 161 that the Alps not only are a source for many rivers, but form a wall about the land, protecting it from attacking neighbors. For many centuries the towering mountains have been like a fortress that kept the Swiss people free from invaders.

Courtesy Swiss Federal Railroads

Once every week, during the summer, the story of William Tell is acted at Interlaken. The play is given in the open air, and the actors, as you see, are dressed in the costume of the time when the Austrians ruled.

Courtesy Swiss Federal Railroads

This is an open-air parliament in one of the Swiss cities. The government of Switzerland is a democracy. In what ancient country did the citizens meet in the market-place to conduct their affairs and elect people to govern them?

In the Dark Ages this region was a part of the empire of the Franks. During the later Middle Ages it was a part of the Holy Roman Empire. For a long time the powerful Habsburg emperors of Austria tried to rule it. At that time the Swiss country was made up of a number of little kingdoms and some free cities. But the people in these mountains were not easy to rule. In spite of cruel punishments, they frequently rebelled and fought for their liberty.

At last the men of the different valleys came together and decided to free themselves from Austria. Three valleys, Uri, Schwyz, and Unterwalden, united to fight their foreign rulers. That was the beginning of Swiss independence. Later, other valleys joined them, and independence was won after a long series of wars.

How the Swiss rule themselves. Switzerland has a government much like that of the United States. The country is divided into cantons, like our states. Each of them has a government like that of our states. The people elect senators and representatives to meet at Bern, the capital. But the senators

and representatives elect the president. In some of the cantons the people meet in the open air, once a year, to select their judges and other officials. This is exactly the way the ancient Athenians selected their rulers.

The languages spoken in Switzerland. The Swiss are loyal to each other and to their country, although customs and even language are not the same in different parts of Switzerland. There is no Swiss language; four different languages are spoken in this little country.

In the valleys which open toward France the people speak French, as they have done ever since their ancestors fled to Switzerland to escape oppression. In the northern valleys and on the plateau the people are of German descent and speak German. These last make up nearly three-fourths of all the Swiss. In the valleys opening southward toward Italy the people are descendants of Italians and speak Italian. In a small section in the eastern part the people speak a language called Romansh, which is very much like the Latin of the Romans. A similar language, called Ladin, is spoken by a very few people.

What Switzerland is like. Most people think of Switzerland as a country of rough, bare mountains. But the Alps take up only half of this land. Look at the map on page 161 and locate these mountains. You will see that they are in southern Switzerland. This part is called the Alpine region. In the northeast find another range called the Jura Mountains. Between the Jura range and the Alps lies a plateau that makes up more than one-third of Switzerland. This region is the heart of the nation, for most of the four million Swiss people live there.

On this plateau are the famous lakes, Geneva, Lucerne, and Zürich. Many of the Swiss lakes were formed when old glaciers melted and left piles of rocks and stones. These rocks made dams across the lower ends of valleys. Gradually the valleys filled with water, and lakes were formed. In this plateau region are most of the larger cities, such as Geneva, Bern, Basel, and Zürich.

Courtesy Swiss Federal Railroads

Tourists in Switzerland see the cities with their modern hotels. But there are many little valleys like this one, where the village is a small cluster of homes situated beside a swift little stream. Surrounding the houses and barns are the hay-fields and pastures for the dairy herds.

The League of Nations holds its meetings in this beautiful city of Geneva, Switzerland. Lake Geneva is in the plateau region of Switzerland. In the background you can see the high peaks of the Alps.

How the Swiss Earn a Living

Perhaps you will be surprised to learn that three-fourths of the land in Switzerland produces something. Only one-fourth of it is too bare and rocky to use. But there are no large farms, for there is not much level land.

The Alpine region. Most of the homes in the Alpine region are in the lower valleys, where each family has its bit of farm-land. At the foot of the Alps the valleys are warm, and there are orchards of fruit and nut trees. A little higher, where the air is colder, are forests of beech and maple, and fields of rye and potatoes. Above these, as the air grows still colder, are pine and fir trees, with shrubs and berry bushes. Still higher, only grass and meadow flowers will grow. Towering above all are the rocky peaks, clad in snow and ice the year round.

The Alpine villages are tucked away in the valleys, sometimes far from the main highways. Often there is only a rough road leading past a village of a dozen houses. These houses are built of pine or hemlock logs. Many of the roofs are held down with stones to keep them from being blown away by the high winds that sometimes sweep these little valleys. Some of the houses are built against the side of a hill or mountain. A little white church and an inn complete the village. In these villages we may find men living in the same homes in which their great-grandfathers were born and died.

The life of the herdsmen. These peasants are mostly dairymen, for cows can graze on steep pastures that cannot be plowed and seeded to crops. In the spring, when the snows have melted from the higher pastures, the herds of the valley are brought together at the village, ready to go to the summer pastures. Because the fields in the valley are small, the farmer sends his cows high up the mountains to graze during the summer. By doing this he can save the grass near home to be made into hay for winter feed.

Taking the herds to the mountains is an important event. The herders dress in gay holiday costumes. The queen of the herd is decorated with a bunch of flowers tied to her head, and a big cow-bell is hung around her neck. When all is ready, the herder lights his big pipe, calls out "Yodlee!" and off goes the procession, dogs barking, hoofs tramping, cattle bellowing. Wagons follow, carrying supplies for the men who are to stay with the cattle in the *alps*. Alp is the name given to a small pasture high among the mountains. The Alps Mountains took their name from this word.

During July and August the herders lead a lonely, but busy, life. The cows must be milked every day and large quantities of cheese and butter made. The houses of the herdsmen are located close to the high pastures, which are above the fields of rye and potatoes, above the vineyards and orchards. Usually one of these houses has three rooms, one for the living-room, one for the stable, and one for making butter and cheese. The men sleep on the hay overhead. From time to time loads of cheese are taken down to the village, and supplies are brought back. The highest pastures are used for herds of goats. Excellent cheese is made from their milk. So, you see, the herdsmen are busy.

But there are playtimes on the mountains, too. Sometimes the herders make an excursion to a peak where they can see their church steeple below. Sometimes their friends come up for a visit. Then there are wrestling matches, dances, and other sports. One of the sports is the contest between the "battle-cows" that are matched to fight. The loser is led away and another brought forward until one cow remains as queen of the herd.

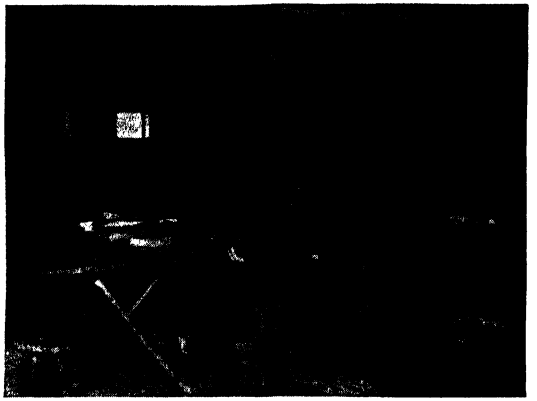
Courtesy Swiss Federal Railroads

On the "alps," or mountain pastures, the cows must be milked regularly. During the day they are allowed to roam in search of grass, but every night the herder drives them back to the little dairy.

With the first flurries of snow in September or October, the cattle are brought down the mountainside and kept in stables most of the time until spring comes. Following the herds come the wagons loaded with butter and cheeses.

Courtesy Swiss Federal Railroads

These herdsmen are loaded down with all the dairying utensils and their own belongings as they start for the high summer pastures. One man is carrying a cream separator; another, a cheese mould. Others will have to carry food, clothing, and cooking pots far up the mountainside to the grassy slopes.



Swiss Federal Railways

Inside the Alpine hut are the utensils for making cheese. You can see a large kettle on the floor. The round object by the stairway is a press in which the cheese is made. Upstairs are beds for the men who must stay all summer.

During the summer, while some of the men are in the Alps, the rest of the family live at home in the village. They are busy on the valley farms raising vegetables and other crops for the winter and storing hay in the barns for the winter fodder. Some of the cows are kept in the lower pastures all summer. Their fresh milk is usually sent to factories to be made into condensed milk. Some of it is used in making milk chocolate and baby foods, which the Swiss manufacture for export.

Home industries. During the winter the members of the family are busy at work. They not only care for the cows and goats and make butter and cheese, but find time for other work. Some of them carve wooden toys for sale. Some of the women do fine needlework, especially hand embroidery, while others spin yarn and weave cloth. Others make jewelry or carve furniture.

Swiss industries. Swiss industries began in the home, as in Britain and France. Then people learned how to run machinery by power from the streams. Today electric power from the mountain streams turns the wheels of Swiss factories. The Swiss make electrical machinery not only for their own factories, but also for other nations. The center of that business is at Zürich, the largest city and most important manufacturing center in Switzerland. Bern and Basel have many factories, too.

In the cities many of the Swiss work in factories, making watches, clocks, and other fine articles. They also manufacture fine cotton and silk goods and dainty, machine-made embroideries. These industries, which require skilled hands, have been carried on in Switzerland for many years.

Several hundred years ago some French watchmakers settled in Geneva and began making watches by hand. Before long these Swiss watches were considered the best in the world. When Americans began making good watches by machinery, the Swiss also built watch factories. Machines are now turning out Swiss watches that are sold all over the world.

Trade and transportation. Most of the Swiss people work in factories because that is the only way they can earn a living. Only about a fourth of the people are farmers and

Courtesy Swiss Federal Railroads

Haymaking in the Alps is not an easy task. But when winter comes, the dairy cows must have their fodder, and so the farmers are busy harvesting hay all summer long. They cut it on steep slopes like this, tie it in bundles, and carry it down the mountain to the barns which shelter the cows in winter.

Courtesy Swiss Federal Railroads

Many travelers go to Switzerland for the sport of mountain-climbing. These two climbers are slowly making their way up a snow-covered peak. Notice the steps which the guide has chopped. For safety the men are connected with a long rope.

herdsmen. They cannot raise enough food for the entire population, especially since little grain can be grown. Switzerland has to import food from other countries. They pay for this by selling manufactured goods.

The Swiss have to import most of the raw materials for their factories. The mountains contain almost no coal or iron. It is very expensive to bring raw materials into a high, mountainous country, and to send out its manufactured goods. For that reason the Swiss cannot manufacture bulky goods. Instead, they make articles that require only small quantities of raw materials. For example, a pound of steel can be made into many watch springs worth hundreds of times its value if made into hammers. Much more skilful labor must be spent on the watch springs. And so the Swiss make things like watches and embroideries and fine textiles.

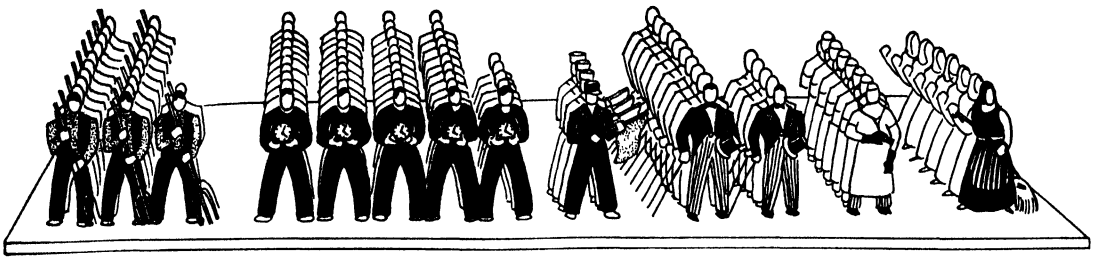
Until the railroads came, the only way to get raw materials and merchandise in and out of Switzerland was on the backs of animals or in slow carts. Even when the first railroads were built, Switzerland had to depend a great deal on the old ways of transportation, for most of the mountain passes were too steep for trains. Now the railroads enter Switzerland through long tunnels. The railroads turn and twist in long corkscrew curves, climbing higher and higher. At last they pass through some of the longest tunnels ever built. One of these is the famous St. Gotthard Tunnel. Another one is the Simplon Tunnel, the longest in the world. It pierces the southern Alps and comes out in Italy.

Other occupations of the Swiss. The Swiss are a thrifty people who waste nothing. They must take care of everything in order that four million people may live in their small land. They have given special care to their forests since before the days of Columbus. From the French they have learned how to raise crops of wood in their forests.

The Swiss have also found a way to make their bare, rocky mountain peaks pay them. We might say that the Swiss sell scenery. At

Courtesy Swiss Federal Railroads

There are many Swiss wood-carvers who are expert in making figures of deer, bears, dogs, and other animals. Some artists make quaint road signs like this.



This picture chart shows that twenty-two out of every hundred Swiss who work for a living are engaged in farming. Forty-five out of each hundred work in factories or at a trade such as watchmaking. Only four of each hundred are in the business of transportation and communication. Fifteen work in stores, banks, or offices. Seven are professional men, and seven work at domestic tasks.

least we can say that they make a good deal of money from boarders. They are the hosts for Europe and the whole world in vacation time. Throughout the winter thousands of tourists with skates, skis, and toboggans enjoy the winter sports in the Alps. In summer, tourists take delight in the Swiss lakes and climb the mountain peaks. There are hundreds and hundreds of hotels and inns, small and large, to take care of the many visitors. Thousands of Swiss find employment in them. Many of them have worked in other countries in order to learn several languages.

The great meeting-place. Because the Swiss make a business of caring for visitors and because the country lies in the midst of Europe, Switzerland has become the meeting-place for many world societies. The international Red Cross Society is one, and the League of Nations is another. Do you know the purposes of these famous organizations? The International Postal Union has its headquarters in Switzerland, too. Countries that belong to the Postal Union agree to deliver mail to people, no matter where they may be living.

Only one-eighth of the land in **Switzerland can be plowed and planted** to crops. Two-fifths, **however, can be used for pasture** and meadow. **One-fourth of the land is in forests,** and the rest is too steep and rocky **to produce** anything.

Swiss Federal Railways

The women of Switzerland are noted for their beautiful needlework. This handkerchief is a famous kind of embroidery called Appenzell. It took many hours of patient hand-work to make the border and the design of the lady and her parrot.

One reason that Switzerland is a good meeting-place for so many organizations is that it is a "neutral" country. By neutral we mean that it does not take sides with any other country in war or other disputes. The rest of the world knows that Switzerland is determined not to enter a war or to do anything that would make another nation wish to go to war. The Swiss seem to have found a way to make people of different languages and customs into a single nation.

Talking Things Over

1. On page 278 you read about the Crusaders and how they first saw windmills in the lands of the Arabs. Have you seen pictures of Dutch landscapes with many windmills? Discuss the reasons why windmills are important to the Dutch people.

2. The Dutch take good care of storks and would not think of harming one. Do you know why? Do you know of any wild animals that are protected by law in our country? Do you know what some of these laws are and why animals are protected?

3. You have read many times that the geography of a land affects the development of the country. Have you read of instances where the people have changed their land? How did the people of the Nile Valley make their land grow crops? In what way was the problem of the Dutch like that of the Egyptians? In what way was it quite different?

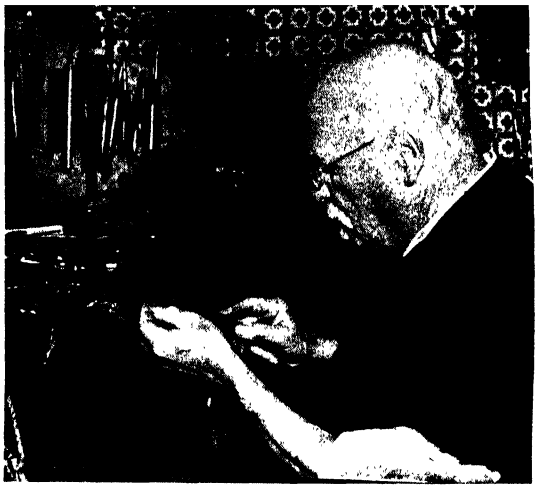
4. Some people have been able to make good use of land on which other people might be unable to make a living. What kind of land makes up Switzerland? How have the people taken advantage of the geography of their land?

5. Switzerland is the oldest of the republics now in existence. In what way does its government remind you of the democracy of Athens? Is its government somewhat like our own? In what ways?

6. Explain with the help of a map how the peoples and languages are divided in Switzerland. What do you think makes Switzerland a united country?

Doing Things Together

1. Do you know what a microscope is? Look up the word in a dictionary to be sure. If possible, borrow a microscope to have in class. It takes practice to look through a microscope, but if you work at it, you will be surprised at what you see. Try looking at a piece of skin, an insect's wing or leg, a drop of water, or a piece of leaf.



Courtesy Swiss Federal Railroads

Although many watches are now made by machinery, there are still craftsmen in Switzerland who make every part of a watch by hand. This man is working on the case of a Swiss watch.

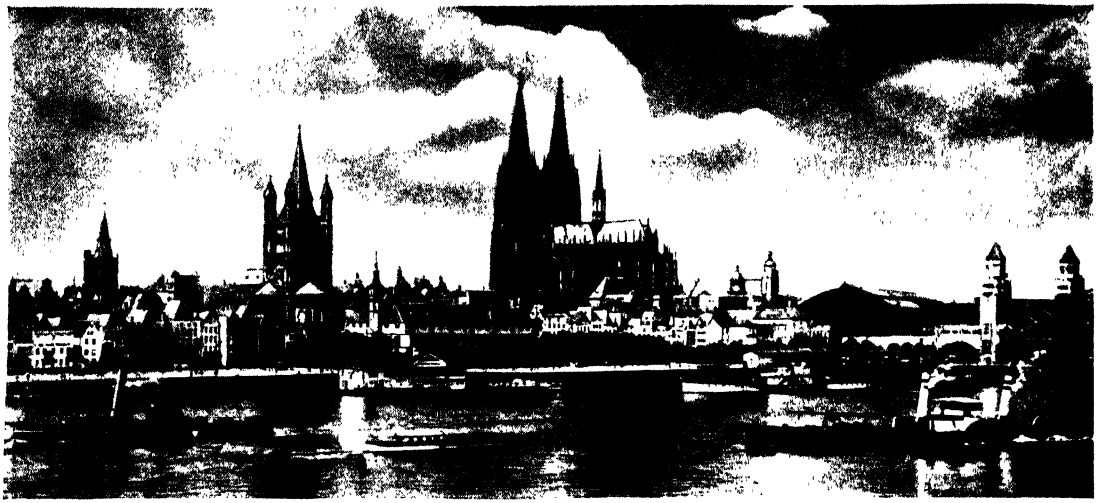
2. Did you ever read the story of *Hans Brinker —or The Silver Skates?* Find several copies of it and read together the parts you like best.

3. You probably know the story of William Tell. Parts of the story may be only a legend, but Tell was a Swiss hero who really lived. Find out something about his life and report to the class.

4. If possible, find phonograph records of the "William Tell Overture" and play them during a class period. Not all music tells a story, but this music does. See if you can pick out the parts describing the Storm and the Calm.

5. Reubens and Van Dyck were two famous Flemish painters, and Rembrandt was a famous Dutch painter. You may be able to visit a museum where you could see one of their pictures. But if not, perhaps you can find reproductions of some of their pictures in papers and magazines. Bring them to class for an exhibit. Each time you look at them, you will notice something new.

6. Belgian lace is very beautiful and highly prized. If you can find some pieces of it, bring them to school. Examine each piece closely, and you will probably understand why it takes so long to make lace. You may also learn how to distinguish "real" lace from machine-made lace.



German Railroads Information Office

One of the most famous cathedrals in Europe is that of Cologne. You can see its twin spires in this picture. Medieval craftsmen began work on it about 1250, and work continued on it for more than two hundred fifty years. Then for more than three hundred years the cathedral remained unfinished. Work was begun again in the nineteenth century, and the cathedral was at last finished about 1880.

XXVII. THE YOUNG NATION OF GERMANY

How the Germans Became United

GERMANY is the northern neighbor of France, the Low Countries, and Switzerland. Look at the map on page 230 and see how large Germany is when compared with France. Almost 42,000,000 people live in France, and about 66,000,000 people live in Germany, although that country is smaller than France.

Plain and mountain regions. When you read how the barbarians entered the northern part of Europe from Asia, you learned that most of this region is plain. This North European Plain, you remember, stretches across Europe and into Asia. Part of Germany lies in this huge plain. But Germany has both highlands and lowlands and may be divided into two parts. The northern half is the North German Plain, while the southern half is made up of much higher land.

The higher, or southern, part of Germany consists of the Central Highlands and a great plateau which is called the Alpine foreland because it lies at the foot of the Alps. Look at the map on page 266 and see how the mountains and higher lands slope down toward the plain in the north.

The climate of Germany. Germany is far from the warm waters of the Atlantic. The warm, wet westerlies do not blow over this country. Therefore the climate is drier, and the winters are colder than in Britain or the near-by Low Countries. Of course the climate has a great deal to do with the crops that the Germans grow on their land.

How Germany has changed. In ancient times, you have read, the German land was covered with forests and swamps, although there were a few valleys and open places. Today Germany is largely a country of cultivated fields and pastures. Many of the dense forests have been cut down. Nearly all of the marshes have been drained. The old Teutons who lived in a dark forest land would not recognize this country of neat, cultivated

fields, rich pastures, and carefully tended woodlands.

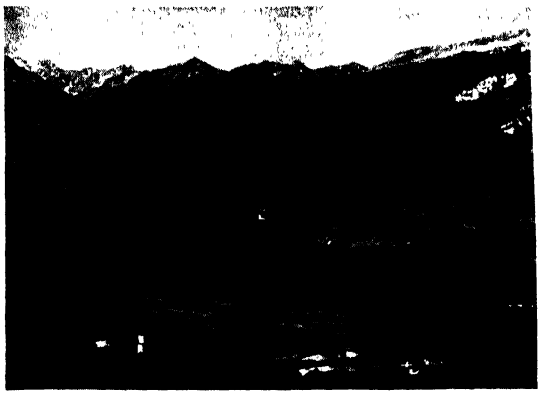
There have been other changes in Germany besides changes in the appearance of the land. When we left the story of the German people, many small German kingdoms were not united. The powerful Habsburg emperors in Austria had been trying for years to get all the German-speaking people in Europe under their power.

Prussia and the Hohenzollerns. One of the German kingdoms, Prussia, was ruled by the house of Hohenzollern. You read the story of Frederick the Great, one of the Hohenzollerns, who made Prussia a great kingdom and defied the Habsburg emperor of Austria. But Frederick had not been able to get all the small independent German kingdoms to unite.

War-torn Europe. Europe was not peaceful, even after Napoleon had been defeated and his wars of conquest ended. There were revolutions in Spain and Portugal, and those countries lost most of their colonies in the New World. The Greeks fought the Turks for their independence. The Russians fought the Turks, and several European nations

James Sawders

These farmers live in the region between Hanover and Bremen, where the land is level and there is enough rain for crops of grass and fodder for cows.



There are rough mountains and fertile little valleys in the Alpine foreland. This scene is in the Bavarian Alps in southern Germany. The forests on the mountains are tended almost as well as the little farms in the valleys. The people know how valuable forests are.

fought the Russians. There had been revolutions in France, Belgium, Poland, and in a number of the small German kingdoms.

In the years between 1848 and 1870 many Germans left their country and settled in America in order to escape the troubles that Europe was having. Up to this time the people of the country that is now Germany did not think of their country as the British and the French thought of theirs. They did not think of themselves as Germans, but as Prussians, Hessians, Bavarians, Pomeranians, or citizens of some other little kingdom. There was no united nation called Germany at that time.

The "Iron Chancellor." A man appeared who was determined to unite the Germans in a strong empire. He was not a king or an emperor, but a Prussian noble—Otto von Bismarck. Ever since the wars of Napoleon, there had been a German "Confederation," or alliance of the various kingdoms of the country. But this confederation did not work very well. Bismarck knew that the reason for this was that Austria insisted on being the ruler. So he planned to get rid of Austria and make Prussia the strong leader of a united Germany.

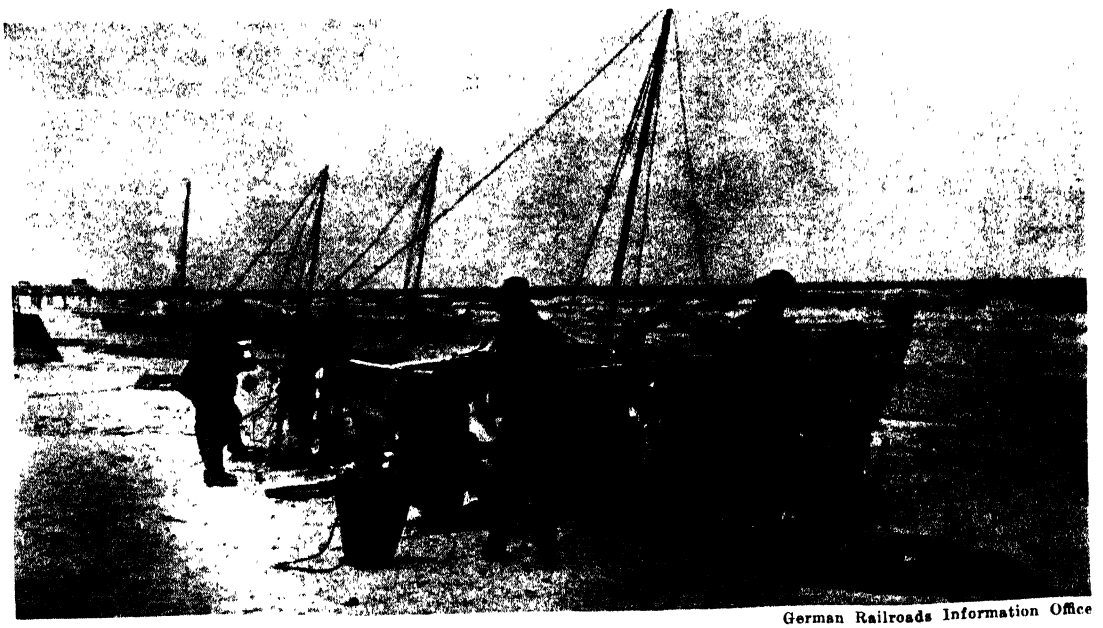
Bismarck was called the "Iron Chancel-

lor" because he had a will as strong as iron. "Chancellor" is the name given to an official who is really the "right-hand man" of a king or emperor. Bismarck managed to get Austria into a war with Prussia, and Austria was defeated. Then the German Confederation was formed again. This time Austria was left out.

The Franco-Prussian War. Bismarck thought that the best way to unite the Germans solidly was to make war on some other European country. He felt sure that the thirty-seven small German states would all join Prussia in such a war. So Bismarck strengthened the Prussian army and waited for a chance to fight. The chance came in 1870, when France quarreled with Prussia. In the war that followed, the Germans won a complete victory and forced the French to pay them a sum equal to a billion dollars. France also had to give up Alsace and Lorraine. Find these regions on the map on page 266. There are rich iron and coal-mines in Alsace and Lorraine. Do you see why Germany wanted them? This war is called the Franco-Prussian War.

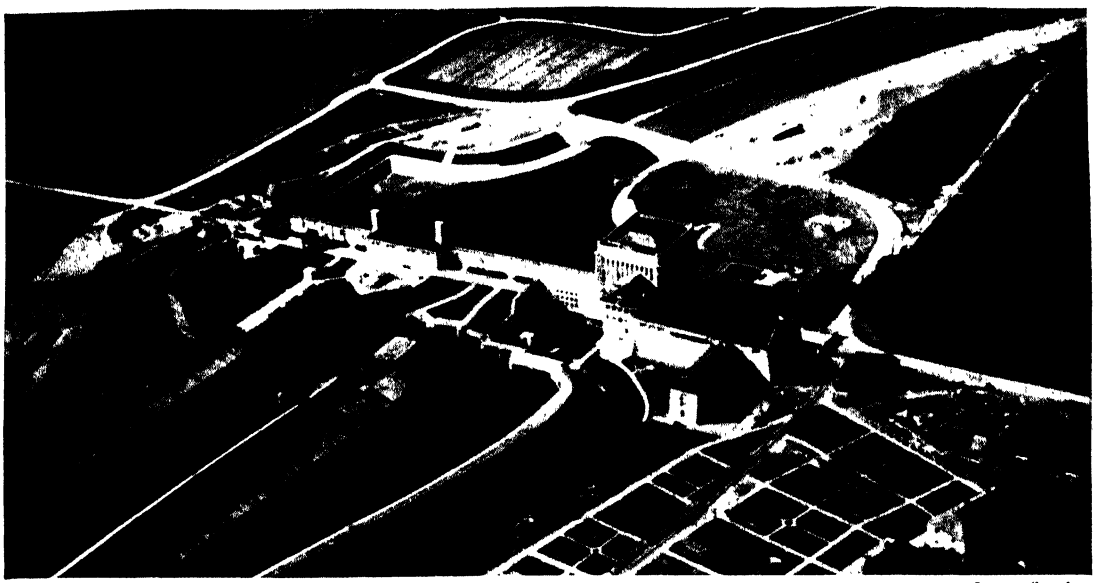
In white letters you see some of the various parts of Germany. Prussia is the largest. In black letters are Germany's neighbors. Notice how a part of Poland, called the Polish Corridor, separates East Prussia from the rest of Germany.

A united Germany. By the time this war ended, practically all the German states had joined Prussia. The princes of the different states of Germany then elected William, king of Prussia, to be emperor, or Kaiser, of all



German Railroads Information Office

Germany also has many fishing villages along the coast of the North and the Baltic seas. In what way do you think this scene differs from the pictures of fishing villages in other regions?



James Sawders

In many places the Germans have built power-houses so that rivers and canals help to furnish electricity for factories and homes. This great electrical power-plant is located in Bavaria, Germany.

Germany. Now, for the first time, almost all the German people, except those of Austria, were united in one nation. As this was not until 1871, you can see what a young nation Germany really is.

Germany's Growth and Prosperity

Now that the Germans were united, the new nation made great strides forward. Leaders of all kinds—teachers, doctors, chemists, bankers, farmers—helped to improve Germany. Before long the nation became strong and prosperous.

Teaching the people. It was decided that the schools should teach the people how to raise more food and how to use the iron, wood, clay, and other materials of the country in manufacturing goods. These manufactured articles were to be sold in foreign countries as well as at home. Each German youth was expected to decide early what business he expected to follow when he became a man. As he grew up, he was to learn all he could about that one business or trade, so that he could follow it in the best possible way. And so the new schools taught the students how to weave, to dye, to farm, to print, to make machinery, to make pottery, and to do many other things.

How farming was improved. Since Germany was not manufacturing enough articles even for its own use, factories were built, and soon towns began to grow into large, modern cities. As you know, cities must have large supplies of food brought in to them. The German leaders soon saw that their land was not producing enough food for the people who worked in the cities.

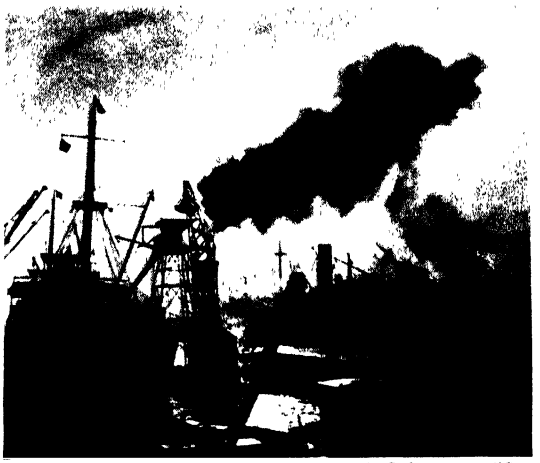
Much of the German land was not very fertile, especially along the sea in the north. Can you guess why? The great glacier, or ice-sheet, that once covered part of Europe was the cause. This glacier was formed in the mountains of Norway and Sweden thousands of years ago. It gouged out deep valleys in the mountains, ground rocks into sand, and scraped up most of the good soil as it moved along. As time went on, the glacier covered the North German Plain. When this ice-sheet finally melted, the rocks and sand and dirt

were dropped. That left large parts of Germany covered with a rocky, sandy soil that is not very good for growing most crops.

Men were sent to Holland to learn how the Dutch had improved their sandy soil. For it was in Holland, you remember, that farmers first learned how to get the best results from the soil. Dutch farmers knew how to fertilize the ground, how to select seeds carefully, and how to change crops each year so that the soil would not wear out.

The Dutch told the Germans to use chemicals called potash and nitrates on their sandy land. Ships were sent to Chile, in South America, to get nitrates. Then great beds of potash were found near Stassfurt, south of Berlin, in Germany. These beds of potash are so rich that Germany has one of the most valuable supplies of fertilizer in the world.

To teach farmers how to use these fertilizers, special schools were started. There farmers learned how to grow the crops best suited to the different kinds of soil. Potatoes, beets, and flax were found to be especially good crops to raise in the sandy regions. The Germans became experts in such matters.

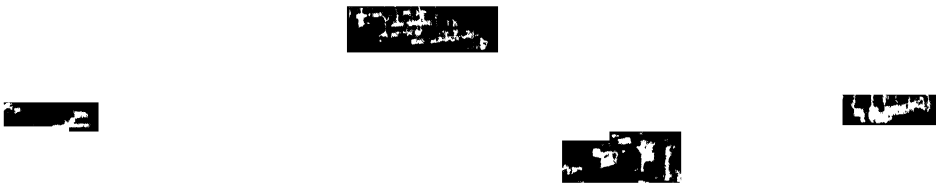


German Railroads Information Office

The port of Bremen is crowded with freighters and liners from many countries. But Bremen is not on the sea, and the largest ships must unload their cargoes at the port of Bremerhaven. Others must go up the Weser River to Bremen.

Soon even the poorer lands were producing good crops.

These improved ways of farming changed much of the sandy northern plain of Germany from a sheep pasture to a land of prosperous farms. In other parts of the country the people learned how to grow larger and



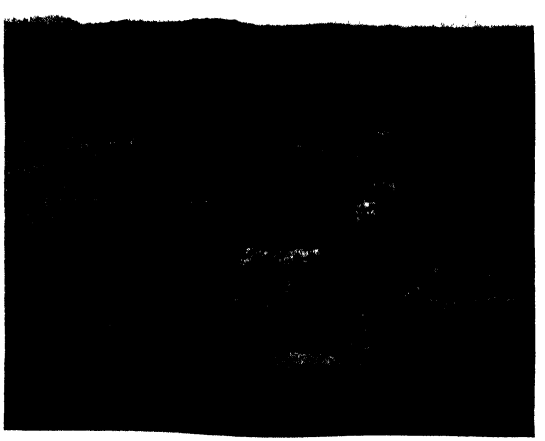
German Railroads Information Office

This photograph shows only a part of Hamburg's great harbor. Everything is arranged for handling freight quickly. There are railroad tracks beside the long warehouse at the left. You can see the electric cranes which can unload cargo much faster than human hands. Even large ships can tie up to the docks.

larger crops of rye, barley, oats, and buckwheat. As the crops increased, the flocks and herds also were improved. There was food for more cattle and swine. In addition to other food, German cattle and swine are fed potatoes instead of the corn that we use for fodder in America. Corn will not grow well in that northern country with its many cold, cloudy days.

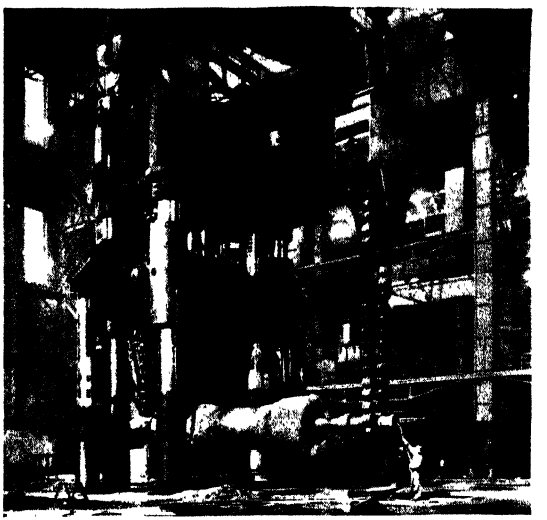
You see that the Germans studied their farming problems very carefully to find the best possible way to use their land. And they did not neglect the forests. On some of the poorer lands forests were planted. On others sheep were pastured. The marshes in northern Germany were drained to make farm-land. Many of the canals that were built for draining the marshes also served to carry produce to market as the canals of Holland do.

Transportation and foreign trade. Canals were not enough to bring food and raw materials into the fast growing factory cities of Germany. Railroads were built, and paved roads were improved. These railroads and highways also had to carry the manufactured goods all over Germany and to ports, where ships carried them to foreign lands.



German Railroads Information Office

The Rhine is not only beautiful but useful. It is a great highway for freight traffic and is often crowded with steamers and barges. Part of the far bank of the river is covered with forests, but much of it is used for vineyards, which are plentiful in this region.

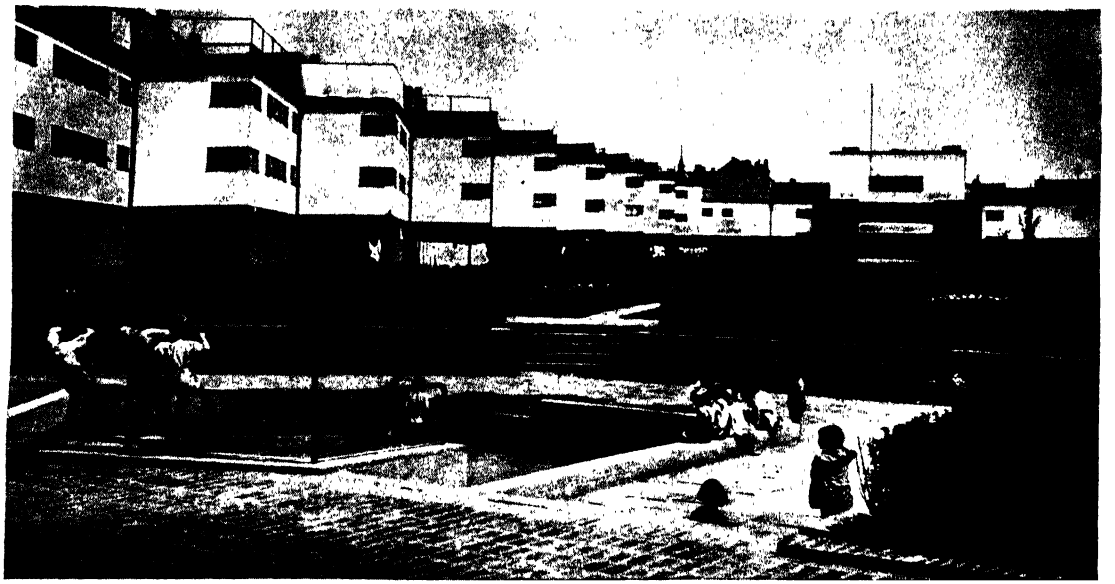


German Railroads Information Office

The best known steel plant in the Ruhr district of Germany is the Krupp factory at Essen. It is equipped with enormous machines, such as the one in this picture, and is able to manufacture extremely heavy articles. Notice the man standing at the end of the great piece of steel which is being shaped.

Germany was fortunate in having valuable deposits of coal, iron, and other minerals. Everything needed for iron and steel manufacturing can be found in Germany. Soon the Germans were producing more than they needed for themselves. Salesmen traveled in foreign lands to sell German wares. They were not satisfied merely to offer their goods for sale. These salesmen found out what people wanted in different parts of the world and sent orders back to the German factories. The manufacturers worked to make exactly the kinds of articles that the customers wanted.

This foreign trade needed ships to carry the many cargoes that left Germany for other countries. Hamburg and Bremen became ship-building ports. Stettin and Danzig on the Baltic Sea were also important. Then the Germans built the Kiel Canal to connect the Baltic and the North seas, so that ships would not have to go around Denmark. Find these places on the map on page 266. Do you see how the canal saves many miles?



German Railroads Information Office

In many industrial regions the workers are able to live in modern buildings like these in Frankfort-on-the-Main. Instead of crowding the buildings close together, plenty of space for gardens and open-air playgrounds has been left, so that children do not have to play in the streets.

A colonial empire. By 1900 Germany had changed from a poor country into a rich one. Factories were prosperous, and the farms produced large crops. But by this time there were so many Germans crowded in their small country that some of them could not make a good living. Germany wanted more foreign markets and more places where raw materials could be secured. For this reason Germany began to look for colonies in unsettled parts of the world. She gained control of several large regions in Africa and some islands in the Pacific Ocean.

The World War. In 1914 Austria and Russia quarreled, and this time Germany sided with the Austrians. Other nations were drawn into the war. We call it the World War because most of the important nations of the world, including the United States, fought in it. Millions of men were killed, other millions were wounded and crippled, while property worth billions of dollars was destroyed. The war lasted four years, but finally Germany and her allies—Austria, Bulgaria, and Turkey—were worn out and defeated. Even the victors were loaded down with tremendous debts, which some of them may never be able to pay.

Germany After the World War

When the war was over and the treaty of peace had been signed, Germany had to give up some of her possessions. France took back Alsace and Lorraine, which Germany had taken from her in 1870. Other countries took control of Germany's colonies. In this way Germany lost many valuable coal and iron mines and colonies that supplied the home factories with raw materials. She also lost the people of the colonies as customers.

Germany's problems. Although these lands were lost, Germany still had factories, skilful workers, and supplies of coal and some minerals. You see, during the forty years just before the World War Germany had changed from a country of farmers to a nation of manufacturers. Of course there were still many farmers left, but Germany had become

an industrial country, more like Great Britain than like France.

It was very difficult for Germany to recover her prosperity after the war. People all over the world had no money to spend on goods, for enormous sums of money had been wasted in the war. Factories were idle, and workers had nothing to do. Then, too, Germany was trying out a new kind of government. Just at the end of the war the Germans decided to have a republic and not be ruled any longer by an emperor. In recent years they have established a different form of government, but they have not returned to the rule of an emperor. All these changes meant hard, bitter times for the farmers and for city workers, too.

Even today, after Germany has struggled to recover from the effects of the World War, the great problems still are to get enough raw materials for the factories, to find customers for their goods in other countries, and to get enough food for all the people. The Germans are hard at work trying to solve these problems. Suppose we look at the different parts of Germany so that we can understand what the Germans are doing.

Coal-fields and manufacturing districts. Factories need power in order to run, and coal furnishes cheap power. If factories are located near coal-mines, the coal can be bought cheaply. So we should expect the German factories, just like the British and French ones, to be near the coal-fields. The chief coal-fields of Germany are in the Ruhr and Saar valleys, in Saxony, and in Silesia. Find these regions on the maps on pages 266 and 414.

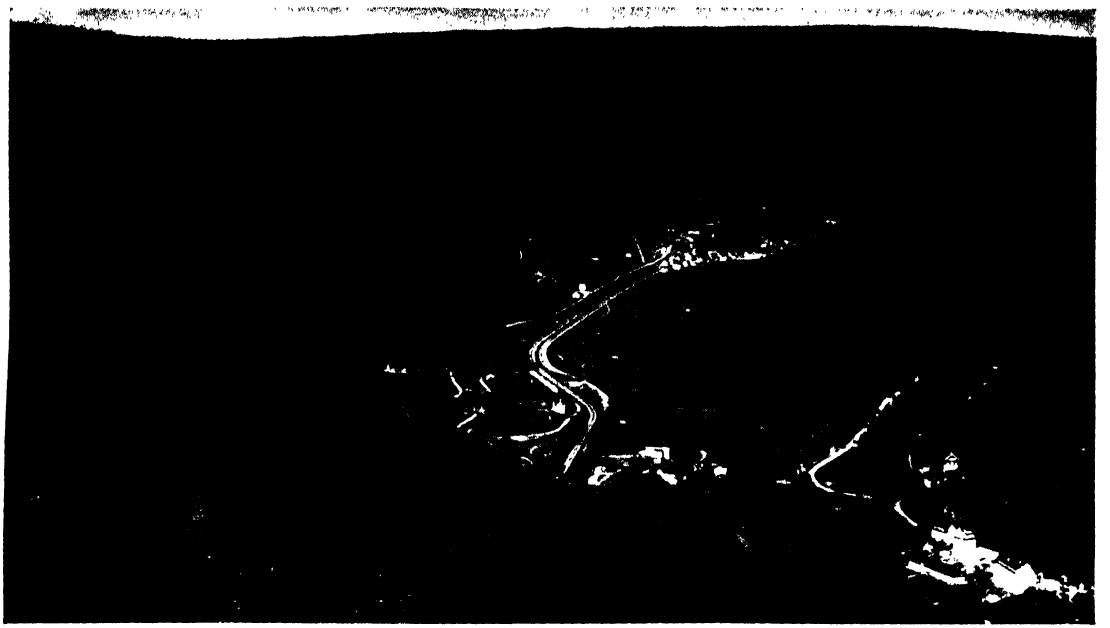
In each of the coal regions is a manufacturing district which specializes in certain industries. The Ruhr Valley makes iron and steel goods. In Silesia are to be found steel mills, blast-furnaces, and factories making tools and machinery. In Saxony and also in the Saar region are other factories, which make textiles, machinery, and chinaware.

All along the Rhine Valley are found mills and factories in which textiles, chemicals, and dyes are made. It was the potash deposits near Stassfurt that started the Germans in the business of making chemicals.

Germany's great chemical business. Back in the Middle Ages men who were called "alchemists" tried to find a way to turn cheap, common metals, like lead, into gold. They did

James Sawders

These women of Bavaria are busy cutting "brown coal," or peat, as it is usually called. As far as you can see in the picture is a swamp filled with peat. The women cut the peat into blocks which must be stacked up to dry in the sun before they can be burned. Do you know of other countries where peat is used?



German Railroads Information Office

Perhaps this picture will explain why one region of Germany is called the Black Forest. The dense pine forest surrounds this little valley on all sides. There are many such valleys in this region. Each valley will support only a few people. If there are more, some of them will have to find work in the cities.

not succeed, for no one has been able to do this, but they did discover many things that helped to develop the science of chemistry. Today chemistry is very important in manufacturing many articles.

The Germans have made such progress in chemistry that some of the greatest chemical works in the world are in Germany. Instead of buying nitrates from Chile in South America to fertilize their fields, the Germans now make nitrates from the air by means of electricity. They have learned how to make dyes from the tar that remains after coal has been turned into gas. They have found out how to make medicines, perfumes, flavors, explosives, and many other products of the laboratory and chemical works. Today Germany is the world's largest exporter of chemicals.

Germany's "black country." As you already know, many of Germany's largest cities are near the coal or iron mines. And so Germany has a "black country," much like that of England. For many miles in such a country there is little to be seen except great factories and thousands of small homes for the workers.

Some of the cities are centers for smelting iron ore. Others make coke for the steel furnaces. The great city of Essen is the home of big factories and foundries that turn out tons and tons of machinery, tools, and heavy iron and steel goods.

Textile mills. Next in importance to the iron and steel business in Germany come textiles. There are many textile mills in the lower Rhine and Ruhr valleys. Here are made nearly half of the cotton goods and most of the silks that are manufactured by the Germans. With its chemical works, steel mills, and textile mills this region is one of the most important in all Germany.

Transportation by water. You know that before the World War Germany had paid particular attention to transportation. There was a fine system of railroads, with Berlin, the capital, at its center. Germany had a

Courtesy German Railroads Information Office

A wood-carver of Oberammergau made this Bethlehem cradle scene. That little town, however, is noted all over the world for the Passion Play, which has been given there every ten years since 1633. In that year the people escaped a plague which was sweeping Europe, and the Passion Play celebrates their thankfulness. People from all over the world journey to Oberammergau when the Passion Play is given.

big merchant fleet and a navy to protect it. Rivers, canals, and roads connected all the principal cities.

Now Germany is once more building ships to carry the products of her factories to other lands. Every effort is made to get the manufactured goods to the ports as cheaply as possible. The cheapest transportation is by water, and Germany makes good use of her waterways.

Shallow rivers have been deepened and connected with each other by canals. The large rivers are kept clear of obstructions. Wide docks have been built at river and canal ports so that goods can be handled quickly and at low cost.

Some of the rivers flow through other countries besides Germany. On the map on page 266 find the Rhine, the Danube, and the Oder, and then trace them from mouth to source. Note the countries through which these rivers pass. Of course the other countries wish to use the rivers, too. And so agreements have been made between the nations permitting anyone to use these rivers. That is what is meant when we say that some of the rivers of Europe have been "internationalized."

German ports. One of the German ports was internationalized after the World War. Danzig was made a "free city" and a "free port" so that ships of all nations could use the port without paying duty. Locate Danzig on the map on page 266 and see if you can tell what nations are most likely to use this seaport.

The most important ports of Germany are Hamburg and Bremen, although both are some distance from the sea. As the coast of the North Sea is shallow and the river mouths often are clogged with sand-bars, many large ships do not enter these ports, but use harbors at the mouths of the rivers—Cuxhaven for Hamburg, and Bremerhaven for Bremen.

Some cities of the German plain. Located on the edge of the German plain are several manufacturing cities and railroad centers. Leipzig, noted for its university, is the publishing center of Germany. To this city, also,

German Railroads Information Office

At harvest time in the Rhineland everyone, including the children, turns out to help bring in the grapes. As most of the vineyards are on steep hillsides, the grapes must be carried on men's backs down to the wine-presses in the valley. The wine is stored in large casks for a time, and then it is bottled.

Metropolitan Museum of Art

Little chinaware figures like these have been made in Dresden and in Meissen for many years. This one is about twelve inches high and is beautifully colored. The same potteries also make expensive dishes and other ware for table use.

come fur-buyers from all over the world to attend the market and buy furs sent from Russia, Canada, and other fur-producing countries. Leipzig is also famous for its great fair, which has been held three times a year for centuries.

The old capital of the kingdom of the Saxons was Dresden. One king of Saxony determined to make Dresden the most beautiful city in the world. Many people think he succeeded. Dresden is known, too, for its museums, art galleries, and famous potteries, where fine china is made. Perhaps you have seen Dresden figures, or little statues made of porcelain. Near Dresden is Chemnitz, a city where locomotives and dyes are made.

In the midst of the plain is Berlin, the largest city of Germany and the second largest city in Europe. It is a great manufacturing center for textiles, glassware, chemicals, machinery, and clothing. Berlin is located on the river Spree, and railroads connect it with all important cities. One of the finest airports in the world, the Tempelhof, is just outside Berlin.

Southland and Northland

If you should travel southward from the German plain to the Bavarian Plateau, you would think that you had entered another country. Here you would see uplands with wooded hills and fertile valleys. The plateau is a land of rich farms, of carefully tended forests, of many small cities, towns, and villages. Here on the wooded slopes of the highlands many Germans still manufacture articles in their homes.

German toyland. One region is particularly noted for toys. Find Thuringia on the map on page 414. From its forests come the wood used for toymaking. In a toymaker's home the whole family is busy, each one doing part of the work. Dealers in the towns buy the toys and ship them away to other countries. Many of the toys come to America.

In this region great quantities of trim-

James Sawders

Workmen in this porcelain factory of Meissen, near Dresden, are preparing the dishes and other pieces for baking, or "firing," as it is called. At the right, on the edge of the oven, or kiln, you can see some of the little statues that are being made. They will be placed in the kiln and baked at a temperature of about nine hundred degrees for several hours in order to make them hard. The colors on the porcelain are baked on. That is when they do not fade.

German Railroads Information Office

This Thuringian workman has his shop at home, where he turns out quantities of toys. Wood comes from the forests close at hand, and toy dealers from large cities visit his village regularly to buy what he and other workers have produced.

mings for Christmas trees are made. In the southern part of Thuringia is the town of Walterhausen, the "doll city" of Germany. Here are many doll factories, although some dolls are still made in the workers' homes.

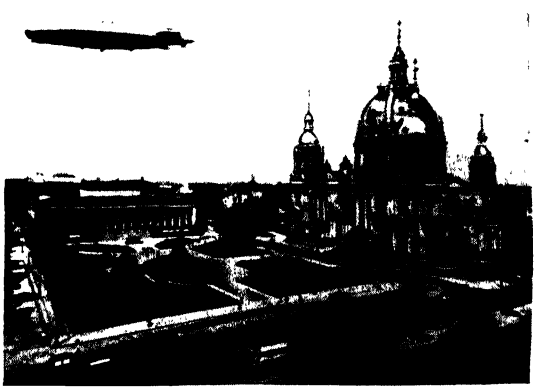
Farther south, in a sandy, pine-covered plain surrounded by hills, is Nürnberg, the chief city of "toyland." Nürnberg is a quaint and beautiful city. In the Middle Ages Nürnberg was on one of the principal trade routes. It was surrounded by a moat, which now is dry and filled with flowers and shrubbery. This city has long been known for its porcelain stoves, and is also noted for its watches and clocks.

A famous Bavarian city. The largest city in this southland is Munich, at the cross-roads of trade routes along the foot-hills of the Alps. Through Munich pass the most direct routes from Paris to Vienna and from Berlin to Rome. On the map on page 255 find these routes and trace them. They cross the Alps through the Brenner Pass.

Beautiful Munich is famed as an art center, but it is also noted for its breweries and for its finely made musical instruments. As you might guess, Munich is a musical center. Its opera-house, museums, and theaters are famous.

German forests and their care. Most of the forests of Germany are in the southern part, in Bavaria, and in the valley bordering the Rhine. The most noted is the Black Forest. Find it on the map on page 266. It is in the extreme southwestern corner of Germany.

Lumbering is the chief business in this region. About the year 1750 the Germans discovered that they were cutting down their forests faster than new trees grew. They realized that if this kept up, they would not have enough wood to make toys or to keep their houses warm. This region is cold in winter, and at that time the only fuel was wood. A law was passed, dividing the woodlands into nearly one hundred parts, of which only one part could be cut each year. Almost one hundred years would have to pass before



German Railroads Information Office

Berlin is full of parks and public buildings of many kinds. At the right is the Cathedral. Beyond the park is the Old Museum, which contains many art treasures. In the sky is an airship, called a "Zeppelin," after the name of a German engineer who developed this kind of dirigible balloon. Inside the covered framework of light metal are several smaller balloons.

that part could be cut again. By that time new trees would have grown.

With the discovery of coal in Germany, about 1850, the people had plenty of fuel to keep them warm. But they were wise enough to keep the forests clear and give each tree room to grow. Only large trees are cut for lumber. The cutting and also the planting of new trees are done carefully under the direction of trained foresters.

Feeding the German nation. Perhaps you wonder how it is possible for all the workers in this great workshop of Germany to get their food. Most of it must come from their own country. You must remember, first of all, that in the early days of the German Empire the farmers were carefully taught how to get the most out of the land. They learned how to raise crops even on poor soil. But that

German Railroads Information Office

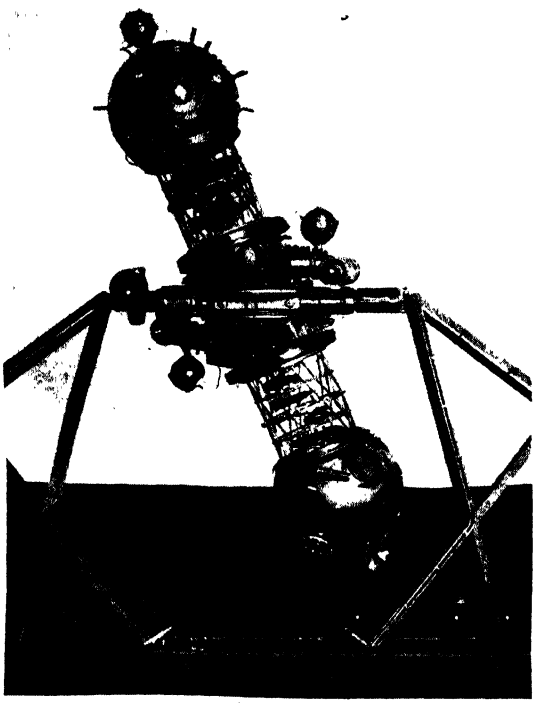
Many varieties of German cheese are known the world over. This worker is preparing and wrapping cheese for shipment. Before the cheese can be shipped, it is stored on racks to age, or "ripen," until the right flavor is obtained. Do you know the names of several different kinds of German cheese?

was not enough. The people had to be thrifty, as well.

If you should share a school lunch with Hans or Gretchen in Germany, you would probably have two thick slices of rye bread with a large slice of cheese between them. And if you shared their dinner, you might have rye bread again and probably some herring. Rye bread, cheese, and herring are nourishing and good, and not expensive, either. The herring comes from the North and the Baltic seas. The Germans raise many cattle and, like the Dutch and Swiss, make very good cheese.

The rye for the bread that most Germans eat can be raised in soil that is too poor for wheat. It will grow in mountainous country and in cool places where wheat will not grow. That is why so many European peoples use rye instead of wheat for their bread.

About one-half of the German land is in crops. One-third of the German people are farmers. They produce nearly enough food to feed all the population. Great Britain, which has less farm-land, has to import much



German Railroads Information Office

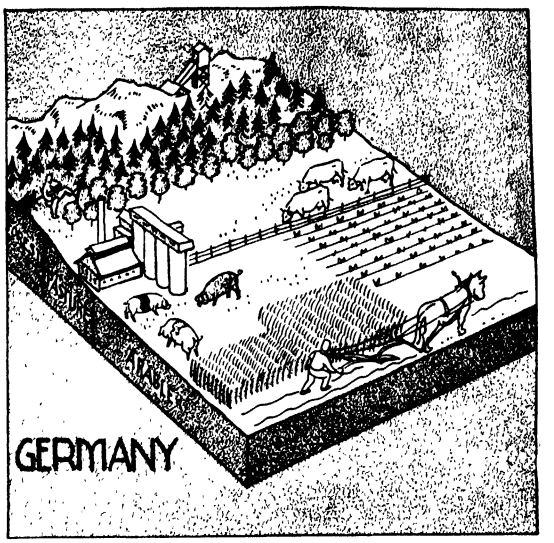
This complicated machine is the device that makes stars shine in a planetarium. It is the invention of German experts. The planetariums in the United States use machines like this one, which was imported from a manufacturer in Germany.

of her food. Germany tries to raise as much as possible by farming carefully and scientifically.

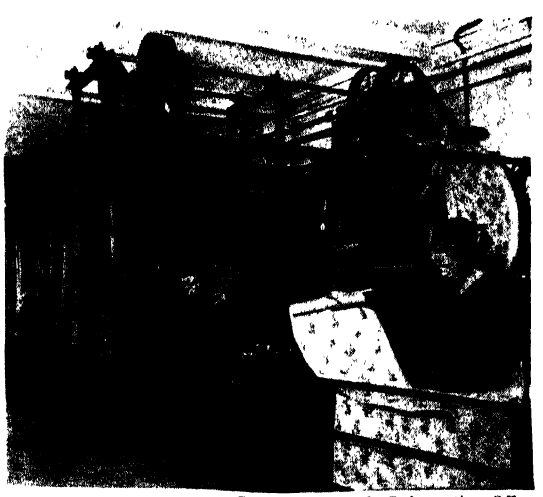
The farms of Bavaria. In Bavaria the farms, though small, produce good crops because the soil is good and the climate mild. In the fields you will see wheat, rye, oats, and barley. Most of this grain goes to feed the family and the live stock. As crops to sell, the Bavarian farmer grows tobacco, grapes, and hops.

In the southern part of Bavaria, where the climate is not too cool, are the hop fields. In the spring, as you travel through Bavaria, you see row after row of poles in the fields. Wires are strung from pole to pole, and strings are fastened to them. Later in the season wires and strings are covered with hop vines. Early in the fall the blossoms are picked, dried, and sent to the breweries, where they are used, with barley, for making beer.

Vineyards of the Rhine Valley. In the midst of the grape country is Bingen-on-the-Rhine. On the southern slopes of the mountains, facing the warm sun and shielded from the cold winds, there are thousands of acres of vineyards. From these grapes the Germans make their light, sour wines. Bingen is a beautiful city, and many tourists go there. Perhaps you have heard the story of Bishop Hatto and the Mouse Tower at Bingen. Another famous Rhine-wine region is the Rheingau.



Compare this picture chart with some of the others you have seen. It shows that nine-twentieths of Germany's land is plowed and seeded to crops. Three-twentieths is meadow land, and one-fourth is forest land. How much does that leave for other uses? Compared with France, is more, or less, of Germany's land used for crops?

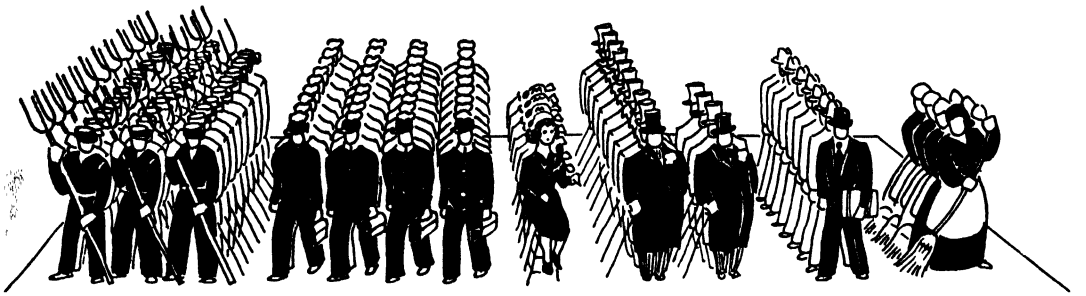


German Railroads Information Office

This German machine prints wall-paper in colors at the rate of two hundred fifty feet every minute.

Farms in the North German Plain. The great plain of Germany, farther north, has a cooler climate. The eastern part, farthest from the warm winds off the sea, is a cold region. Here snow still lies on the ground while spring blossoms are opening in Bavaria and in the Rhine Valley. But though the climate is cold and the soil is sandy and poor, the farmers have made the North German Plain into a great food-producing region.

Here is raised not only food for the farmers, but also one-fifth of all the sugar-beets grown in the world. Magdeburg is the center of the sugar-beet country. There, on land too sandy for other crops, the Germans grow very large crops of potatoes. Only Russia raises more. The Germans eat a great many potatoes and also use large quantities of them for cattle and hog feed. Factories make



Twenty-nine out of each one hundred Germans who work for a living are engaged in farming or fishing. Most of the twenty-nine are farmers. Forty of each hundred Germans work in factories. Five of each hundred are engaged in transportation and communication. Fourteen work in banks, stores, or offices. Eight are professional men, such as lawyers or doctors. The rest are in domestic or personal service.

starch, alcohol, and flour from potatoes. There is grain, too, on the cool northern plain. Most of this grain is rye.

German sciences, arts, and literature. You know already that the Germans have many chemists and skilled workers in metals and minerals. German doctors have long been noted. The world recognizes the painstaking care and thoroughness with which German scientists investigate every little detail of their work. German scientific books are to be found in libraries in all countries.

But it is not alone in science that the Germans have helped civilization. Probably the greatest musicians the world has yet known have been German. You have surely heard some of the music of such famous composers as Bach, Beethoven, Brahms, Handel, Mendelssohn, Schumann, and Wagner. Many people think the music dramas of Wagner have never been surpassed.

Germany has also produced noted writers. Later on in school you will hear of Goethe, Schiller, Heine, and other famous German writers. You have probably read many of the fairy-tales collected and first published by the Grimm brothers. Many of these stories are of places in the Rhineland, the heart of Germany.

There have been noted German artists, too —painters like Hans Holbein and Albrecht Dürer. And we must not forget the first printer, Gutenberg, who was a German. We can see, therefore, that we would not like to get along without the things the Germans have given the world.

Talking Things Over

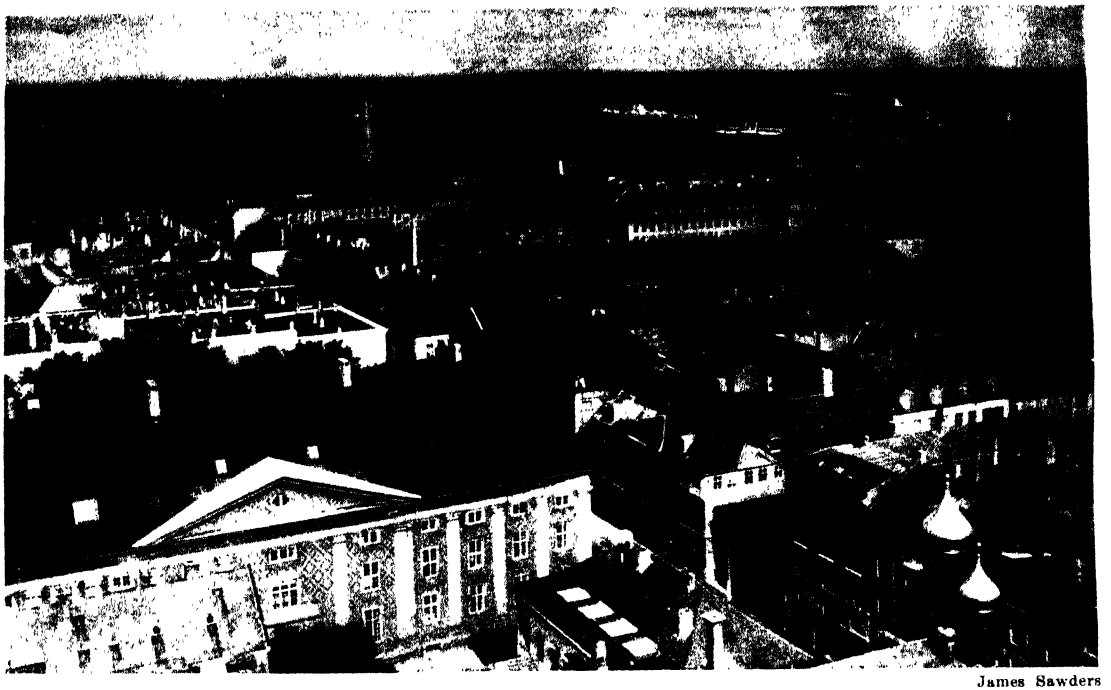
1. The German government was one of the earliest of European governments which were interested in helping their farmers. Their land was so poor that they could not afford to waste it by using careless methods. In our country, the Department of Agriculture was not established until 1889. Why do you think this country waited so long? Consider the amount and kind of land in the United States and the size of our population when you discuss this. Talk over some ways in which our government has interested itself in agriculture.

Doing Things Together

1. Some of the natural resources of a country can be replaced as they are used. Others are gone for good when they are once used. Forests are an example of the first type, and coal of the second. Work together to make a list of each type.

2. Some of the world's greatest musicians were Germans. Collect phonograph records of music by Beethoven, Bach, Handel, Wagner, Brahms, and Schumann. Play the music of just one composer on each day. Later you might compare them.

3. You might have an exhibit of German chinaware, including some little Dresden figures. You could make a collection of German toys. Books of children's stories which have German settings would also make an interesting exhibit.



James Sawders

Copenhagen is not located on the peninsula but on one of the larger islands that form a part of Denmark. In the distance you can see a part of the harbor. Bridges connect Copenhagen with other islands.

XXVIII. THREE PENINSULA COUNTRIES

Denmark, Norway, and Sweden

SCANDINAVIA is not one country, but a group of countries in northern Europe. This group consists of Denmark, Norway, and Sweden on the Continent, and a number of islands in the Arctic and North Atlantic oceans. These islands were settled by Scandinavian peoples. Most of Scandinavia, though, is a large peninsula. Find it on the map on page 333.

What Scandinavia is like. This peninsula is a mountainous country. The backbone of the highlands of Scandinavia is the range of the Kjölen Mountains. In these northern highlands a great ice-sheet once collected and spread slowly over northern Europe. That was many thousands of years ago. The southern tip of the peninsula is a part of the North European Plain.

Turn to the map on page 333 and see how much of the peninsula is north of the Arctic Circle. The winters along the west coast are warmer and the summers are cooler than they are farther inland on the Continent. These moderate winters and summers are caused by our old friends, the North Atlantic Drift and the westerlies, which bring warm air with their abundant rain.

South of the Scandinavian Peninsula is a smaller peninsula which extends northward. Find it on the map on page 333. This is a part of the North European Plain, too. It is called Jutland, and most of it belongs to Denmark.

Viking seafarers and their descendants. As you look at the map, you see that the Scandinavian lands are almost surrounded by the Atlantic Ocean, the North Sea, the Baltic Sea, and the Gulf of Bothnia. The lands are al-

most like islands. You can easily understand how the Scandinavians, descendants of the Vikings, or Norsemen, of olden times, are a seafaring people.

Centuries ago the Vikings loved the sea. They went on fishing trips, or on pirate expeditions, or crossed the seas to trade in other lands. Today their descendants fish and send out fleets that carry trade to many ports of the world. It is natural that the sea still invites these people, for much of the land back from the coast is rocky and barren.

How the Scandinavians became three nations. In feudal days the Scandinavian people in both peninsulas were all part of the kingdom of Denmark. Toward the end of that period the people of the northern peninsula rebelled. A Swedish army under Gustavus Vasa drove out the Danes. This man is remembered as a great hero, and Swedish stories tell how he was elected king. For three hundred years more Norway belonged to Denmark. A little over a hundred years ago Norway became part of Sweden. But the Norwegians wanted their independence, and in 1905 the country declared itself free and selected a king for itself. And so now there are three separate Scandinavian countries. They are Denmark, Norway, and Sweden.

Prosperous Denmark

In the story of England you read how Angles, Saxons, and Jutes moved into Britain. The Jutes came from Jutland, the peninsula where Denmark is located. Later, you remember, England was invaded by Danes. The English called most of the Northmen Danes, because at that time all Scandinavia belonged to the Danish king. A Danish king, Canute, conquered and ruled a part of England about the year 1000. By this time the Danes had become Christians.

Denmark in the Middle Ages. After Canute's time the people of Denmark lost much of their freedom. Nobles owned great estates and made them larger by taking the land of poorer, weaker men. Many free peasants had to become serfs in order to live. It was not easy to get food on the peninsula of Jutland. Much of the land was sandy and barren. Along the western coast, beside the North Sea, the winds blew so hard that nothing could be grown. But in parts of the coast toward the east the people could raise crops as well as go to sea for fish.

The terrible Danes, who were so feared by the English, finally lost their power to frighten Europe and invade other countries.

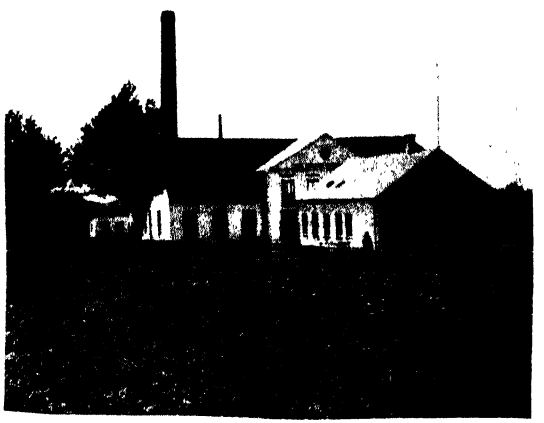
James Sawders

In Denmark there are no mountains to be seen in the distance. Most of the land is as flat as this potato farm. The farmer is not digging the potatoes by hand but is using a team of horses to help him. After the potatoes are sacked, they will be hauled to the nearest city and delivered to the coöperative society to which the farmer belongs. It will sell the potatoes for him.

In our story about the great trading centers of the Middle Ages, you read about a league of German cities called the Hanse towns. Merchants and traders of the Hanse towns owned many ships and had a navy to protect them. Suddenly the Hanse towns made war on Denmark and took many cities from the defeated Danes.

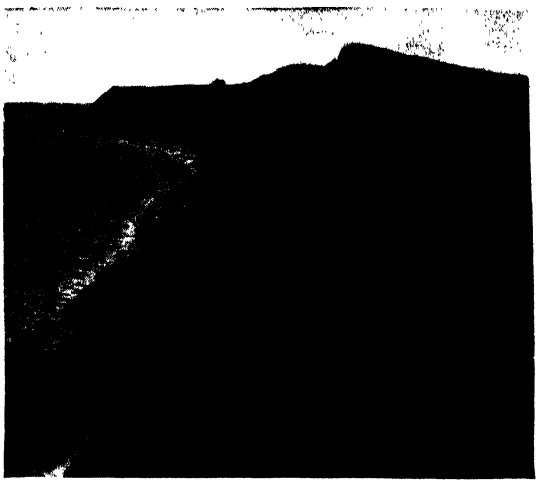
The loss of large possessions. Denmark lost other lands, too. You have already learned how Sweden broke away from Denmark when Gustavus Vasa rebelled. Several hundred years later Norway was taken away from Denmark and given to Sweden by England and Germany in order to punish the Danes for siding with Napoleon in his wars. In 1865 Austria and Prussia made war on Denmark, and Prussia took a part of the peninsula. After the World War ended in 1918, the people living in that part voted to see which country they wanted to join. Those in the north wanted to belong to Denmark, while those in the south decided to stay with Germany.

A nation of expert farmers. All these changes left Denmark a small country, only about the size of our state of Maryland. The map on page 333 shows that there are no



Courtesy Royal Danish Consulate

Danish farmers bring their milk to coöperative dairies like the one you see in this picture. The dairies have strict rules to insure cleanliness and purity.



James Sawders

The western coast of Denmark is like this in many places. It is sandy and not very high, and only the grass roots keep the sand from being blown along in moving dunes.

mountains. In fact, Denmark's highest hills are only about six hundred feet above sea-level. The whole country is rather flat and has the same sandy soil as the plain of northern Europe, of which it is a part. This sandy soil, you remember, was left by the great glacier when it melted. Don't you wonder how the Danes have become prosperous in such a land?

The Danes have made the most of what they have. There are no minerals in their country, and Denmark has not tried to import raw materials and become a manufacturing nation. But the farmers have worked hard at raising crops that were suited to the soil. Grass is one crop that grows there very well. The wet westerly winds give Denmark plenty of rain. With great meadows of rich grass, the Danes have gone into the dairy business. They raise fine cattle and have learned how to produce milk, butter, cheese, and eggs in the most scientific way. Now they are the most famous dairymen of all Europe.

On Danish farms there are beef cattle as well as dairy cows, and there are pigs and poultry, too. Butter and bacon make up more than half of Denmark's exports. As the

Courtesy Royal Danish Consulate

Not all the farmers in Denmark have homes as well built as this fine brick farm-house. But most of the farmers are prospering and have comfortable homes because their products find a ready market abroad. The coöperative societies market a great deal of the farm products in neighboring countries, particularly in England.

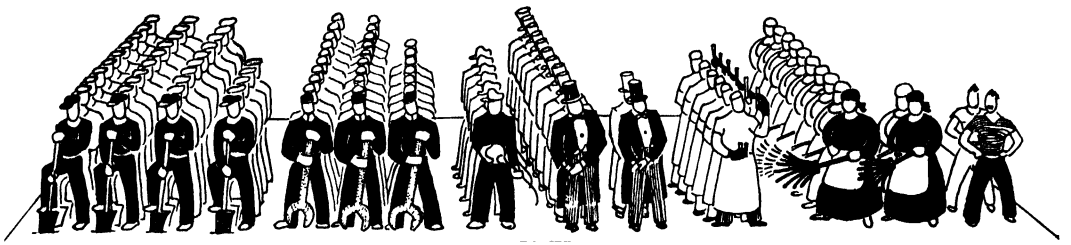
Danes raised more cows, they had to find some way to use the skimmed milk that was left after the cream had been taken to make butter. They soon found that skimmed milk is good food for pigs. And so Danish farmers raised pigs, and before long Danish bacon became famous.

In the fields the farmers raise rye, potatoes, and sugar-beets, as well as oats, barley, and other crops that make good fodder. Like the Germans, whose northern lands are much the same, the Danes learned how to fertilize the soil in order to get the most from their farms.

Coöperative farming societies. The farmers in Denmark help each other by working together when they buy or sell. Almost every farmer belongs to at least one "coöperative society." One society handles cream and butter, another eggs, others cheese or bacon. The farmers sell their products to these societies, which own packing plants and factories. In these the food is prepared in the best way for market. When the societies sell their products, each farmer gets his share of the profits.

One reason for the success of the coöperative societies is that they are very particular about the quality of their products. The cream must be rich and pure. The pigs for bacon must be fat and healthy. The eggs must be perfectly fresh. Each egg sold has a number stamped on it, and this number shows who brought the egg to market. If a farmer sends in a bad egg, he must pay a fine. If he sends in bad eggs several times, the society expels him. After that the society will not help him sell his eggs, and so he does not get a good price for them.

The same plan is followed by the societies that handle other farm products. In this way the Danish people have made their products famous for excellence, and so receive high prices for them. A great deal of Danish food goes to England, which you know is a great manufacturing nation and cannot raise all the food it needs.



This picture chart shows that thirty-five out of each one hundred Danes who work for a living are engaged in farming or fishing. Twenty-seven out of each hundred work in factories. Six are in the business of transportation and communication. Twelve out of each hundred work in banks, stores, or offices. Only six are professional men. Twelve out of each hundred work in homes. How many are left for all other kinds of paying work? Can you name some occupations that are not shown on this chart?

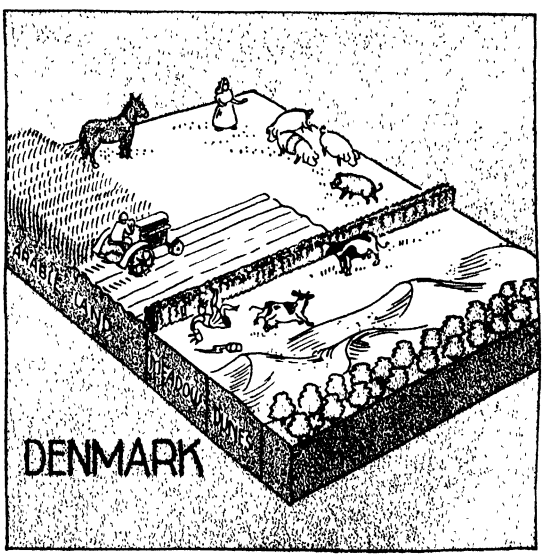
A land of small farms. Most of the farms in Denmark are small, consisting of only a few acres. Usually the farmers own their land. Ever since the days of the great estates, the Danes have tried to get the land into the hands of the people. Today a law forbids anyone to buy a number of small farms and combine them into a large farm.

Every inch of land on the small farms is made to produce. The Danes do not fence their land, for they do not want to waste the space that fences would occupy. Marshes have been drained, and sand dunes have been planted with trees. Now two-thirds of the land of Denmark produces crops. There are special societies that furnish the farmers with fertilizers at low prices and advise them how to use the land. Farm advisers travel about, teaching the best care of land, crops, stock, and buildings. Everywhere there are good roads and good schools, for the Danes believe in education.

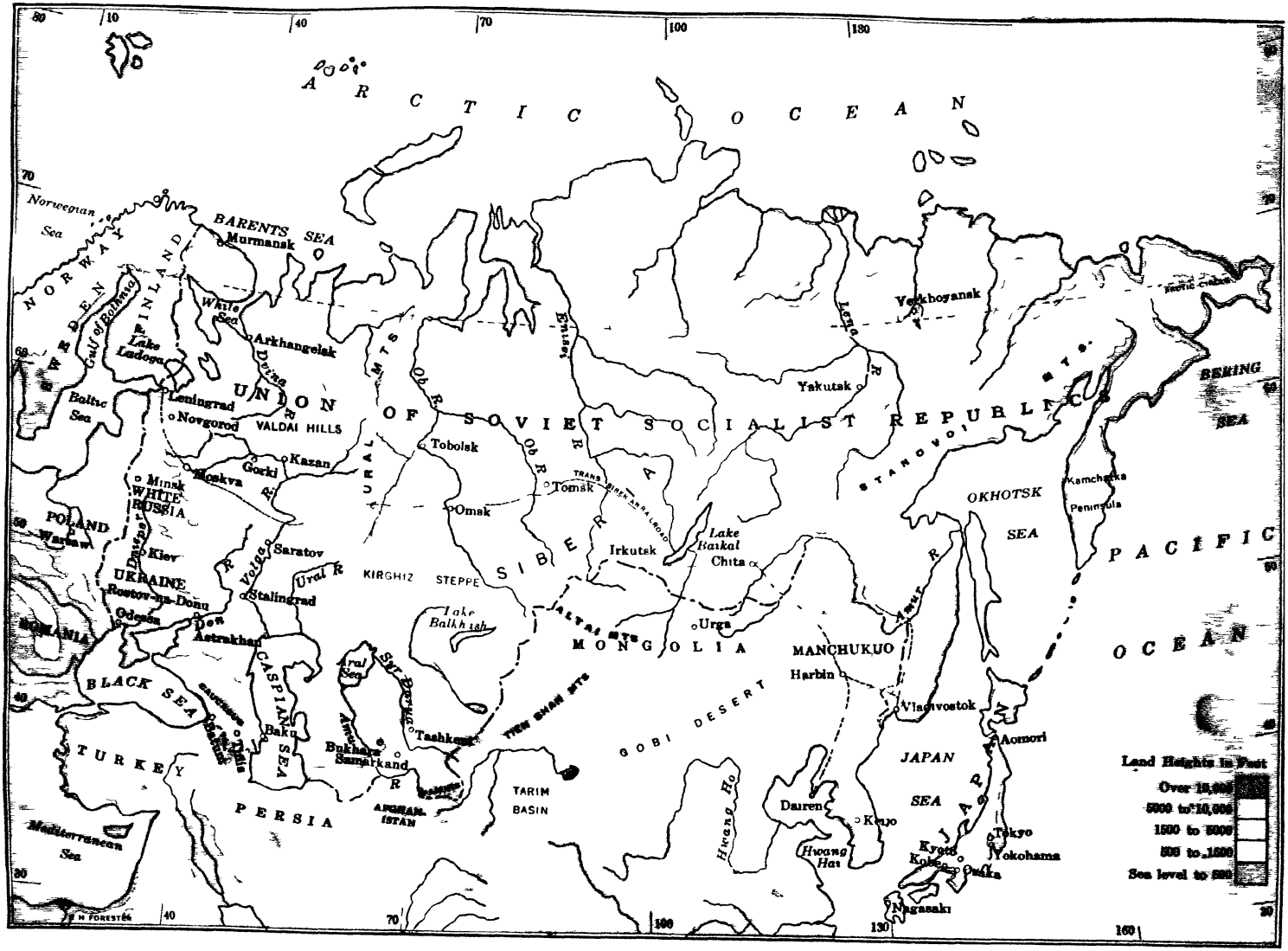
Denmark's largest city. The chief city and capital, Copenhagen, is built on islands, but trains reach it from the mainland by means of ferries. During the Middle Ages, Copenhagen was an important trading city. Its name means "merchants' haven" or port. Today it is a large commercial city and is the main market for the products of the Danish farmers.

Copenhagen is a "free" port, which means that traders from other lands may bring goods to Copenhagen to be shipped out again to other ports without paying any duty. Many American automobiles and automobile parts are shipped there. The other countries around the Baltic Sea use this port so much that Copenhagen is sometimes called the "Queen of the Baltic."

About one hundred miles east of the mainland and the principal islands of Denmark is the rugged island of Bornholm, also a part of Denmark. This island in the Baltic contains Denmark's mineral resources of coal, stone, and clay for making porcelain.



Almost two-thirds of the land in Denmark is plowed and used for crops. This is a much larger part than in most of the countries you have studied. One-eighth of the land is used for pasture and meadow. One-twelfth of Denmark is covered with trees. The rest of the land is chiefly dune land.


ARCTIC OCEAN
Norwegian Sea
BARENTS SEA
Murmansk
NORWAY
SWEDEN
FINLAND
Gulf of Bothnia
White Sea
Lake Ladoga
Baltic Sea
Leningrad
Novgorod
Arkhangelsk
Dvina R
VALDAI HILLS
UNION OF SOVIET SOCIALIST REPUBLICS
Ural Mts
Ob R
Yenisei R
Lena R
Yakutsk
Verkhoyansk
Arctic Ocean
BERING SEA
STANOVOI MTS
Tobolsk
Tomsk
Omsk
TRANS-SIBERIAN RAILROAD
SIBERIA
Kazan
Gorki
Moskva
Minsk
WHITE RUSSIA
POLAND
Warsaw
Dniepr R
Kiev
UKRAINE
Rostov-na-Donu
Odessa
RUMANIA
Volga R
Saratov
Stalingrad
Ural R
KIRGHIZ STEPPE
Lake Baikal
Irkutsk
Chita
Amur R
OKHOTSK SEA
Kamchatka Peninsula
PACIFIC OCEAN
Lake Balkhash
ALTAI MTS
MONGOLIA
Urga
MANCHUKUO
Harbin
Don R
Astrakhan
Ural Sea
Syr Darya R
Tashkent
BLACK SEA
Sevastopol
Caucasus Mts
Batum
CASPIAN SEA
Baku
Amu Darya R
Bukhara
Samarkand
TIEN SHAN MTS
GOBI DESERT
TURKEY
PERSIA
AFGHANISTAN
TARIM BASIN
Huang Ho
Vladivostok
Aomori
JAPAN
JAPAN SEA
Dairen
Kanjo
Tokyo
Yokohama
Kyoto
Kobe
Osaka
Nagasaki
Hwang Hai
Mediterranean Sea
Land Heights in Feet
Over 10,000
5000 to 10,000
1500 to 5000
500 to 1500
Sea level to 500
N FORESTRY

. Swedish Travel Bureau

Lumbering is an important industry in Sweden. On this river is located one of the largest sawmills in Sweden. Ocean steamers can load lumber at docks built along the river banks. You can see rafts of logs floating in the river, and hundreds of piles of lumber waiting for shipment.

Sweden and Norway

Land of fiords and lakes. Ages ago, great glaciers helped to carve out the mountainous land of the Scandinavian Peninsula. As the great ice-sheet gouged the mountain valleys deeper, the land slowly sank lower. When the ice melted, the sea filled the long, deep valleys. This made deep, winding inlets that are called fiords. In higher places among the mountains, the melting ice left long lakes in the valleys. The coast of Norway is cut by many fiords, while Sweden has many lakes in her valleys.

The mountains of Norway rise steeply from the coast. Ages ago, some of the mountains slowly sank into the sea until only their tops showed. These tops make a long row of islands along the coast, as you can see by the map on page 333. Between the islands and the coast the water is generally so calm that ships can sail safely. This waterway is called the "inside passage" and serves as the best highway between the coast towns. You can see how difficult it would be to build a railway along such a coast.

In Sweden the mountains do not run down into the sea, as in Norway, but slope to a plain. The coastline of Sweden is low and not so irregular as the Norwegian coast. The southern tip of Sweden is a part of the Great Plain of northern Europe. You can see by the map on page 333 that Sweden has a large lowland region. That lowland region has made Sweden a farming country, even though most of the land is mountainous.

Norway does not have as much good farmland as Sweden. There are only narrow strips of good land around some of the fiords, a few small valleys, and some land near Oslo that can be farmed. In fact, there is so little farmland that the Norwegians have been forced to become a nation of fishermen.

Land of the Midnight Sun. Many travelers in Norway take a ship to North Cape, the northernmost tip of Norway, far inside the Arctic Circle. Here, during the summer, the traveler is amazed to see the sun swing around the horizon. For almost three months it never completely sets. Even at midnight the sun is

Swedish Travel Bureau

Winters in northern Sweden are cold, and snow covers the ground for many months. But in the spring, clearings in the forests will be covered with grass, and the farmers will pasture their cattle outdoors.

still shining. But for two months in the winter the sun never completely rises. Can you examine a globe of the world and see why this is so?

In northern Scandinavia there are only two or three hours of darkness each day in the summertime, and during the winter there are only three or four hours of light. Even in the southern part of the peninsula it is still light at nine o'clock in the evening in summer. But in winter it is dark early in the afternoon.

Forest industries. Both Sweden and Norway have many forests. More than half of Sweden is covered with forests, and a fourth of the mountains and valleys of Norway are wooded. The trees are mostly evergreens—pines, firs, and spruces. They produce wealth in the form of lumber and wood-pulp. Wood-pulp is used in making paper and artificial silks, such as rayon.

Usually the logs are cut in winter and hauled over the frozen ground to the river banks. In May, when the ice has thawed, the logs are floated down-stream to the sawmills. In Sweden, lumbering is carried on chiefly in the province that makes up the northern half of the country.

Iron mines. Large deposits of iron ore also help to make Sweden a prosperous country. There are mines in the district around Stockholm, and they help to make the capital of Sweden a busy industrial city. There are also iron mines in the north. The mining town of Kiruna is one hundred miles north of the Arctic Circle. Find this town on the map. Kiruna is close to a huge mountain of iron ore. Millions of tons are blasted from the mountain each year and shipped to smelters in Sweden and in other countries where iron and steel are in demand.

In summer the ore from Kiruna is shipped from the port of Lulea on the Gulf of Bothnia. In winter, however, the ore must be carried over the mountains and shipped from the port of Narvik in Norway. The reason for this is that the harbors along the Gulf of Bothnia are frozen in the winter, while the port of Narvik is open, even though it is farther north. The Atlantic ports are free of ice because the warm North Atlantic Drift keeps the shores of Norway warmer than the Swed-

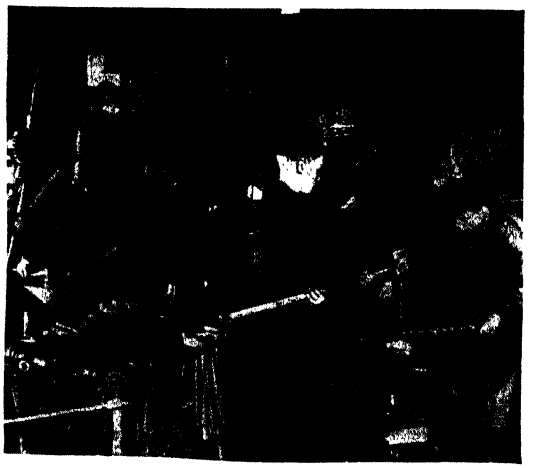
Swedish Travel Bureau

Modern machinery, run by electricity, is used to mine iron at Kiruna, Sweden. The mountain here is all iron ore, and it is blasted away as needed. Shovels load the ore into cars like those you see. The cars are hauled by electric engines. Power for making the electricity is furnished by swift mountain streams close by the mines.

Swedish Travel Bureau

Sweden is noted throughout the world for making beautiful glassware. This artist at Orrefors is engraving a vase. He is holding the vase against a small cutting wheel which is turned by an electric motor. The wheel cuts a design into the glass. In a frame, in front of the artist, you can see the design he is following. Some of these artists have become famous for their beautiful work.

ish coast along the Gulf of Bothnia. The Kjölen Mountains, which form the backbone of Scandinavia, keep the warm Atlantic winds from blowing over the lands to the east. Like other countries in Europe that are away from the Atlantic, these lands are very cold in winter.



Swedish Travel Bureau

There are many trade schools in Sweden where boys and girls learn the work they intend to do for a living. These boys are learning to make ornamental ironwork. The hood of the forge is covered with chalked figures which seem to show that arithmetic is useful.

Sweden's industries. Kiruna is too far north to be a center for manufacturing. There is no "black country" around Kiruna as there is in England, France, and Germany, because there is no coal in Sweden to use for smelting. For that reason, the Swedes have had to find other ways to smelt their iron and to make steel.

The finest Swedish iron is made by smelting with charcoal, instead of with coke as in Germany and France. Charcoal-making is therefore an important forest industry in Sweden. Few other countries have wood enough to smelt with charcoal, and so Swedish iron is in demand in many parts of the world.

Iron is also smelted in great electric furnaces, for electricity is cheap in Sweden. Much electric power is developed from the streams in the southern region. With cheap power close by, this region has become a busy manufacturing district. There are many sawmills and factories. Jönköping, a city in that re-

Swedish Travel Bureau

This picture will tell you why Stockholm is called the Venice of the North. The city is built on islands. The visitor is as likely to take a steamer as a street-car in going from one part of the city to another. More than one-fourth of the city is given up to parks and gardens. On one island is a famous open-air museum where visitors can see the animals and plants of Sweden as well as copies of the old-time costumes and homes.

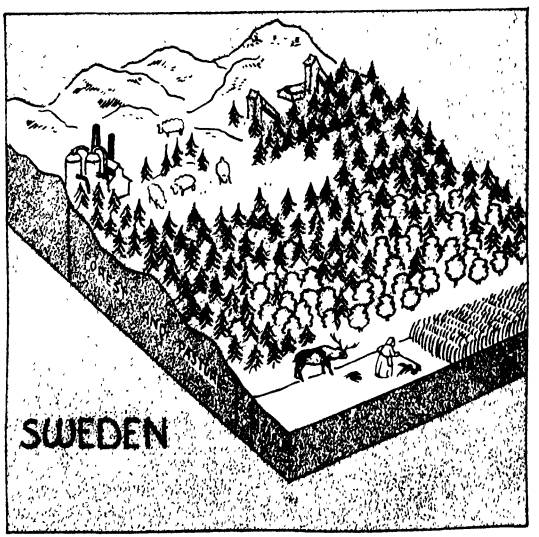
gion, manufactures more matches than any other city in the world. Can you think of a reason why matches should be made in Sweden?

Sweden's capital. The most important city of Sweden is Stockholm, the capital of the country. "Holm" in Swedish means island, and Stockholm is located on a number of islands at the place where Lake Mälar flows into the Baltic Sea. Stockholm is one of the most beautiful and most charming cities of the world.

Inland waterways. Like Holland, southern Sweden makes much use of canals. These waterways connect many of the rivers and lakes. From the city of Göteborg on the western coast of Sweden, the Göta River, the canals, and the lakes form a network of waterways on which passengers and freight can travel for many miles inland.

Farming in Sweden. Four-fifths of the Swedish people are farmers. Most of the farm-land is in the wide southern stretch of open land known as the Skåne. This part of the North European Plain is a lowland belt extending from the Skagerrak eastward to the Gulf of Bothnia. Find all these names on the map on page 333.

The Skåne is not only the chief farming region, but also the richest industrial district and the leading shipping center. Göteborg is



Only one-tenth of the land in Sweden can be plowed and planted to crops. Forests and pastures take up more than half of the land. About one-twentieth of the land is used for growing hay.

the chief port. The Skåne is the granary of Sweden. In addition to grain, most of the farmers raise cattle, hogs, and sheep. For their feed the farmers grow root crops and hay, as well as oats, rye, and barley. Dairying is important here. This southern part of the country has been called the "garden of Sweden." Throughout this region are well-built wooden farm-houses, barns with tidy barnyards, vegetable and flower gardens. Some of the farms are large, just as they were in the days of the manors, centuries ago when Sweden was a feudal country.

A Trip to Norway

Norway's limited resources. Norway has little farm-land and almost no mineral resources. The wealth of the Norwegians lies in their fisheries and forests. Oslo, the chief seaport and railroad center, is the largest city. It exports mostly timber and wood-pulp for paper-making. The many streams which run into the fiords provide cheap electric power for the sawmills and fish-canneries as well as for home use, but there are not many other kinds of factories to use this power.

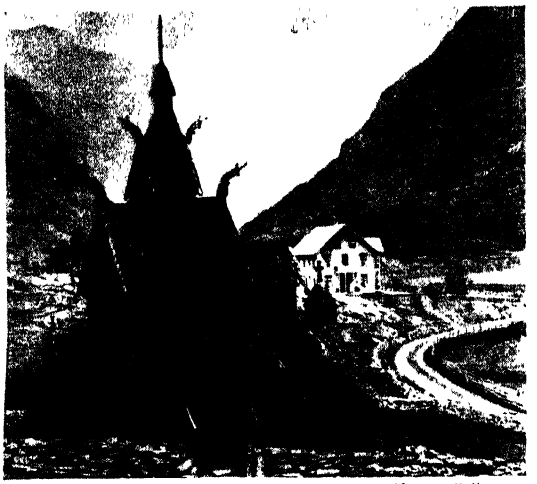
Picturesque Norway. Suppose we take a trip to Norway. We shall probably enter by way of Sogne fiord, the largest and one of the most picturesque of the fiords. We can see the heart of Norway by sailing up the Sogne and then climbing the steep western slope of the Kjölen Mountains. These mountains are the backbone of Norway. Almost at their southern end is the plain around the city of Oslo.

The steep canyon walls that enclose the fiord are almost covered with forests of spruce, pine, birch, and juniper. Here and there are grassy glades, overgrown with wild flowers. There are many rocky ledges, too steep to hold any soil.

Norwegian farms and villages. Wherever there is a tiny patch of level ground, we find a garden, an orchard, or perhaps a farm-house and little farm. There are small farms on the narrow strips of almost level land at the foot of the steep valleys. We shall also see vil-

Swedish Travel Bureau

This old castle in Sweden is now a library. But it reminds the traveler that there were rich nobles in Sweden during the Middle Ages and that many fine castles were built. Swedish cities did a thriving trade with towns on the Baltic Sea, for at one time Sweden owned almost all the land along that coast. That is why many cities have two names, one in Swedish and another in the language of the inhabitants.



Sloane Collection

This old church is built in the early Norse style. Although there was plenty of stone, as you can see by the stone walls, the Norsemen built of wood because wood was easy to work with and there were forests everywhere to furnish lumber. What else did their craftsmen build of wood?

lages at the base of cliffs, where streams pour down to the fiords. These streams have piled up sand and gravel to form fairly level deltas. Pretty, white wooden houses, with well-kept barns and sheds, surrounded always with gardens, border the shores of the fiords.

Each home has its own boat-house. In this land of waterways, the small boat is like the automobile in the United States. People travel up and down the fiords in boats, for paved roads are scarce.

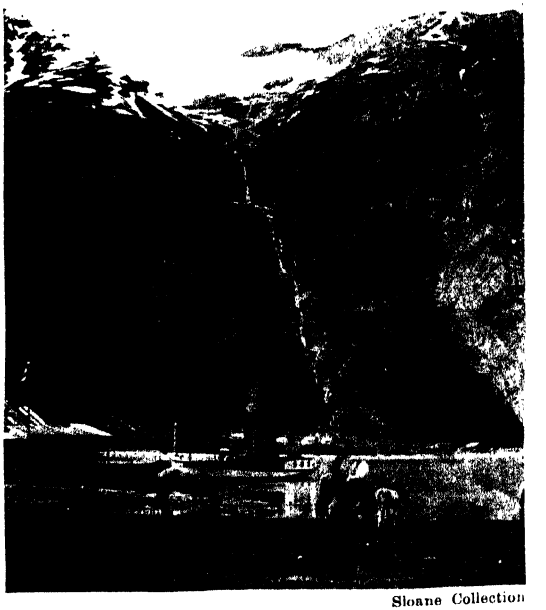
Each house also has a milk-house, usually built right over the small mountain stream which supplies the home with water. Up from this dairy runs a cable to a pasture that is part way up the mountainside. Down the cable come milk, cheese, and hay from the workers in the pasture. Mail, food, and clothing are hoisted by the cable to the men above.

Caring for the herds and flocks. You have read how dairying is carried on in another mountain country, Switzerland. In Norway the people work in much the same way. During the long, cold winter the cattle are kept in the village barns in the lower levels. They are fed on hay and other fodder that has been stored in the summer.

As soon as the snow melts on the mountains, the cattle, sheep, and goats are driven up to the hillside pastures. At first the animals stay in little clearings where there are small buildings. Some of the family stay here, tending the animals and sending the milk-cans down by a cable to the home below.

As summer advances and the higher snows melt, the cattle are moved to fields on the upper slopes. These fields are usually at the "tree-line," where the forest disappears because the winters are too cold and windy for trees to grow. In these upland pastures, with their luxuriant grasses, the herdsmen tend the cattle and make cheese.

When autumn comes, the animals are driven down to the lower levels again. During the warm season, while the animals have been in the high pastures, the people below



Sloane Collection

Every farm along the fiords has its own landing-place for boats. Little steamers like the one you see here visit the farms and small villages regularly, for there are almost no railroads along the coast of Norway. As you can see, there is a little level land beside the fiord, but the mountains rise steeply from this level ground where the farmers build their homes.

Norwegian Canners' Association

These Norwegian fishermen are pulling in a net which contains thousands of little sardines. The fish will be taken from the boats directly to the canneries on shore. There the sardines will be packed in oil or sauce, cooked, and boxed for shipment.

have been busy on the lower farms. Every bit of land that will grow anything is used. Hay is cut and stored in the barns. Vegetables are raised and stored away for winter use. A little grain is grown and ground at the near-by mill.

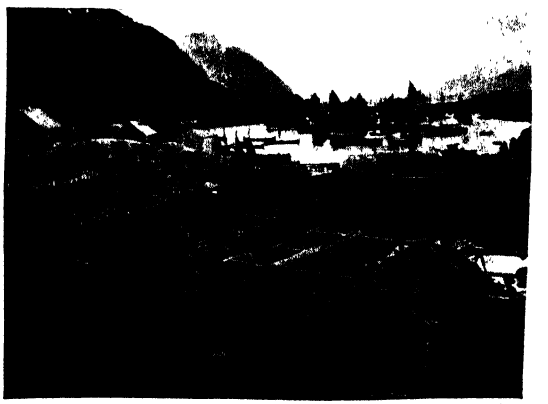
Transportation in Norway. As you already know, boats have to be used for transportation. There are few railways in Norway, for the land is too rough and mountainous. The region surrounding each fiord, then, is like a little country to itself. In each of these regions the people make and raise almost everything they need. Boats bring in some manufactured goods, and boats take out the products of the farms and the fisheries.

Norway's ocean fleets. You have read how the Northmen of olden times sailed the seas. For centuries they fished the waters of their own fiords; then gradually they ventured across the waters to other fishing-grounds. They traded in other countries, often thousands of miles away. And so today their descendants, the Norwegians, turn naturally to the sea. Much of their food comes from the ocean, as farm-land is scanty. They have almost no minerals or manufactured goods to sell to other countries, but they export the finest fish.

Whaling fleets travel to the Antarctic, where the crews spend months catching whales for their valuable oil. Another fleet of fishing-boats, carrying thousands of men, goes to the Lofoten Islands, a hundred miles inside the Arctic Circle. About these islands many cod are caught. Around the large island called Iceland is another famous fishing-ground. Still other boats sail across the Atlantic and fish on the Grand Banks off Newfoundland. A large fleet goes to Hammerfest, near North Cape, to bring back seals, whales, and walrus.

But perhaps the most famous fleet is the sardine fleet. Millions of these little fish are caught every year. In nearly every fiord is a fish-cannery where the catch is packed in cans. Norwegian sardines are sent all over the world.

The center of the fishing industry is Bergen, the second largest city in Norway, near the famous Hardanger fiord. This city is also the home port of the Norwegian merchant fleet, which is made up of ships that carry goods all over the world. Norway has a larger fleet of merchant ships for her size than any other nation.



Sloane Collection

Almost every foot of the shore at this Norwegian fishing village is covered with racks for drying fish. In the sheltered harbor you can see dozens of fishing boats at anchor.

Sloane Collection

Here is a valley in Norway, where there is much more farm-land than along a fiord. This one is not far from the city of Oslo. But the mountains and the forests are close, and every possible bit of land is planted.

The Story of Iceland

Northern islands. You would expect the descendants of the Northmen to own land in different parts of the world. But the Scandinavian peoples have not built up a large colonial empire. Greenland, near North America, belongs to Denmark, and Svalbard, or Spitsbergen, a far northerly group of islands, belongs to Norway. Svalbard is bitterly cold, but there are valuable coal-mines there. The islands also contain other minerals which are not yet being mined.

The most important of the islands in the northern seas is Iceland. For a long time this island belonged to Denmark, and even today the Danish king is its king, too, though Iceland is an independent country.

Iceland lies as far north as Greenland, but its southern coast has mild weather, for the warm waters of the North Atlantic Drift sweep past it. Yet only a fringe of the coast, perhaps a fifth of the island, is fit to live on. The rest is covered with snow-crowned mountains, where there is ice throughout the year. In the interior, volcanoes sometimes spread lava over the rocky land.

There are no wild animals in Iceland except foxes, although there are many birds. And there are almost no trees. The most important industries are sheep-raising and fishing. In the long winters the people weave cloth.

Most of the houses in Iceland are built of sod, but some are of wood brought in from other lands. Only a few are of stone. There are too many earthquakes for the people to build large houses very close to the volcanoes. But Reykjavik, the capital, has a few buildings of stone.

Early days in Iceland. Irish monks discovered Iceland. They called it their "desert in the sea." When the Norsemen came, about 800, they found the island inhabited by Christians who were using Irish books. The Norse settled Iceland, for they knew how to make a living in such a land. But for two hundred years the island was the battle-ground of warring clans. Then more missionaries came, the pagan Norsemen were converted to Christianity, and Iceland became peaceful.

The world's first parliament. Every year the heads of all the Iceland families travel from the coast to the interior to hold the midsummer festival of their parliament, the *Althing*. So far as we know, the Althing was the first parliament, or law-making assembly,

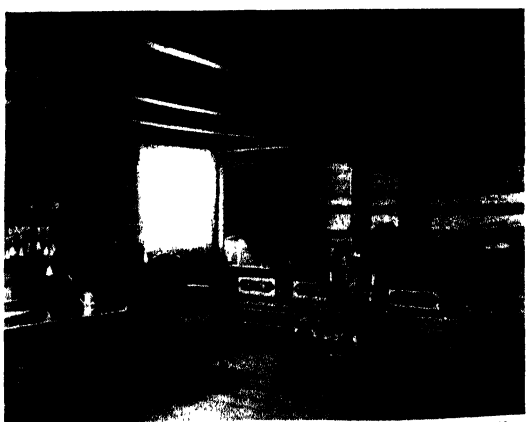
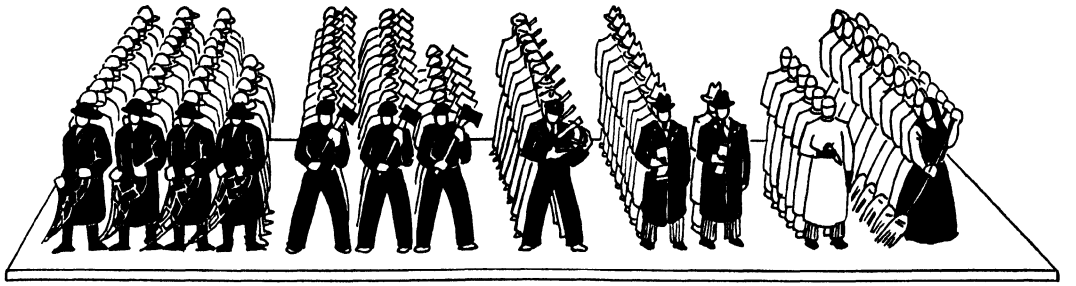


Photo by Wilse

This is the "best room" of a Norwegian farm-house. Notice how the beds are built into the wall, just as they were in the days of the Vikings. In the old days such beds had doors that could be closed.



Thirty-five out of each hundred Norwegians who work for a living are farmers or fishermen. Most of the thirty-five are fishermen. Twenty-six out of each hundred work in factories or at trades. Nine are in the transportation or communication business. Twelve out of each hundred workers are in banks, stores, or offices. Six of each hundred are professional men. Ten are in domestic work. How many are left?

ever held in the world. Later, the idea spread to Britain and to other countries. At the meeting of the Althing laws are made and criminals are exiled to the mountains. When their sentence is over, the criminals return and are then treated as if they had never been exiled. You can see that the Icelanders have given the world some valuable ideas on the way people can govern themselves.

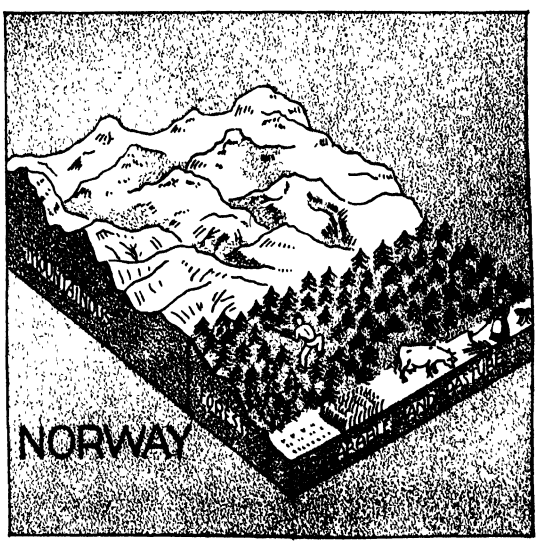
Great Men Among the Scandinavians

Of course you will not be surprised to learn that from the old Viking ancestors have come great explorers. Two of them were Fridtjof Nansen and Roald Amundsen. But explorers are not the only famous people the Scandinavians have given the world.

Lovers of music and old tales. In a land of many birds and wooded mountain slopes, filled with the sound of waterfalls, it is natural that the people are lovers of music. And it is natural that many legends and tales have sprung up among a people who have long winter days and evenings for story-telling. These old tales, sung many centuries ago by *skalds*, or bards, are still popular with the people. There are stories of the Viking gods and of *trolls* and *kobolds* who toboggan down the mountainsides.

The Scandinavians are especially fond of the violin. The Hardanger violin is larger than the Italian kind that we know. It is made of birch and is much used in the mountains. Great names among Scandinavian musicians are Ole Bull, violinist; Edvard Grieg, composer; Jenny Lind, "the Swedish Nightingale"; and Kirsten Flagstad, a famous operatic singer of today.

A Danish story-teller whom you know is Hans Christian Andersen, who wrote fairy stories. The people of his country have erected a monument to him in Copenhagen. On it is carved a figure of the Ugly Duckling. Why do you think that character was chosen?



One-fourth of the land in Norway is covered with forests. Only one-twentieth of the land is pasture or land that can be plowed. How much is too mountainous to be used?

Scientists. Famous among Swedish scientists are Linnaeus, a great botanist, and Alfred Nobel, inventor of dynamite. The income from the fortune that Nobel left furnishes annual prizes to those people who have made the greatest achievements in the world.

Talking Things Over

1. Do you remember what is meant when it is said that two countries are in the same latitude? Look on a map to find out what countries are the same distance from the Equator as the Scandinavian Peninsula. Discuss the climate of Norway and Sweden and compare it with that of northern Canada and Siberia. Why are the Scandinavian countries more settled and developed than the other countries of the same latitude?

2. Producers' coöperatives are very important in Denmark, as you learned in this chapter. They help the farmer get a good price for his products, and they insist that he bring in to them only the highest quality of produce. We have producers' coöperatives in our country, too. Do you know anything about them? Find out whether or not the farmers in your section of the country have coöperatives and how these organizations work. There is a coöperative among some of the fruit growers of the country. Is there one among the dairies of your community? Can you find out something about consumers' coöperatives, too?

3. Discuss the importance of good transportation facilities in the growth of cities. Why it is especially important for seaports to have good transportation into the interior of a country? Point out on a map some of our largest cities and explain how their growth is partly due to good transportation and communication.

4. We sometimes talk of the Scandinavian countries almost as if they were a single nation. This is probably because of their location and because the people of the three countries are much alike. However, there are many, many differences between Norway, Sweden, and Denmark. Read over the chapter and discuss the ways in which the three nations and their people are alike and the ways in which they are different. Find as many differences as possible.

5. When you were talking about France, you discussed the fact that tourist trade was an important business for the French people. What are some of the things that bring tourists to a country? Discuss the reasons why tourist trade would be important in Switzerland or the Scandinavian countries. What parts of the Scandinavian Peninsula do you think would attract the greatest number of tourists? Why?

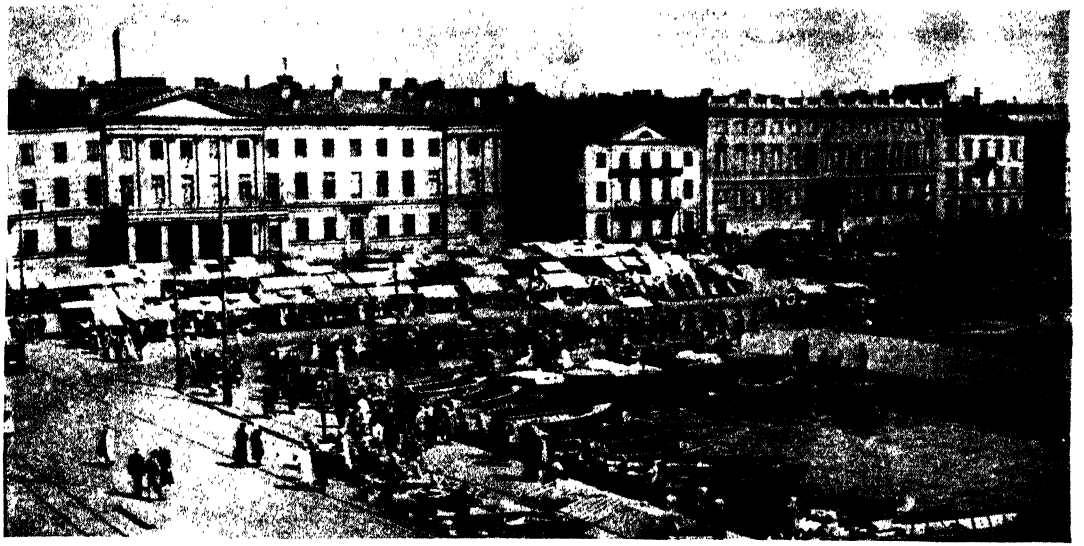
Doing Things Together

1. The Scandinavian countries are noted for their scenery. The fiords of Norway, the lakes of Sweden, and the mountains of both countries are unusually beautiful. Make a collection of pictures of Scandinavian landscapes. Look for them in newspapers, magazines, and travel folders. See if you can find pictures which show the timber-line of mountains, above which no trees grow.

2. Are you sure you can tell the difference between kinds of evergreen trees? Collect small branches and the cones of fir, pine, and spruce trees. Notice the difference in the ways the needles are arranged.

3. You could have a very interesting exhibit of Scandinavian products. The people of these lands produce all sorts of useful and beautiful things. Find some examples of textiles and embroidery and woodcarving. Swedish glass is very beautiful and would make your exhibit more colorful. Don't forget to include a few cans of Norwegian sardines and some Swedish matches!

4. Plan a program of Scandinavian music. You would enjoy hearing some of Grieg's music if you can borrow some phonograph records of it. Try to find some recordings of Kirsten Flagstad's voice singing parts of Wagner's music dramas.



James Sawders

The landing-place at Helsinki is a public square, a market, and a harbor, all in one. Farmers and fishermen come by boat, bringing what they have to sell. Merchants bring their wares in carts, and business goes on under the hundreds of little awnings you see over the carts and booths.

XXIX. THE BALTIC COUNTRIES

Four Northern Republics

EAST of the Scandinavian countries, along the shores of the Baltic Sea and the Gulf of Bothnia, are four republics which we call the Baltic countries. They are Finland, Estonia, Latvia, and Lithuania. The land is part of the great North European Plain. Before the World War these countries belonged to Russia. Turn to the maps on pages 300 and 333 and find them. Notice whether the land is high or low.

Finland

What Finland is like. The largest of these republics is Finland. Notice how it stretches from the Gulf of Finland to the mountainous district in the north of Sweden. That northern region, called Lapland, is not a separate country, but parts of it lie in Norway, Sweden, Finland, and Russia. It is a cold land. It is so cold in winter and has such a short summer that no large trees will grow. There are only a few low bushes and a kind of moss which reindeer eat. A cold plain like this is called a "tundra." The wandering Lapps get food and clothing from their large herds of reindeer.

It is the lower part of Finland that is important. The Finns, who live here, are not like the Scandinavians, nor are they related to any of the other peoples of Europe, except perhaps the Hungarians. Centuries ago the ancestors of the Finns came from Asia and settled down in this peninsula.

The lakes of Finland. The map on page 333 shows you that Finland is a land of lakes. Sometimes it is called the "Land of a Thousand Lakes," although there are many more than a thousand of them. The Finns call their land *Suomi*, which means marshland in the Finnish language.

Centuries ago a great glacier melted and left these lakes in pockets where the ice had

Photo by Wilse

This family of Lapps was photographed outside their home. They live inside the mound of sod you can see over the backs of the two reindeer. Look closely, and you can see the open door. The shoes the people are wearing look like the moccasins of North American Indians. Lapp mothers tie their babies to cradle-boards that look very much like the ones used by American Indian squaws.

scooped out the ground. The huge ice-sheet also scraped most of the soil away, so that the farms of the Finns have only a thin covering of soil that is rather poor.

Farming under difficulties. With such poor farms the Finns must work hard to make a living. Each farmer tries to have some water on his farm, from either a lake or a stream. He also must have some forest land. There is a law in Finland that a part of every farm must be forest. Only a certain number of trees may be cut each year, and new trees must be planted to take the place of those that are cut down. You see, Finland has no coal, and wood is the only fuel. And so the Finns take good care of their wood supply.

Finnish Travel Information Bureau

This farm scene in Finland does not show a lake, which is unusual, because almost every farm is close to a lake. On these farms the chief occupation of the people is tending dairy cattle.

The Finns depend chiefly on their cattle. During the short summer the dairy herds browse in the meadows, while the farmer and his family are cutting hay and hanging it on racks to dry in the wind, or caring for their fields of barley, oats, and flax. Many farmers have gardens and grow great quantities of strawberries. Everyone has to work hard, taking especially good care of the cattle. It is a Finnish saying that to have a good time in Finland, you must be a cow.

In the winter the men are busy cutting down trees to mend their fences or barns, or for firewood. Some of the men work for logging companies. Finland does not get as cold in the winter as you might think, since the prevailing winds come from the southwest, off the warm North Atlantic Drift.

Finland's greatest treasure. North of the dairy region, among the lakes, stand wonderful forests of pine, spruce, and fir. These are Finland's greatest treasure. The chief export of Finland is lumber, with wood-pulp a close second. Over half of the wooden spools used in the world are made in Finland. The Finns are careful of their lumber supply and have strict laws about cutting the trees. By enforcing these wise laws for many years, they have been able to have a constant supply of lumber without destroying their forests. They cut only as much as the new crop will replace.

Two Finnish cities. The chief industrial city of Finland is Tampere, also called Tammerfors. There are large sawmills and paper mills in this city. The capital is Helsingfors, which the Finns call Helsinki. Here is the national university, and each year the Finns gather in the capital for winter sports.

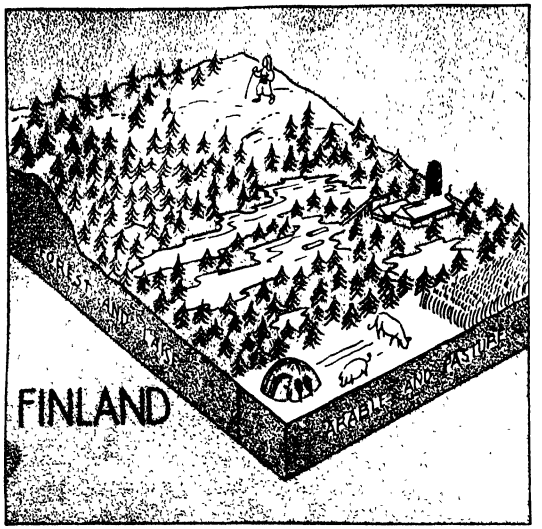
There are few railroads in Finland, but good highways are being built, and the people make use of waterways for transportation.

Finnish Travel Information Bureau

This old church in Finland was built of boulders left by the glaciers. Like most buildings in the northern countries, the church has a steep roof so that heavy snows will slide off.

Finnish Travel Information Bureau

The round objects in the water which look like giant lily-pads are rafts of logs that have been brought to the sawmill on this island in Finland's lumbering region. You can also see many piles of lumber. As many southern European countries cut down their forests years ago and cannot now produce enough wood, the northern countries find a good market for their lumber. A great deal of wood is used to make paper-pulp.



This picture chart shows how little of Finland is land that can be cultivated. Together with the pasture land, it amounts to only one-tenth of the land. The rest of the land is forested, covered with lakes, or unused because the weather is too cold. Can you describe the kind of land known as tundra?

Estonia, Latvia, and Lithuania

Small countries with few resources. South of Finland, across the Gulf of Finland, are three small, new nations—Estonia, Latvia, and Lithuania. Like Finland, these countries belonged to Russia before the World War. As in Finland, it is not easy to make a living in these lands.

In these countries, too, the great northern forest extends over large regions. But the nations are so small and have so little in other resources that there are few cities. The largest are the capitals. Tallinn, also called Reval, is the capital of Estonia. Riga is the capital of Latvia. Both of these cities are seaports. The capital of Lithuania is Kaunas, also called Kovno, but the port of the country is Klaipeda, also called Memel. From these ports are shipped the lumber and wood-pulp, which are the chief exports of these small countries.

Estonia is sometimes called the "potato republic," because it has many distilleries in which alcohol is made from potatoes. The pulp is fed to cattle. Many of the people are dairymen, and butter is shipped out of the country. The people are trying to follow the example of the Danes and make the most out of a poor soil in a cool climate.

These three small countries have no minerals. Their wealth lies in their forests, rivers, and lakes, and in the energy of their farmers.

Talking Things Over

1. You have read about deserts in many lands. They are different in many ways, but alike in one way. As there is snow in Lapland, would you call that country a desert?

2. The Lapps of northern Finland depend on the reindeer to a great extent. From these animals the Lapps get food and clothing. In what ways does that remind you of our uses of cattle? Discuss other animals that we use in the same way.

3. The Germans and Danes had to develop thrifty methods of using their natural resources, because the land would not otherwise support the people. The Finns had to be just as careful, for their land is poor, too, and their resources are not great. Compare the way they take care of their forests with the way the French care for the trees in the Landes. Do we have some of the same ideas in this country?

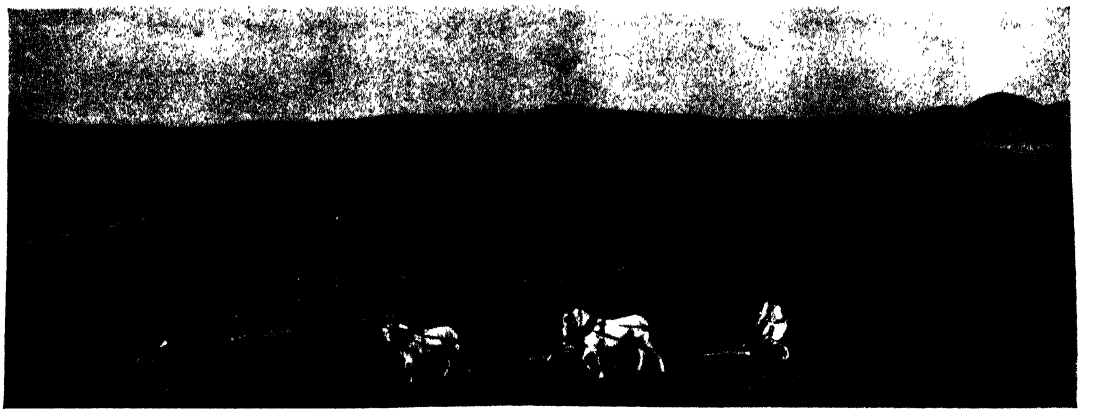
Doing Things Together

1. Plan an exhibit of small wooden objects, such as spools and pencils. It will be interesting to see how many different things used every day you can include in this exhibit.

2. One of the famous composers of our own time is Sibelius, a Finnish musician. Can you find some phonograph records of his music and listen to them in class?

3. See if your librarian can find you a copy of the *Kalevala*, which contains many of the myths of the Finns. Read some passages from it, and have others read parts of Longfellow's "Hiawatha." Do they sound alike?

4. In this chapter you have been given two names for many cities. One of these names we generally use; the other is the name as the people of the country say it. Find out how the people of France or Spain say "America," or "The United States."



Sovfoto

Vast regions of Russia are wheat lands. The rolling country called the Crimea, near the Black Sea, has been a fertile grain region since the days when the Greeks spread out to find richer farm-lands.

XXX. THE SOVIET UNION

A Huge Country in Two Continents

THE vast country of Russia. The Great Northern Plain stretches across nearly all of eastern Europe. It is interrupted by the Ural Mountains, and then it continues eastward across the northern half of Asia. Find this region on the map on page 432. On and around this plain live the Russians and the other peoples who make up the country now called the Union of Soviet Socialist Republics. It covers half of Europe and all of northern Asia. To cross this country from east to west you would have to travel twice as far as the distance from New York to San Francisco.

Over this enormous stretch of land, broken only by a few slow-moving rivers, the people are thinly scattered. Here and there are villages; but large cities are few. The country is so huge, however, that millions of people live in it. In fact, it contains almost one-twelfth of all the people in the world.

The Russian Slavs. Most of the Russians are Slavs. To understand who the Slavs are and where they came from, we must go back to the time when barbarian tribes from Asia were entering Europe. You remember that these peoples are called Indo-Europeans because their descendants settled in India and in Europe. There were two groups of these peoples. We have read about the western group in the story of Greece, Rome, and western Europe. But there was an eastern group, and some tribes belonging to it settled in Persia and India. Later, other tribes belonging to this eastern group moved westward from Asia into Europe. We call these tribes Slavs. They settled in Russia, Poland, and in other countries, as you will read later.

The Russian Slavs live in different parts of this great country. Those called Little Russians live in the land bordering the Black Sea, the land known as the Ukraine. The White Russians live northwest of the Ukraine. The Great Russians are scattered over the rest of the country. All of these speak dialects of the Russian language.

Other Russian peoples. There are many people in Russia, however, who are not Slavs. Among them are many tribes of Mongols, who are descendants of the Tatars and Huns. You remember that both of these peoples once invaded Europe. Today there are Mongol tribes in Russia that live near the Ural Moun-

Paul's Photos

When Peter the Great planned his capital, now called Leningrad, he was able to lay out the city as he wished. The city was built to order, and did not grow from a small town as most cities do. Peter planned it with wide streets and many bridges to connect the islands in the Neva River with the shores. There are many parks and palaces. Peter's palace, called the Hermitage, is now a public museum.

tains, near the Caspian and Aral seas, and in much of the region farther east. Some of them live in houses and farm for a living. But many of them are tent-dwelling shepherds, who live just as their ancestors did thousands of years ago. Many of them are Mohammedans.

Early days in Russia. For hundreds of years the Russian people were oppressed by powerful rulers. The land was divided into huge estates that were owned by nobles and farmed by thousands of serfs who were no better off than slaves.

The work of Peter the Great. The family of rulers in Russia during the seventeenth century was the house of Romanoff. A few years before 1700, one of the Romanoffs, Peter the Great, came to the throne. At that time Russia was more like an Asiatic than a European country. The people disliked Europeans and their ways. Peter changed that. He set out to make Russia more like her neighbors. He seized a strip of land along the Baltic Sea and another along the Black Sea. Those two strips of land gave Russia seaports in Europe. Of course this action displeased the countries that had owned these lands, the Swedes and the Turks. Peter made war successfully against both nations and held his seaports.

Peter also built a capital, which was later called St. Petersburg, on the river that flowed from Lake Ladoga into the Gulf of Finland. This city is now called Leningrad. Find it on the map on page 432. Peter, who was called the czar, or Caesar, of the Russians, also established schools, printing-presses, and factories. He had maps made and sent explorers into all parts of the land to see what resources his huge country had. One of his explorers was Vitus Bering. What sea is named for him?

The freeing of the serfs. Peter succeeded in making Russia a powerful European country. Czars who came after him kept up the large army he had raised but did not help the Russian people to become happier or more comfortable. Most of the people continued to be serfs, with almost no rights or property. Wealth and power were in the hands of the landlords, who were nobles. Even when one of the later czars freed the serfs, less than a hundred years ago, the people were not much better off than before.

Russian pioneers. After being freed, many of the Russians decided to look for better lands. Most of these pioneers traveled eastward or southward. Some settled on the

Sovfoto

The people who live on the Kirghiz steppe have been Mohammedans for many centuries. These men are wearing turbans made of astrakhan. Do you know what that is and where it is obtained?

Sovfoto

The Kirghiz people live along the north borders of the Takla Makan, a desert near Tibet. They live in tents very much like those of the nomads you see on page 450. You can see a part of the crisscrossed framework of poles at the right. The Kirghiz mother is wearing the old style clothes of her people and is spinning in the old way. Her daughter is dressed in modern clothing and is using a sewing-machine.

high, dry plains, or *steppes*, of Russia. Others settled on the land north of the Black Sea. This is called the Black-Earth Belt, and here the Russian farmers had an easier life. The soil is fertile, and there is usually enough rain for good crops.

The movement of these serfs reminds us of the pioneers of our own country, who moved to the prairies of our Middle West. Our farmers also raised wheat. And the best wheat raised on our prairie land is a kind that was grown in the Black-Earth Belt of Russia.

A revolution and a new Russia. Although a few of the Russian farmers had an easier time, the people in the cities were bitter and unhappy. During the World War there were riots and finally a revolution. Czar Nicholas, the last of the Romanoffs, and his family were killed. The leaders of the revolution set up a new kind of government.

The name of Russia was changed to the Union of Soviet Socialist Republics. Sometimes just the initials are used—U. S. S. R.—and sometimes it is called the Soviet Union. It consists of many different soviet republics. A soviet republic is not like one of our states. The people of each republic in the Soviet Union are ruled by a council that is called a soviet. At the head of the council is the president, who is very powerful. Over all the different republics is a Grand Council. The president of the Grand Council is really the head of the country.

An experiment in government. The government of the Soviet Union owns all the land and large properties such as railroads and factories. Most of the people work at tasks which the government decides must be done. As the government owns the forests and the mines, the rivers and railroads, the land and the factories, it decides what wages shall be paid, what hours people must work, and what work shall be done.

In many parts of Russia groups of farms

Sovfoto

These harvesters on a Russian collective farm have gathered for their noon meal. A traveling kitchen supplies the food for the workers from the community storeroom. The collective farm was made by putting together all the farms of a community into one large farm. The farmers live in a village and share in the products after the government has taken its share.

Sovfoto

These Kalmyks, who live in the region between the Caspian Sea and the Black Sea, are nomads. They live in tents which are made by covering a framework of poles with felt. One of the women is cooking over a fire made in a trench dug in the ground.

have been joined together into large units called "collective" farms. The government is supplying modern farm machinery to many of these collective farms. To pay for the use of the machinery, a large part of the produce goes to the government.

All these experiments in a new kind of government are being tried by a people who had no experience in ruling themselves before the World War. The common people of Russia had not learned gradually to govern themselves, as did the English and the American peoples. They had never been allowed to have any large share in their government. Now they are making many experiments in ways of government that have never before been tried by any large nation.

Natural Divisions of Russia

The map shows that this great Russian country stretches from warm lands in the south to barren wastes in the north. The southern borders are in the same latitude as San Francisco, but there are many thousands of square miles north of the Arctic Circle. The Arctic Ocean is the northern boundary.

The tundra and its people. Bordering this cold ocean is the region known as the tundra. It extends from Finland to Bering Strait. The tundra is covered with many swamps and crisscrossed with many rivers. The land is matted with mosses, stubby little shrubs, and dwarf trees. During the long, bitterly cold winter, the ground is deeply covered with snow. Summer, which comes quickly without any spring, lasts scarcely two months. Even in summer the frozen ground thaws out only about two feet in depth.

You would not expect to find many people here, for they could not get enough to eat. The people of the tundra are nomads who wander about, hunting and fishing, or following their herds of reindeer. These people have no homes except during the winter, when they burrow into tiny huts of rock or of sticks covered with sod. In the winter they live on the milk and flesh of reindeer, and on fish, which they catch through holes in the ice. In the summer they add wild berries and roots to their food. Some of these nomads cut hay in the summer for their reindeer. Some of them grow a little barley on small patches of cultivated land.

Sovfoto

This airplane view shows how timber is being cut in the Taiga. The lumbermen mark the forest into strips. They cut only half of the strips and leave the other half standing. Some of the smaller trees are left standing in the place where the larger trees are cut. In time, trees will grow to replace those that have been cut.

Sovfoto

This hunter lives near the Amur River in the far eastern part of the Taiga. He is showing a lynx skin to his friends. There are many peoples in the Taiga who earn a living by trapping.

What the "Taiga" is like. South of the tundra is one of the greatest forests in the world. It is called the *Taiga*, and it extends from Finland eastward across Europe and Asia to the Pacific. The great forests of Norway, Sweden, and Finland are part of the Taiga. In the northern half of this forest belt grow the evergreens, while the southern half is a mixed forest of hardwoods and softwoods. Fully half of the European part of Soviet Russia is occupied by this forest. Some land on the southern border of the forest has been cleared, and here rye, oats, flax, and potatoes are grown. Cattle are also raised in this region.

In the eastern, or Siberian, part of the Taiga there are very few people. Hence, there is scarcely any farming, there are no railroads within easy reach, and there are few towns. Life is hard here, for the winters are long, snowy, and bitterly cold. Turn to the map on page 432 and find the region of northeastern Siberia which is called Verkhoyansk. In winter it is one of the coldest places in the world. Houses in this part of Siberia are built mostly of whole logs instead of boards. The people are lumbermen and trappers, for the forests are full of such animals as foxes, martens, wolves, and sables, from which we get valuable furs. Here and there, located on streams, are sawmills and paper factories. Furs and lumber are the chief products.

The Volga basin. Southward from the Taiga is an enormous plain not unlike our prairies. On this plain are the low Valdai Hills, which are covered with forests. From these hills flow many of the Russian rivers. Trace their courses on the map on page 432.

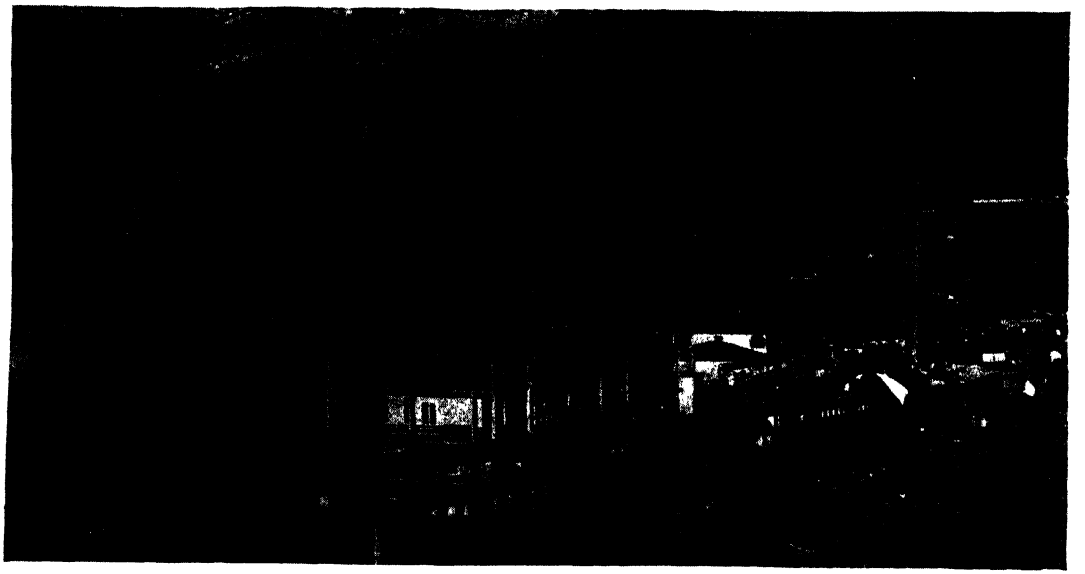
The Volga, the longest river of Europe, was once the center of Russian life. When the Mongols invaded Russia, the Russians fled for refuge to the source of the Volga in the Valdai Hills. The river has always been important in the life of the people, as it is a highway through the very heart of the country. It meant to the Russians what the Mississippi and the Ohio rivers meant to the American pioneers.

There are not many rapids to block navigation on Russian rivers, since they flow through a flat plain. For centuries the people have used these streams as a means of transportation. Today many canals link the rivers, just as canals do in other European countries.

The Russian Plain. This Russian prairie

Sovfoto

When we think of fisheries, we do not always remember that the ocean furnishes other foods besides fishes. These Russian girls are drying oysters on large racks at the seashore. This fishery is in the far eastern region along the Sea of Okhotsk.



Sovfoto

Trace the Volga River on the map on page 432. It passes through many miles of country which has no other means of transportation than the boats which move up and down this broad stream.

includes the Black-Earth Belt, where the soil is deep and fertile. This region of rich soil extends all the way to the Tien Shan Mountains in central Asia. Here the winters are very cold and the summers hot, for this is the interior of the continent. You have read that in these northern regions only the border lands near the seas have mild climates.

Most of the rainfall, which is not very heavy, comes in the early summer. This is good for the farmers, who raise crops of spring wheat, barley, flax, and oats. Of these, wheat is the largest crop. You will understand how much wheat is raised when you learn that usually the Soviet Union is second to the United States in the amount of wheat it produces.

This prairie country is the great farming region of Russia. There are enough people and good land in this region to make it the greatest farm-land in the world if the farmers can learn to work the soil by scientific methods. The government is making an effort to teach the people modern ways of farming, but they are only just beginning to use modern machinery made in government factories.

The steppes where nomads rove. Southeast of the Black-Earth Belt is the dry land of the Russian steppes. These steppes are grazing lands, except in the region around the Caspian Sea. There the land is so dry that it is almost a desert. The poor grasslands, extending to the mountains of central Asia, are occupied by nomads. The largest of these tribes is the Kirghiz. Its members live in the steppes that reach from the lower Volga eastward to Lake Balkhash.

The Kirghiz move about a great deal, for they are always hunting new pasture for their flocks and herds. Their homes are tents made of a framework of willow sticks covered with woolen cloth or felt. When the tribe moves, the camels and cattle carry the tents, pots, and sacks. The horses are used only for riding.

A desert land where crops are raised. South of the steppe land is a large lowland region. Although it is a desert, the melting snows from the mountain-range at the west furnish water for irrigation. Here,

through the long growing season, cotton is raised, and mulberry trees thrive. The people have become expert weavers, and their silks and rugs are sold in the bazaars of Samarkand and Tashkent. Sheep, cattle, and fruits are also raised in the fertile valleys among the Caucasus Mountains. Find these places on the map on page 465.

Recent Progress in Russia

The development of natural resources. Although the Russian people are mostly farmers, their land has great resources in the form of mineral wealth. These resources are now being developed. The principal minerals are coal, iron, and oil.

The Russians have not yet developed as an industrial people. But industrial districts are now growing up in the regions where raw materials are plentiful. The government has built many factories and mills, and the people are being taught to labor in them. Many of the workers are women and girls.

Moscow, or Moskva, the new capital of the Soviet Union, is the center of the greatest industrial district. It lies in a thickly populated region and is one of the largest cities in Europe. Just south of Moscow are coalfields and good iron mines. With plenty of labor close by, and coal and iron at hand, there are many factories in Moscow. It is also not far from the Taiga, and wood can be obtained easily. Wood, as you know, is needed for manufacturing many things.

A second large industrial and coal-mining region is the basin of the Don River, right in the heart of the Black-Earth Belt. Another is around Leningrad.

At Baku, in the Caucasus, are many oil-wells. Huge oil refineries have been built, and Russia is next to the United States and Mexico in the amount of petroleum produced. The oil is carried by railroad and through pipelines all the way to Batum on the Black Sea. From there it can be exported to Europe in tank steamers or sent up the Dneiper and Don rivers into the heart of Russia.

Poor transportation hampers progress. Although rivers and canals connect the Baltic, the Black, and the Caspian seas, goods cannot be shipped everywhere by boat in the winter, because many of these water highways are frozen. The river towns and cities are then forced to use the land roads, most of which

Thousands of tractors are made in Russia to do the work on the large collective farms. This tractor is pulling five seeding machines and can cover many acres of land in a day. Look again at the picture on page 447 and notice the three small figures in the distance. They are women at work sowing wheat by hand. Which way takes the most time? Which way requires the greater number of workers?

Sovfoto

The Kirghiz boy is holding the colt while his sister milks the mare. From the milk the Kirghiz make a drink called "kumiss," which is somewhat like our buttermilk. Other Russian tribes also use mare's milk.

are still poor and unpaved. In many places during the winter it is much easier to use sledges on the ice of the rivers or canals.

Most of the railroads in the Soviet Union run to Moscow. They connect the industrial regions with the ports. Look at the map on page 432 and notice where the principal Russian railroad is. Find the city of Omsk. Trace the Trans-Siberian Railway from this point all the way to the Pacific Ocean. This is the only railroad that crosses Asia. Most of the vast territory to the north and to the south of it is without modern means of transportation. Goods must be hauled to the towns in carts, by oxen, camels, donkeys, horses, or men. In only a few places in Siberia are roads good enough for motor trucks to be used.

With transportation so poorly developed, it is not strange that the Soviet Union has not made the most of the great resources of the country.

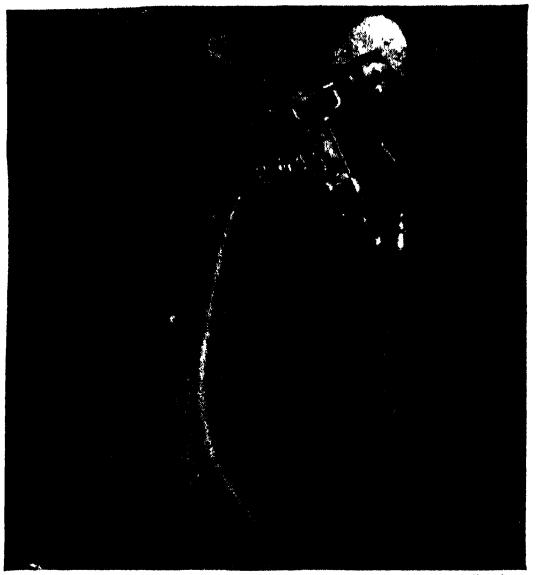
Russia's ports and their trade. Russia has few good seaports for such a large country. This lack has prevented much trade with other countries. On the north are the ports of Murmansk and Arkhangelsk. Murmansk is free from ice because the winds that blow across it are warmed as they pass over the North Atlantic Drift. Arkhangelsk is many miles farther south, but for half the year it is ice-bound, so that ships cannot enter. These two ports handle lumber from the Taiga, and ships load there to carry Russian lumber to many countries.

Leningrad is Russia's western port. Lumber and furs are shipped from that point. Thousands of miles eastward, at the end of the Trans-Siberian Railway, is the port of Vladivostok on the coast of the Sea of Japan. This port also handles lumber and furs. The chief port for oil is Batum, while wheat leaves the country at Odessa. Both of these cities are on the Black Sea. Turn to the map on page 432 and find these six important Russian seaports.

Education in Russia. Only a few years ago most Russian people could neither read nor write. The children of the peasants did not

Sovfoto

North of Afghanistan is a region where the Uzbeks live. Find Samarkand on the map on page 432. This Uzbek woman of Samarkand is tending silkworms. Those you see are not half grown and will eat many pounds of mulberry leaves before they are ready to spin their silk into cocoons.



Sovfoto

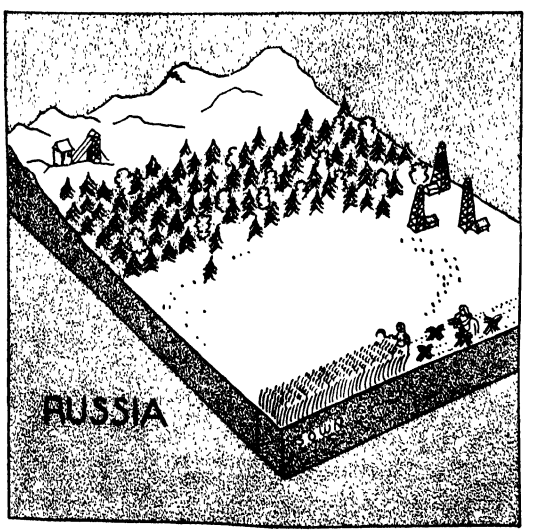
Modern methods of mining coal are used in most of the Russian mines as you can see by looking at this miner. He is using an air drill.

have any school training. Now schools have been established in all parts of Russia, even among the nomads, and the people are slowly learning to read. It will take a long time to provide a good education for all, because many thousands of school teachers must first be trained.

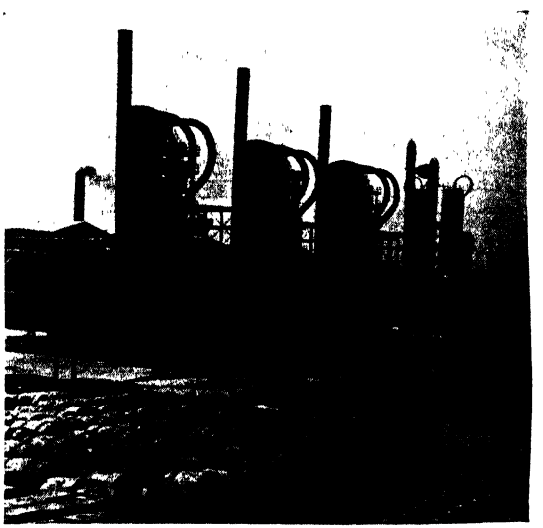
Another problem is the language of the people. Many peoples in the Soviet Union speak languages that are somewhat like Chinese, while others are more like that of the Arabs. Many have languages of their own that are unlike any other. Perhaps some day all the people of the Soviet Union will be taught to read and write in Russian. Russian is hard for foreigners to learn. It is said to be the hardest of all languages except Chinese.

Russian writers. Although most Russians have been unable to read or write, Russia has produced some great authors. Perhaps the greatest one was Tolstoy. But many others have had their books translated into English.

Russian music. Russian composers are known all over the world. Perhaps you have heard Rimsky-Korsakow's "Flight of the Bumble-Bee" or some of the music in Tschaikowsky's "The Nutcracker Suite." The Russians are especially fond of dance music and



This chart shows that only about one-sixteenth of the land in Russia is cultivated to crops.



Sovfoto

At Baku, on the Caspian Sea, the Russians have built great oil refineries to handle the petroleum from the wells in that region. In the factory you see here, gasoline is made. The barrels and cans are filled with waxes and heavy oils that are left after the gasoline is removed from the petroleum. The various products are shipped from Batum, a port on the Black Sea.

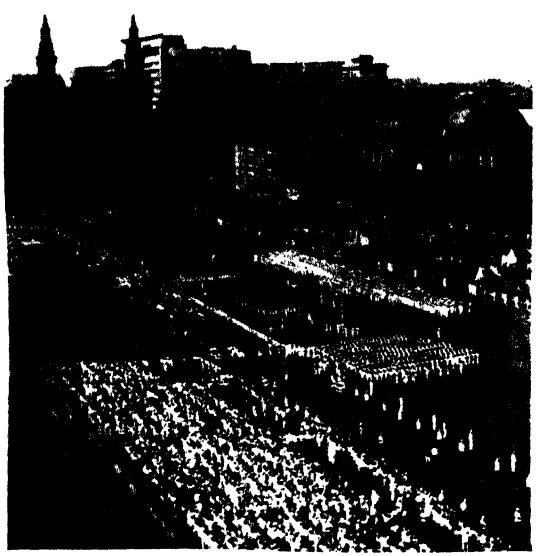
songs. Much of the music is sad, and it reminds us that these people were persecuted by harsh rulers for many centuries.

There have been many Russian composers, singers, and pianists. Among them are such famous musicians as Rubinstein, Chaliapin, Rachmaninoff, Glazounow, and Strawinsky. Many of them have come to this country to charm us with their music, for music is a language that almost all people can understand.

Talking Things Over

1. In the United States we are so used to living in a large country that it is hard to realize that many of the European countries are smaller than our state of Texas. This is not true of Russia. Find out the area of Russia and compare it with that of the United States. Look at maps of the two countries and discuss the ways in which they are different.

2. In an encyclopedia or almanac find the number of miles of railroads and highways in Russia. Compare the figures with those for England. Talk over the reasons why it is harder to build railroads and highways in Russia than it is in England.



Sovfoto

There is plenty of room for parades in the public square of Moskva. Here you see thousands of people watching a parade of boys and girls who belong to athletic clubs and societies.

Sovfoto

One problem of the Soviet Republics is that millions of grown men and women can neither read nor write. Russian teachers are sent to these people and spend many hours teaching them. In some regions it is hard to find teachers who know the language of the people. The women you see here speak a language entirely different from Russian.

Doing Things Together

1. The government in the Soviet Union is trying to improve industrial conditions in their republics. News about this country is likely to be out of date very soon. Watch the newspapers and magazines for news items about Russia. See if these items add to or change the facts given in this chapter.

2. In two parallel columns list four seaports of the Soviet Union and four American ports. Beside the name of each port, write down one or two of its chief exports.

3. From newspapers and magazines collect pictures showing modern machinery used on farms and in factories of Soviet Russia. Then find pictures of American farms and factories showing the machinery used in this country. Do you see any similarities?

4. You will enjoy the music from Tschaikowsky's "Nutcracker Suite." Try to find phonograph records of the different parts of this ballet. You will enjoy the music even more if you know the story that goes with it. One book that tells the story briefly is *Listening Lessons in Music*, by Agnes Moore Fryberger. Talk the story over before you play the music.

5. There are many Russian folk-dances. Perhaps one of your teachers knows some of them. A group of pupils might give one or two dances.

Publishers' Photo Service

Through the Slavic countries of Poland and Czechoslovakia the traveler sees families at work in the fields. These Moravians, who live in the valley of the Morava River in Czechoslovakia, are planting potatoes. Perhaps this farm is not large enough nor the farmer prosperous enough to have machinery.

XXXI. TWO MIDDLE COUNTRIES OF EUROPE

Poland and Czechoslovakia

THE Russians are not the only Slavic people in Europe. The countries around the Baltic Sea—Estonia, Latvia, and Lithuania —are partly Slavic and partly German. But there are other important Slavic countries. The first one that we shall study is Poland. Turn to the map on page 300 and find this country.

A country with an open boundary. Poland has only one natural boundary. On the south are the Carpathian Mountains, which separate Poland from Czechoslovakia. The northern section of Poland is a part of the Great European Plain. It is a flat land that runs into the plain of Russia on the east and into the plain of Germany on the west. There are not even any large rivers to mark the boundary lines.

Poland's story. Once Poland was the largest country in Europe, with the exception of Russia. It stretched from the Baltic Sea down to the Black Sea. When the hordes of Tatars invaded Russia, it was the Poles who kept them from moving farther into Europe. Later, when the Turks tried to conquer lands west of Turkey, it was the Poles who saved Europe from the Mohammedans. So we can say that the Poles helped to keep Europe a Christian continent.

Poland was not able to stay a large, strong nation because the power was in the hands of greedy nobles. About one million nobles had thirteen million serfs working their estates for them. Some of the estates were so vast that it took thousands of serfs to farm them. The serfs lived in terrible poverty and mis-

Ewing Galloway

As Gdynia is a "built-to-order" city only a few years old, we can expect it to be modern. The design of this warehouse and rice mill proves that the architects did not copy old buildings along the Baltic Sea. The warehouse is well located for receiving and shipping by water.

ery. The nobles were not interested in having a strong central government and did nothing for the people. You have read about similar conditions in Russia.

At last Poland's neighbors stepped in and divided up the country. Russia took a part, and Prussia and Austria divided up what was left. Then for more than one hundred years there was no independent nation called Poland. But the condition of the common people did not improve very much. The land was still divided among rich landlords, and it was still farmed by poor peasants. They were no longer serfs, but they were living in much the same kind of poverty.

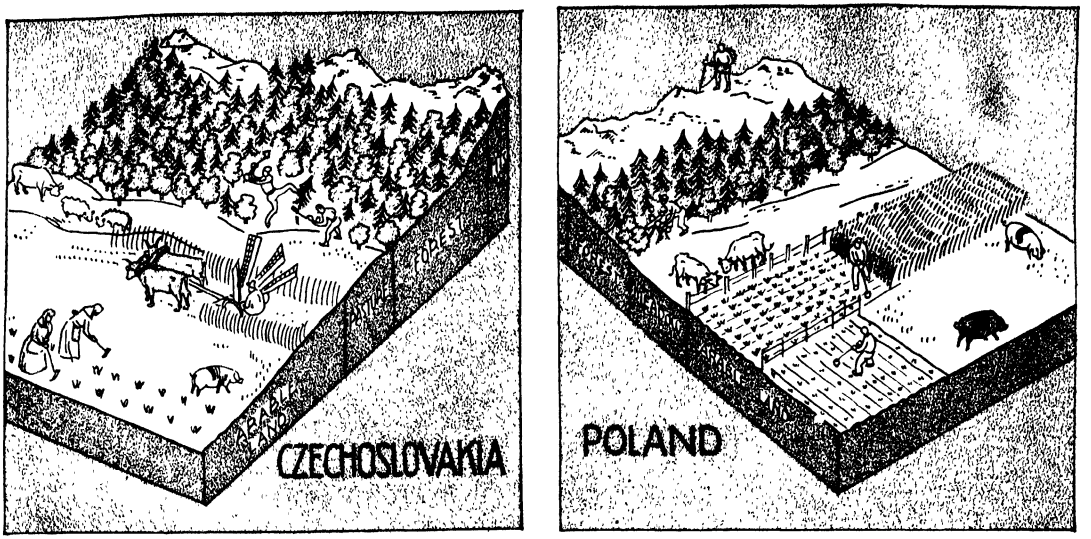
After the World War, Poland again became an independent nation, and it is now a republic. By the peace treaties it was given a seaport on the Baltic. Laws were passed to divide up some of the large estates and to abolish all titles of nobility.

The land of the Poles. If you should travel through Poland, you would still find large farms worked by peasants for rich landlords who live in the cities. But little by little, the people are being granted some of the land and are improving their condition.

The southern part of the plain has good soil for wheat and other grains, flax, potatoes, and sugar-beets. In the highlands of the Carpathian Mountains are coal and iron mines, and deposits of lead, zinc, and sulphur. Poland also has a natural supply of salt, potash, and petroleum. In the mountains and also in the hilly country in the northeast are valuable forests from which the Poles take lumber for their own use and for export.

Polish cities. Warsaw, or Warszawa, the capital and largest city of Poland, is on the Vistula River. It is the center of the Polish railroads, which connect the principal manufacturing and trading cities. To the east of Warsaw are many miles of marshy land, reaching to the Russian border. There are few towns in this marshy country. The people there make a living by fishing, hunting, and cutting wood.

Lwów (Lemberg), Kraków, and Lódz are important cities. Lódz makes cotton textiles, while the other two have iron and steel works.



These charts show how the land is used in Czechoslovakia and Poland. Nearly half of Poland is plowed and sowed to crops, but only two-fifths of Czechoslovakia is arable land. One-sixth of each country is used for pastures and meadows. One-fifth of Poland is forested, but one-third of Czechoslovakia is wooded. How much remains in each country for all other uses, including land that has little value?

Poznań, in the farming region, has distilleries and mills that buy grain from the farmers.

Poland is not only an agricultural nation, but an industrial one, and has many products to ship out to other countries. When the boundaries were arranged after the World War, Poland was given a strip of land through Germany to the Baltic Sea. This is called the Polish Corridor. At the Baltic end of this corridor is the port of Danzig, which was made a "free" port. As you know, all nations are allowed to use a free port. Poland was expected to be satisfied with this free port. But the Poles wanted a seaport of their own. So they dredged out a harbor and built the city of Gdynia on a barren, sandy waste, twelve miles north of Danzig. Through this new port flow shipments of farm machinery for the large Polish farms and exports of Polish farm products, lumber, and textiles.

Ewing Galloway

These Polish girls are busy wrapping soap made in a Warsaw factory. Do you know what raw materials are required for making soap? Does Poland have such materials, or must they be imported?

Czechoslovakia

A new country of two peoples. Just south of Poland is the new country of Czechoslovakia. Before the World War it was a part of the Austro-Hungarian Empire. Now it is an independent republic, made up of two groups of peoples. The Czechs live in the western part, on the Bohemian Plateau. The Slovaks live in the eastern, mountainous part. The two sections of the country are separated

Czechoslovak State Railways

Not all the farms in the Slavic regions are worked by hand in the old way. In Poland and in Czechoslovakia are many prosperous farmers who use modern machinery to help them farm more land with less labor. This Czech farmer is using a tractor to furnish power for running the thresher.

by the valley of the Morava River. Besides being an important trade route, this valley has rich farms. Since there are deposits of coal, copper, and other minerals, it is an industrial district, too.

How the people earn a living. In the broad valleys of the Bohemian Plateau there is fertile farming country. Here oats, potatoes, sugar-beets, wheat, rye, and barley are grown. Many pigs and cattle are raised. Although these valleys are a rich farming country, more than half of the people on the plateau work in factories and mills.

Abundant coal in the Bohemian Plateau furnishes power for the factories, which turn out great quantities of shoes and gloves, and thousands of yards of cotton, silk, linen, and woolen cloth. There are also iron and steel mills and sugar refineries.

The mountains and ridges on the plateau are covered with forests that furnish large supplies of lumber. Deposits of clay and sand furnish raw material for china and glass. Large quantities of Bohemian glassware are exported to our country.

Slovakia, the part of the country to the east, is mountainous and contains valuable forest land. The people are mostly farmers, who grow food for the factory workers in the other part of the country. The Slovaks speak a language somewhat different from the Czech language, but the two peoples can understand each other.

Czechoslovakian markets. The capital of the country is Praha, lying on a bend of the Moldau River. This river is a tributary of the Elbe. Turn to the map on page 266 and find these rivers. Notice that Czechoslovakia has no way to reach the seacoast of Europe.

Since Czechoslovakia has no seaports, all her exports have to go through other lands. But the country is centrally located, and it is crossed by important railroads that run across Europe from north to south and from east to west. Czechoslovakia also has the free use of three rivers that have been "inter-

nationalized." All countries may use an internationalized river without paying toll or duty. These three rivers are the Elbe, the Oder, and the Danube. Trace them on the map and see how they link Czechoslovakia with the North Sea and the Black Sea.

Bratislava, not far from Vienna, is Czechoslovakia's port on the Danube. Plzen is a city famous for its steel mills and breweries. Brno manufactures great quantities of woolens.

Famous Czechs. Most Americans know this country for its beautiful glassware, but there have been famous Czechs who have given us other things. The first man to use pictures in children's school-books was a Czech teacher named Comenius. One of the world's noted violinists was Jan Kubelik. And many Americans have heard orchestras play "To the New World," a symphony by Antonin Dvořák, the Czech composer who spent many years in America. Another famous musician was Friedrich Smetana. The Czechs are especially proud of their music and the folk-songs of their peasants.

How the country has advanced. Before the World War there were fewer than two hundred schools in Czechoslovakia. One of the first things the people did when they became independent was to start more than four thousand new schools, so that all children could get an education. Many of the large estates were divided up among landless farmers. Railroads and canals were built, so that the products of the country could be moved to markets. Now Czechoslovakia is one of the most prosperous of the new countries in Europe.

Czechoslovak State Railways

Woolen carpet is woven on this giant loom in a Czechoslovak factory. Piled at the left you can see many bobbins wound with dyed yarn. Underneath the bench is a roll of carpet as it comes from the loom. From what part of the country will this factory obtain its raw materials?

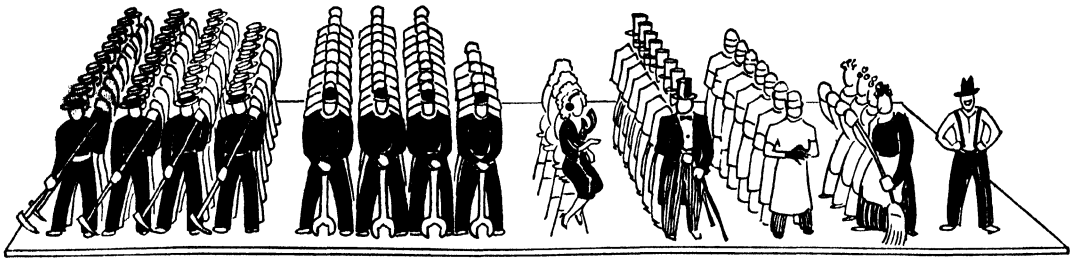
Ewing Galloway

Czechoslovakia produces much gaily decorated pottery and colored glass. These workers are painting bright floral designs on vases.

Talking Things Over

1. Look at a map of Europe. You can see that Poland has no natural boundaries such as most of the other countries have. Discuss the boundaries of Italy, France, Great Britain, Spain, and other European nations. Which countries seem to you to have the most effective boundaries?

2. In newspapers and magazines look for any items or articles that deal with Poland or Czechoslovakia. Discuss them in class and see if any of them give you information in addition to what you have found in this chapter.



The groups of people in this picture chart show how the Czechoslovakians earn a living. From left to right the groups represent farmers, workers in industry, transportation, banking and commerce, professional men, domestic and service workers, and miscellaneous. There should be more than one left for miscellaneous occupations. Count up the figures and see how many figures ought to be at the extreme right.

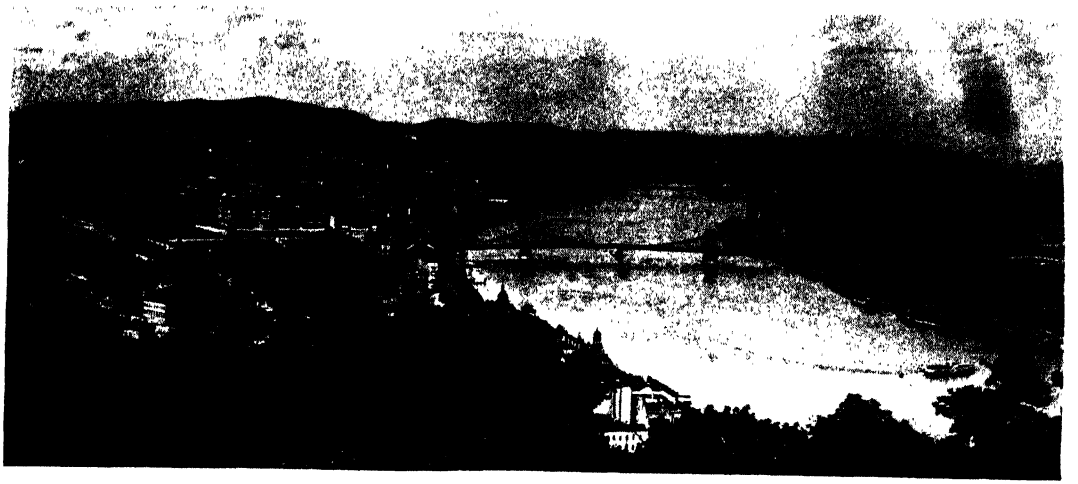
Doing Things Together

1. Plan an exhibit of articles manufactured in Poland and Czechoslovakia. You may be able to find some pieces of lovely embroidery and of hand-woven cloth. There are many other products from these countries, of course. Perhaps some of you may find that your shoes are marked "Made in Czechoslovakia."

2. Paderewski is a great Polish patriot. For what else is he famous? Plan a program in which you tell something of his life and play one or two phonograph records of his music. Chopin, the famous composer, was a native of Poland, too. It would be enjoyable if you could find a record of one of his compositions played by Paderewski. You might find a record of a "Polonaise," and discover what the word means.

3. If you have gym classes, ask your teacher if she can teach you some folk-dances that are danced by the people of this section of Europe. Perhaps you can borrow costumes for the dancers.

4. You have probably learned some words in every chapter of this book that you never knew before. It would be a good plan for each of you to make a list of five words which were unfamiliar to you before you read them in the last two chapters. You can read the chapters over rapidly to help you to recall the words. Then work together to make a list that includes all your words. Put them on the blackboard. Probably many of you will pick out the same words.



James Sawders

Budapest is really two cities. Buda, which you see on the left, is a very old city. The Romans had a city on these low hills, only they called it "Aquincum." Barbarians originally settled in the low, flat plain at the right, on the opposite bank of the Danube, where the city of Pest now stands. Most of the palaces, government buildings, and homes of the nobles are in Buda. Pest is the industrial and commercial center.

XXXII. THE DANUBE VALLEY COUNTRIES

Austria, Hungary, Romania

SOUTH of the new country of Czechoslovakia are three much older countries, Austria, Hungary, and Romania. Through them runs the famous Danube River, about which you have read many times. Turn to the map on page 300 and locate this river. Trace it from its mouth in the Black Sea to its source in Germany.

Austria, a mountain land. You can see from the map that the Alps slope down through Austria to the Hungarian Plain. Only a little corner of this small country, near the city of Vienna (Wien), is valley land. Austria is like Switzerland, and its people have the same kind of problems to solve that the Swiss people have, in order to make a living in their mountainous country.

A once important empire. You will remember reading that Austria was once a large and powerful country. The house of Habsburg began to rule over it near the end of the feudal period. The Habsburg rulers became more and more powerful. Finally, the Habsburgs united Hungary with Austria and formed the Austro-Hungarian Empire. This was a large and important country until the end of the World War. It included what became Czechoslovakia, Hungary, Austria, part of Poland, and most of the north shore of the Adriatic Sea. This great empire had large resources for manufacturing and many rich farming regions. Its capital, Vienna, was an important trading and manufacturing city, and a center for art, music, and science.

But after the World War, in 1918, Austria-Hungary was divided into several countries. Most of the good farm-land was lost by Austria as well as almost all of the manufacturing districts. Austria was left with only mountainous country and with only one large city, its capital, Vienna. In 1938 Austria became a part of Germany.

Austria's resources and products. Austria has more minerals in her mountains than has

Austrian State Tourist Department

In the mountains of Austria there are many health resorts where people go to be treated for sickness. Some of the sanitariums are built near natural springs or streams of water that have medicinal qualities.

Switzerland. There are enough coal and iron to supply raw materials for many steel mills. In the mountains are large forests to furnish lumber. There is some good pasture land for sheep and cattle, and there is a little good farming land.

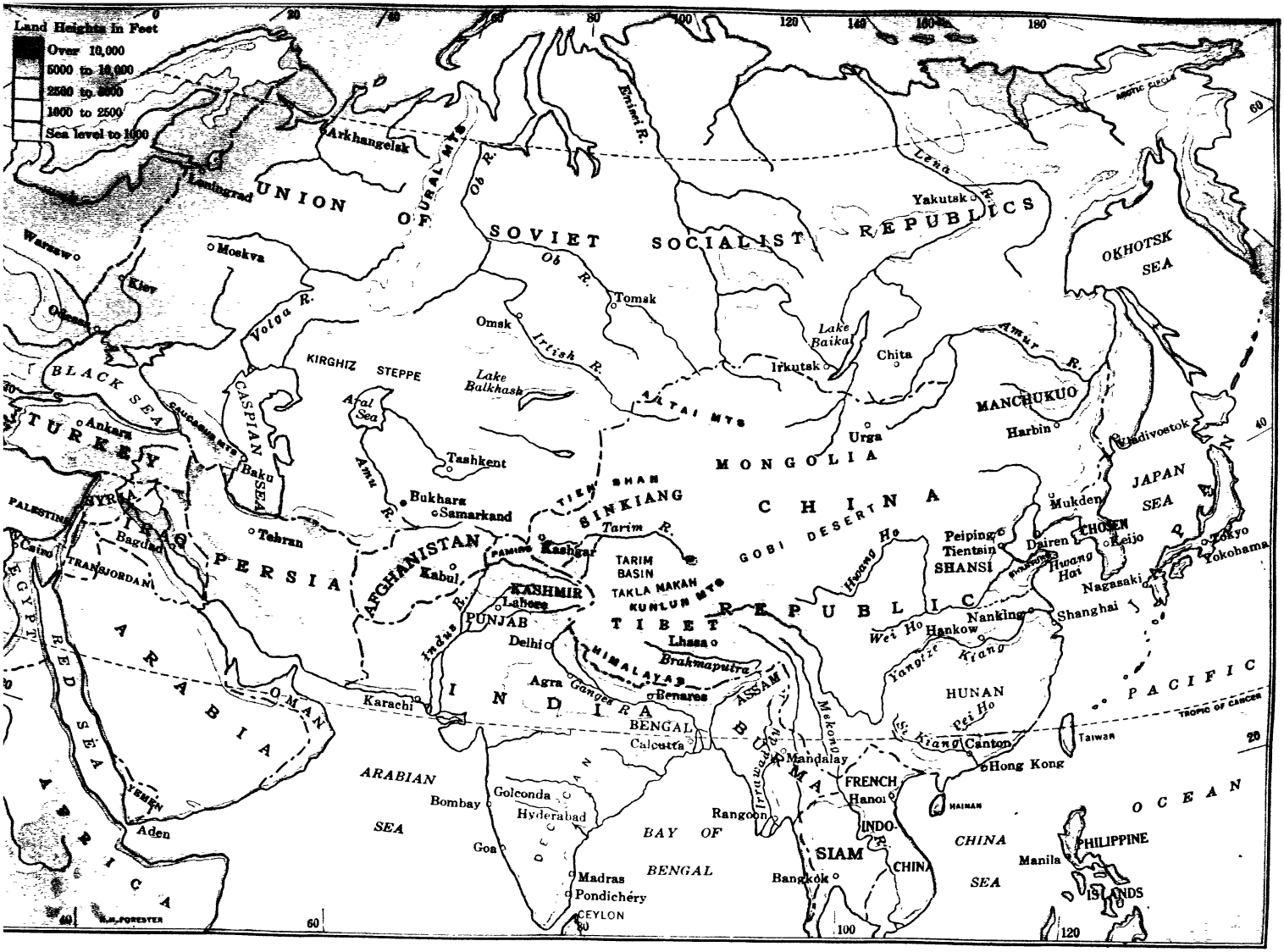
Knowing these resources, you can tell what the products of Austria are. They are machinery, wood-pulp and paper, shoes and other leather goods. Austria also produces goods woven from cotton, linen, or silk. Which of these products are made from raw material that must be imported?

Like Switzerland, Austria has mountain streams that furnish power to run many of the mills and factories. Like Switzerland, too, Austria has beautiful mountain and lake resorts where travelers spend their vacations. This tourist trade is important to the people because it brings money into Austria from other countries.

The capital on the Danube. One-third of all the Austrian people live in Vienna. Since Roman times this city has been an important commercial center on the Danube River trade route. The Danube, as you learned in the story of medieval times, for many centuries has been a highway for trade from east to west. Look again at the map on page 266. Notice the valley of the Morava River and see how it runs southward to the Danube Valley near Vienna. In olden times traders

Ewing Galloway

Vienna contains many beautiful buildings. Here you see, at the left, the parliament buildings, the Rathaus with its high tower, and a part of the great University of Vienna. At the right is a large theater.


Land Heights in Feet
Over 10,000
5000 to 10,000
2500 to 5000
1000 to 2500
Sea level to 1000
UNION OF SOVIET SOCIALIST REPUBLICS
Arkhangelsk
Leningrad
Moskva
Warsaw
Kiev
Odessa
Volga R.
Ural Mts
Ob R.
Yenisei R.
Lena R.
Yakutsk
Tomsk
Omsk
Irtish R.
Lake Baikal
Irkutsk
Chita
Amur R.
OKHOTSK SEA
ARCTIC CIRCLE
KIRGHIZ STEPPE
Lake Balkhash
Aral Sea
Amu R.
Altai Mts
MANCHUKUO
Harbin
Vladivostok
BLACK SEA
Sea of Azov
Caucasus Mts
CASPIAN SEA
Baku
TURKEY
Ankara
Urga
MONGOLIA
Tashkent
Bukhara
Samarkand
Tien Shan
SINKIANG
CHINA
JAPAN SEA
Mukden
Peiping
Tientsin
Dairen
CHOSEN
Keijo
Fusan
Hwang Hai
Tokyo
Yokohama
Nagasaki
PALESTINE
SYRIA
IRAQ
Cairo
Baghdad
TRANSJORDAN
Tehran
PERSIA
AFGHANISTAN
Kabul
Kashgar
Tarim R.
TARIM BASIN
TAKLA MAKAN
GOBI DESERT
Hwang Ho
SHANSI
KASHMIR
Lahore
PUNJAB
Indus R.
TIBET
KUNLUN MTS
HIMALAYAS
Brahmaputra
Lhasa
REPUBLIC
Wei Ho
Hankow
Nanking
Shanghai
Yangtze Kiang
EGYPT
RED SEA
ARABIA
OMAN
Delhi
Agra
Ganges R.
Benares
Karachi
INDIA
ASSAM
BENGAL
Calcutta
HUNAN
Si Kiang
Canton
Taiwan
Hong Kong
PACIFIC OCEAN
TROPIC OF CANCER
Mandalay
Irrawaddy R.
Mekong R.
FRENCH INDO-CHINA
Hanoi
HAINAN
SIAM
Bangkok
Rangoon
BAY OF BENGAL
ARABIAN SEA
Bombay
Golconda
Hyderabad
Goa
Madras
Pondichéry
CEYLON
Aden
YEMEN
ABYSSINIA
Manila
PHILIPPINE ISLANDS
CHINA SEA
0
20
40
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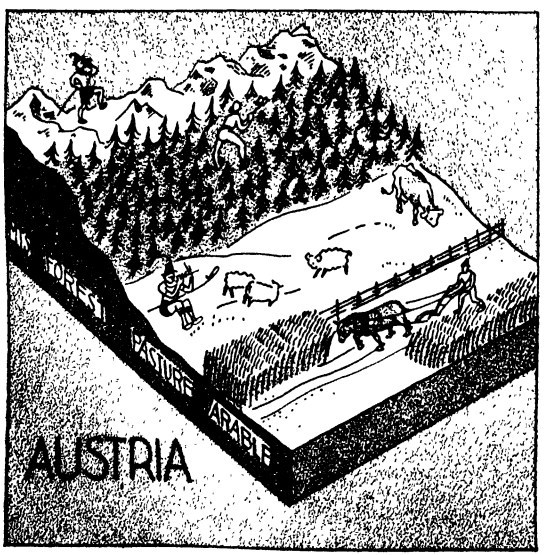
80
100
120
140
160
180

Austrian Tourist Information Office

This air view of St. Florian, Austria, shows a community in the farming region. Notice the buildings of the great monastery. As early as 600 A.D. there was a monastery here. In the nineteenth century a great Austrian composer, Bruckner, was organist of the monastery church. Can you find the church?

went up the Morava Valley from Vienna and then to the North Sea by following the Elbe Valley, or to the Baltic Sea by following the Oder Valley. Trace these routes on the map.

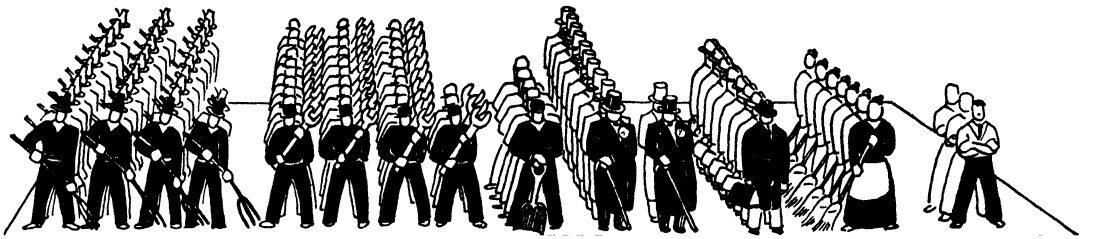
For many centuries these traders helped to make Vienna prosperous. It was a cross-roads city, rich and gay. Today Vienna is far from prosperous. Austria is now so small that Vienna's factories and great businesses cannot obtain enough raw materials to keep busy. But the old city is still beautiful. It has wide streets, many parks and gardens, and fine public buildings. The Ringstrasse, or Ring Street, reminds us of feudal times. In those days a great wall circled the town to protect it from invading armies. When the wall was torn down in modern times, its place was taken by this wide avenue that forms a ring around the heart of the city.



One-fourth of Austria is arable land, and another fourth is used for meadows and pastures. More than one-third of the land is covered with forests. How much land is left? Do you think that the remaining land is of much use to the Austrians?

Look again at the map on page 266. To the north and east of Vienna are countries of Slavic people. West and northwest are countries of people who are mostly German. Vienna, you see, was a meeting-place for two large groups of peoples. Since most of these people now have countries of their own, Vienna is no longer so important.

Austria's gifts to us. Many American doctors have studied in the famous medical schools of Vienna. But most Americans, when they hear the name of Vienna, think of music. A noted composer, Johann Strauss, wrote many tuneful dances. You have probably heard "The Beautiful Blue Danube." Some



These groups of figures show how the Austrians earn a living. From left to right the groups represent farmers, workers in industry, miners, people employed in banks and offices, professional men, domestic workers, and people in all other occupations. Count the figures and find out how many are in each group.

of the greatest musicians of the past lived in Vienna—such men as Mozart, Haydn, Beethoven, Schubert, and Brahms. Their music is known and played almost everywhere.

Hungary, the Basin Land

The "Alfold." East of the mountainous land of Austria lies a wide, fertile basin. The map on page 300 shows that this basin is surrounded on all sides by mountains. The Danube River flows through the basin, and here several rivers join it. Find them on the map on page 300.

Most of this basin, which is called the *Alfold*, is in the country of Hungary. It is the most fertile land in all Europe. Its pastures feed many cattle, sheep, and pigs; and on the farm-lands grow large crops of wheat, tobacco, sugar-beets, rye, barley, hemp, potatoes, and corn. This is one of the few places in Europe where the kind of corn we have in America will grow well.

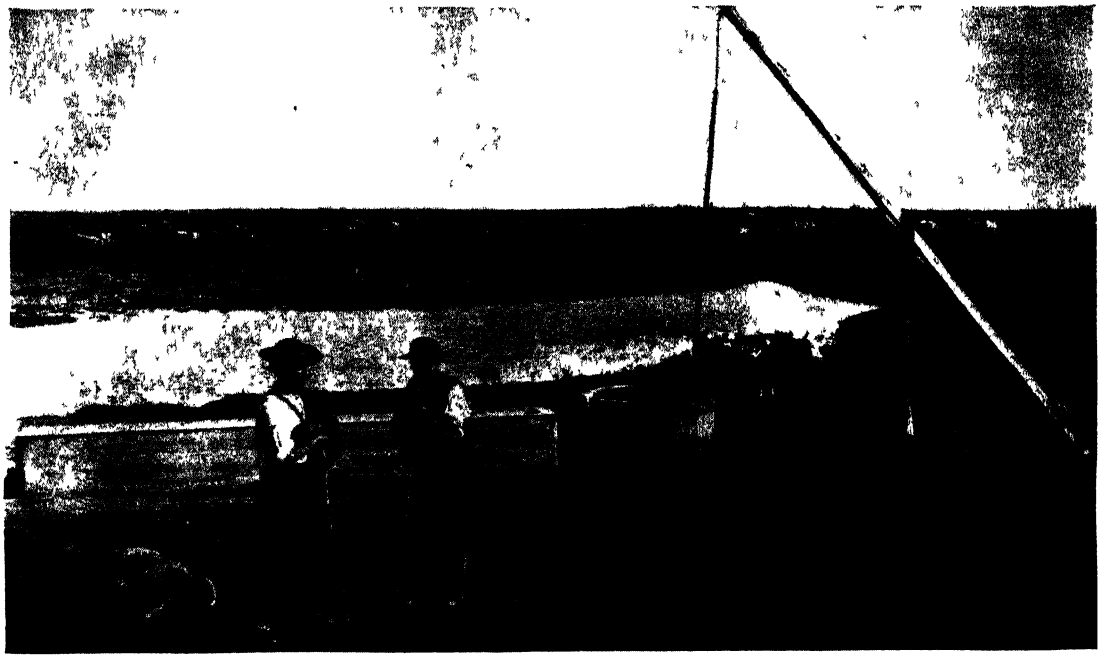
The people of Hungary. The Hungarian people call themselves Magyars. About the time that Charlemagne was forming his empire in western Europe, nomads from Asia, called Magyars, came up the Danube Valley. These Magyars were not like the tribes of Germans or the Slavs who had come into Europe from Asia. Perhaps the first home of the Magyars was farther east than the first homes of the other tribes that came from central Asia.

The Magyars spoke a language unlike any other language in Europe. Even today, although it has changed a good deal, it is still unlike the language of any other people in Europe except the Finns. In some ways it is like the language of the Turks.

These Magyar raiders forced their way up the Danube to the Alfold, which was then occupied by some of the Slavic tribes. The huge plain was a good pasture land for their flocks and herds, and the Magyars settled there. These invaders were like a wedge, dividing the Slavic people who lived to the north and the south of them. West of the Magyars were the German tribes, who bravely resisted the new-comers and forced them to stay in their basin land.

The coming of the Turks. You have read how the Poles, a Slavic people, battled the Turks and helped to save Christian Europe from a great Mohammedan invasion. The Hungarians battled, too, but lost their country. The Turks invaded it and held all except one corner of it for nearly two hundred years. Here and there in Hungary, today, Turkish mosques, or churches, can be seen.

The little corner of Hungary that was left to the Christians came under the rule of Austria. Finally the Austrians won Hungary from the Turks, and the Magyars once more had a country of their own. They have always been a people who wanted independence, and the Austrians had to give them



James Sawders

These Hungarian herders have rounded up their cattle beside a water-hole on the great plain which is known as the Puszta. Thousands of cattle, as well as many horses, are raised in this region. Notice that the land is flat and treeless as far as you can see. What part of our own country is this like?

equal rights in the new empire, which was called the Austro-Hungarian Empire.

Independent Hungary. After the World War, Hungary became independent. But it was not so large as the old Hungary. One slice of the Alfold was given to Czechoslovakia, another slice to Romania, and still another to Yugoslavia. About three million Magyars live in these sections of old Hungary. The Hungarians think that these people and their lands should belong to the new and independent country of Hungary.

Europe's vanishing cowboys. Before the cities of Europe were filled up with factory workers who needed huge quantities of food, the Alfold was a pasture land. Herds of cattle, droves of horses, and flocks of sheep roamed the wide prairies. It was a land of cowboys and herders. The Magyars were famous horsemen, like the cowboys of our western states. Herds of cattle were driven to the Vienna market.

When cities began to demand more and more food for the factory workers, the pasture lands of Hungary were plowed, and the Alfold became one of the great granaries of Europe. Today it is dotted with villages of whitewashed houses. At the edges of the basin there are still some unplowed plains where cattle and sheep graze. Beyond them are the foot-hills of the mountains, where there are many vineyards.

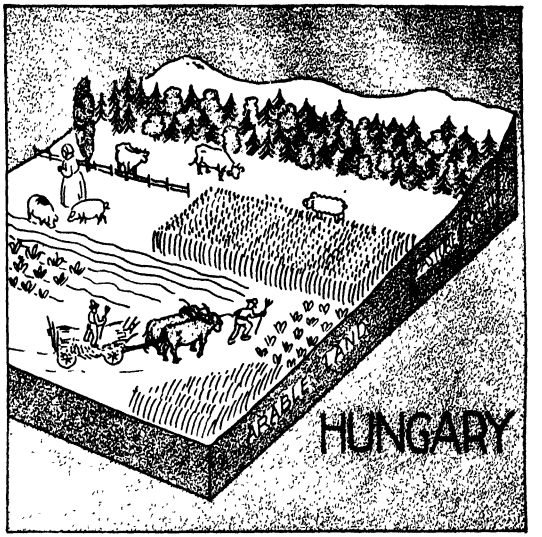
Before the World War, less than one-fourth of the Hungarian farmers owned the land on which they worked. Since then, however, many large estates have been split up into small farms and sold to the people.

The city of Budapest. The few cities in the Alfold have grown up at the edge, where the early markets were held. Budapest, the capital, is the only large city of Hungary. It is located on the Danube and consists of two parts. The hills on the west bank are occupied by Buda, which was a thriving town

when Hungary was a part of the Roman Empire. On the east bank, which is a lowland, is the part of the city called Pest. In Pest are so many flour mills that the city has been nicknamed "the Minneapolis of Europe."

Budapest is a cotton-manufacturing city, too, for the Hungarians are turning to the manufacture of cloth from imported cotton. Not so many workers are needed on the farms as before, because the Hungarians are now using modern farm machinery.

Easy transportation aids trade. Miles of good highways connect the towns and cities of Hungary. The government has built more than five thousand miles of railways, so that the products of Hungary can be easily taken to market. Most of these goods are farm products, such as flour, grains (especially wheat), live stock and meat, sugar, and poultry and eggs. Hungary also possesses one of the richest deposits of aluminum ore in the world. Large quantities of this ore are mined and exported.



Three-fifths of the land in Hungary is used for crops. One-fifth is used for pastures and meadows. Only one-eighth is forest land. About one-thirtieth of the land is planted in vineyards and gardens.

Like all farming countries, Hungary must rely on outside countries for many things, such as machinery, metals, coal, and wood.

Romania and Its People

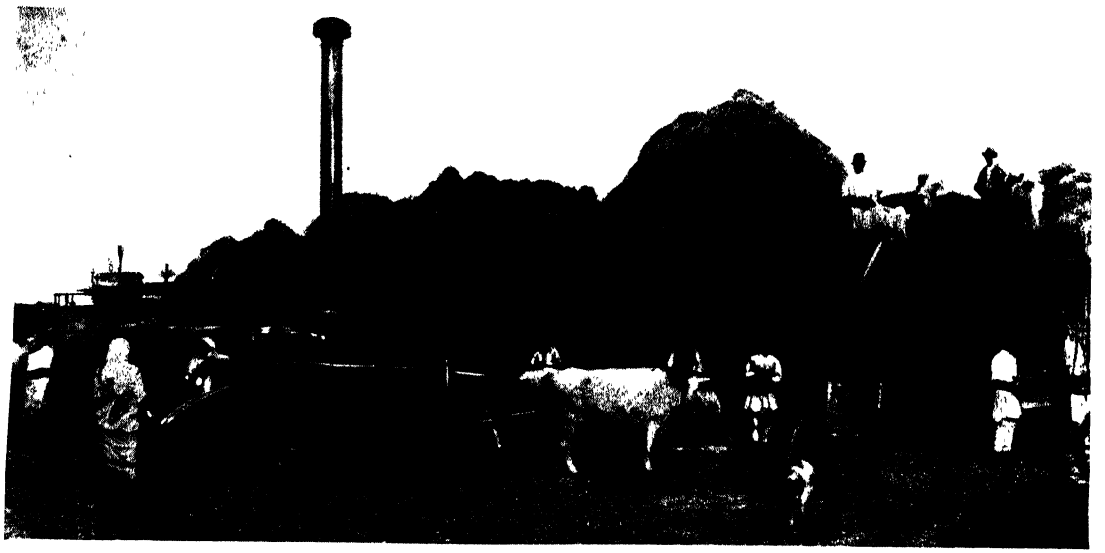
A land of mountain and plain. Hungary's neighbor to the east is Romania. Turn to the map on page 93 and locate this country. It consists of a knot of mountains, which are called the Transylvanian Alps, and a crescent-shaped lowland. One corner of the country lies in the Alfold, or Hungarian basin. The mouth of the Danube River is in Romania. Romania's summers are warm, but in the winter, cold winds from Russia send the temperature down and fill the Danube with ice.

Romania's story. Travelers along the lower valley of the river are often reminded that this land was once a Roman province. Old Roman walls and Roman roads are often seen in Romania today. The Romanian people say that they are descendants of the Roman colonists who settled this rich valley. Their language is somewhat like Italian and is unlike the language of their neighboring countries.

For many centuries after the Turks invaded Europe, Romania was under Mohammedan rule. It has been an independent country for less than a hundred years.

An agricultural land. More than four-fifths of the people of Romania are farmers. About half of the land is owned by peasants with small farms. They work the land by the same methods that have been used for many centuries. They reap their wheat, barley, rye, and corn with sickles or scythes. The plowing and hauling are done by water-buffaloes or oxen.

Modern machinery is used on the other half of the land, which is in large estates. The government is now trying to teach the smaller farmers to use new methods in agri-



Ewing Galloway

Travelers in Romania find odd contrasts like this one. The old methods, such as transportation by ox teams, are found side by side with modern ones like threshing with machinery. Notice the clothes the men and women are wearing. Do they seem like the clothes of most other Europeans?

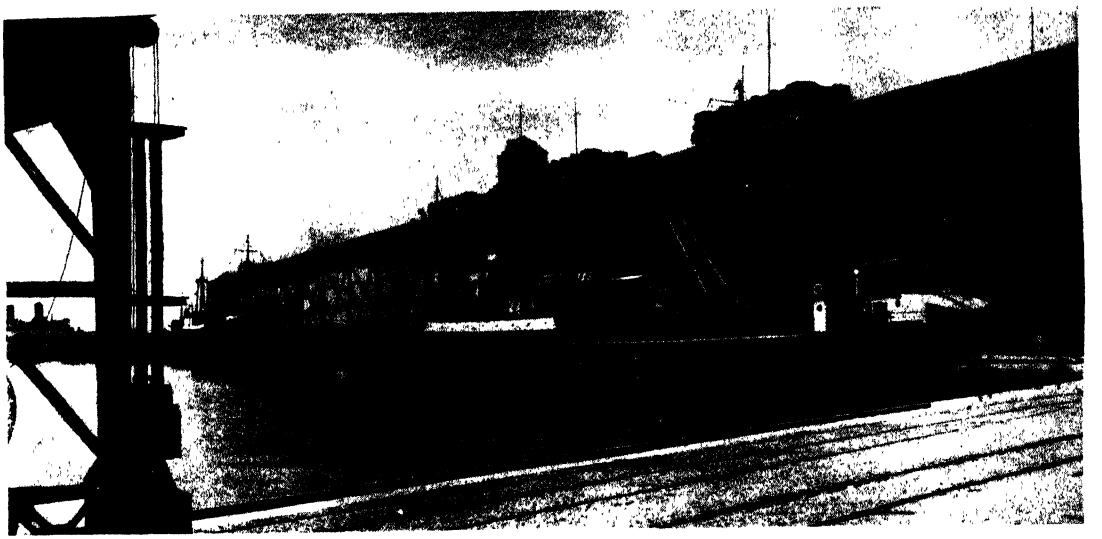
culture and to help them buy machinery and better seed.

Romania's resources. The hillsides between the Danube plain and the mountains are covered with vineyards, while higher up are pastures for sheep and goats. The steep slopes are wooded, and lumber is exported to other countries. The mountains also contain many minerals. At the foot of the mountains are oil fields and salt mines. The grain, oil, salt, and lumber which Romania exports pay for the manufactured articles that the people must import.

James Sawders

An American company owns these oil-wells in Romania. One of them is on fire, and it may take months of hard work to put it out. The scene is not very different from an American one. But if you could visit this region, you would see teams of oxen hauling supplies along the road and not many motor trucks. And the drivers would not be dressed like American teamsters or truck drivers.

Romania's capital. The roads in Romania are so poor that products are not easily transported. The villages are therefore marketplaces for the surrounding farming country. The only large city is Bucuresti, the capital. This name is often spelled Bucharest. It is located in the heart of the farming land, near the center of the great plain, at the cross-roads of the main trade highways. For many centuries traders traveling between Russia and the countries south of Romania have passed through this city. A railroad runs from Bucuresti to Constanta, on the Black Sea. Constanta is Romania's seaport and chief connection with the rest of the world.



Constanta, Romania's chief port on the Black Sea, has modern docks and machinery for handling the cargo of the freight ships which carry the trade of the countries along the Black Sea.

Talking Things Over

1. Talk over the most important changes in the Danube Valley from the time of Charlemagne to the present day. A map will help you to see the difference in the amount of territory included in the Austrian Empire at the time of the World War and now. Discuss some of the reasons why Austria-Hungary was divided into several countries.

2. Talk over the ways in which the geography and the peoples of the Danube Valley are alike and the ways in which they are different.

Doing Things Together

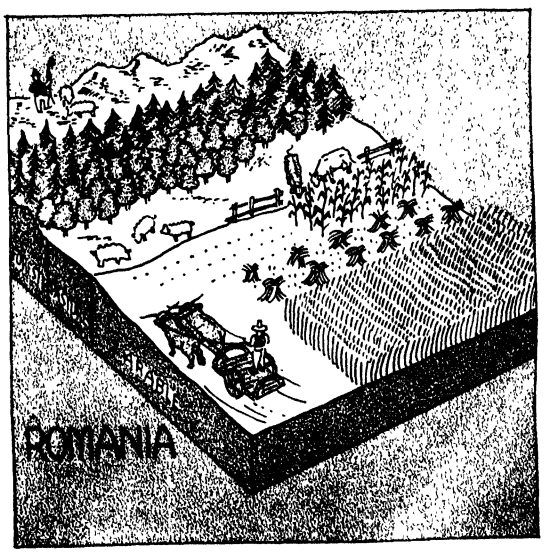
1. Vienna is a beautiful city, with lovely old buildings and gardens, and many historic spots. Have an exhibit of pictures of Vienna. You can find these in the rotogravure sections of newspapers, in magazines, and in travel folders.

2. List some of the chief products of Austria. After each item on your list, write whether or not the raw material must be imported.

3. If you were planning to start a store near a hotel in Vienna, what things would you keep in stock in order to attract the tourist trade? Make out lists. Do not forget to include such things as picture post-cards and the attractive products of the country. When you hired salespeople, what languages would they need to know?

4. Vienna is particularly well-known for the gay waltzes which have been written there. Perhaps you know a pianist or a violinist who will visit the class and play some of the waltzes of Johann Strauss.

5. Are there any Austrian folk-songs in your music books? If so, this would be an excellent time to learn them.



Nearly one-half of Romania is arable land. One-eighth of the land is used for pastures and meadows. One-fifth of the land is forested. How much remains?

Publishers' Photo Service

Not much modern machinery will be found on the farms of the Balkan countries. This Bulgarian farmer is plowing with a wooden plow drawn by oxen, just as his great-grandfather tilled the soil. In the valleys of this region will be found fields of grain. On the slopes of the hills are orchards, vineyards, and sheep pastures. In this picture you can see where the fields leave off and the pastures begin.

XXXIII. THE BALKAN COUNTRIES

The "Bridge Lands" of Europe

COUNTRIES shut off from the world. South of Romania are the Balkan countries—Bulgaria, Yugoslavia, Albania, the European part of Turkey, and Greece. Most of the land in the Balkan Peninsula consists of the rough Balkan highlands, which is an enormous mass of mountains. Here and there are a few valleys, and stretching toward Asia is the plain which is the European part of Turkey.

These lands form a kind of bridge between the two continents, and the countries are often spoken of as "bridge lands." For many centuries peoples have moved across this bridge, picking their way among the valleys. The Balkan bridge countries are so cut up that no one group of invading peoples could control all of the tangled mountain land. The people who live in the Balkan countries are shut off from each other and from the rest of the world by their rugged mountains. For that reason the Balkan peoples have not advanced rapidly in civilization. You have already learned that people make progress in civilization by meeting others and trying their ideas.

Yugoslavia

The kingdom of the southern Slavs. You read in the last chapter how the Magyars forced their way into Europe between two branches of Slavic peoples. Since then the northern Slavs have lived in Czechoslovakia, Poland, and Russia. The southern Slavs, or Yugoslavs as we call them, live in the land along the north coast of the Adriatic. Turn

Yugoslav Trade and Tourist Information Office

The dome and minaret you see in this picture of a street in Sarajevo, Yugoslavia, is a reminder of the days when the Turks ruled much of this land. Many of the cities and towns seem more like places in Asia than like European communities.

to the map on page 230 and find the country of Yugoslavia.

Many centuries ago, when Venice and Genoa controlled the trade of the Mediterranean, this coast of the Adriatic was ruled by Venice. During the Crusades the Venetians hired one of the crusading armies to help them capture some of the cities.

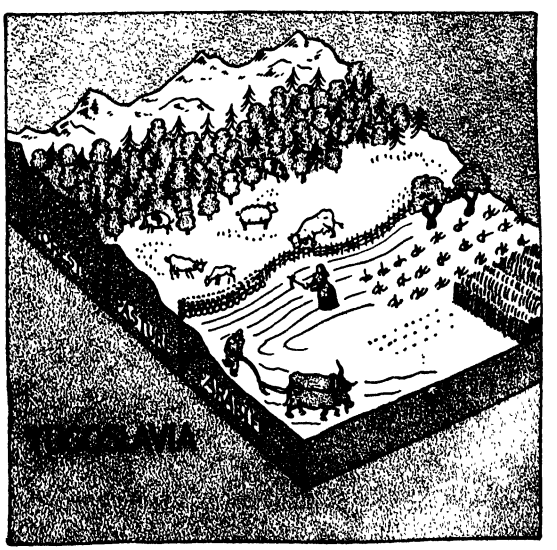
Later the Turks took possession of the country. Then the lands became part of the Austro-Hungarian Empire, and for years the peoples living there were ruled by Austrian emperors. But even today many Yugoslavs are Mohammedans, not Christians. Since the World War the southern Slavs have had a separate and independent country.

A mixed people and their problems. The Yugoslavs are a mixed people. Among them are groups of Croats, Slovenes, Serbs, and others. The Croats and Slovenes, living in the north, are farthest advanced in civilization, for they have learned many European customs and ideas from Budapest and Vienna. The Serbs, in the southeast, are more like certain groups of the Russians and the Turks in their customs. You can see that these peoples, with different languages, alphabets, and religions, have a problem in learning to live together as a nation.

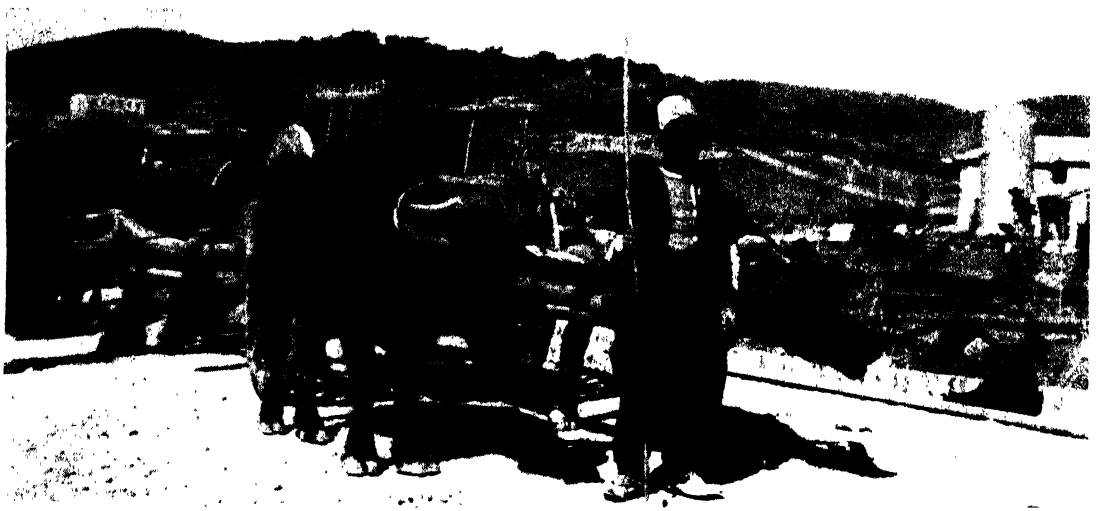
The land and its products. The map shows that Yugoslavia includes a part of the rich Hungarian basin. There the farmers grow the same crops as do the Hungarians—corn, wheat, tobacco, and grapes. They raise live stock, especially sheep, in the mountain regions. Since the coast of Yugoslavia lies in the Mediterranean region, Mediterranean crops are raised in the coastal valleys.

In the Serbian part of the country there are enormous plum orchards from which come prunes and plum brandy for export. In the mountains are forests, which give the country another kind of wealth. Mulberry trees thrive in many valleys, and the people raise silkworms. The raw silk is exported, although there are some factories in which cloth is woven by machinery.

The mountains contain mineral wealth, but very little of it is used. There are few railroads and almost no good roads. Until these are built, the minerals will have to stay in the earth.



Three-tenths of Yugoslavia is land suitable for farming. One-fourth of the land is used for pastures and meadows. Three-tenths of the land is covered with forests. One-fiftieth is used for vineyards.



Near East Foundation

This Albanian carter is hauling a load of sand in a primitive two-wheeled cart pulled by two water-buffaloes. These plodding animals are used by farmers for plowing and hauling on the rough roads.

Albania

A small, undeveloped country. Across the Adriatic from the heel of Italy is the little country of Albania. Find it on the map on page 93. Ever since the days of the Romans, neighboring nations have fought over this little country. As a result, the people are a mixture of many races. For many centuries Albanians have made little progress.

The people live in scattered communities with few roads and almost no transportation except by ox cart and packhorse. Today many of the Albanians herd cattle and sheep, and farm in a crude way, just as their nomadic ancestors did. Tribes in different valleys often carry on feuds. Three-fourths of the Albanians are Mohammedans, while the rest belong either to the Greek or the Roman church.

Although the country has valuable forests and deposits of coal, petroleum, iron, lead, and precious metals, little has been done with them. Most of the people are poor and ignorant, and it may be a long time before they establish schools and develop Albania into a prosperous country.

Bulgaria, Land of Farmers

The land and its products. East of the southern end of Yugoslavia is the Balkan country of Bulgaria. Look at the map on page 300 and notice that the northern end of this country is a part of the lower Danube River Valley. This is the grain country, where the people raise large crops of wheat.

In the mountains, which are not so high as the rugged peaks of Albania, herding is the chief occupation. There are large forests in the mountain regions, and much wealth in the form of minerals, but the Bulgarians have not developed mining or lumbering on a large scale. Few people live in the mountain districts.

The southern part of the country has a mild climate. Its products are like those of Mediterranean lands—wines, fruits, and silkworm cocoons. In the southeastern corner is a valley, sheltered by two mountain-ranges,

James Sawders

These bags are full of rose petals which the men are emptying into kettles in order to make attar of roses. Thousands of pounds of rose petals are required to make a pint of perfume.

which is called the "Valley of the Roses." Here grow acres and acres of roses, from which the famous perfume, attar of roses, is made. In other valleys the farmers grow fine fruits, tobacco, and cotton.

The people of Bulgaria. Bulgaria is a nation of farmers. The people are descendants of the Bulgars, who came into Europe from Asia not long after the Slavs came. They found Slavs living in this land, and the two peoples mixed with each other. Their descendants became the Bulgarians of today. Like all the countries of the Balkans, Bulgaria was ruled by the Turks for many years. But since 1908 Bulgaria has been an independent country.

Most of the Bulgarian peasants own their small farms and work them with hand tools. They use oxen and water-buffaloes for plowing and hauling. Each little community makes or raises almost everything it needs. The Bulgarians are eager for education, and the schools are always crowded.

The capital, Sofiya (also spelled Sofia), is a very old city, but it has been almost entirely rebuilt during the last fifty years. It now looks modern like many cities of western Europe.

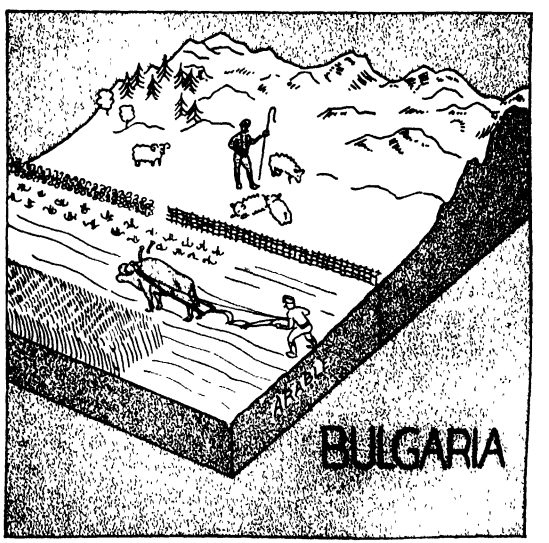
Greece and European Turkey

The stories of Greece and Turkey were told in earlier chapters of this book. Reread these stories in Chapters VIII, IX, and XII and compare these two countries with the other Balkan countries.

Talking Things Over

1. Discuss the occupations of the people in the various Balkan countries. In what ways do they use the land? Can you think of other countries where the geography is like that of the Balkan countries? Talk over the problems the people have and compare them with the problems of the people of the Balkan lands.

2. You have learned that transportation and communication play important parts in the progress of civilization. During pioneer days in America, the settlers in regions where there were few roads had to go without many things that people along the Atlantic coast enjoyed. Compare the conditions of those times in America with conditions in the Balkans



A little more than one-third of the land in Bulgaria is used for farming. A part of the remaining two-thirds is used for pasture, but much of it is too rough to be used for any purpose.

today. Discuss what you think will be the effects of better transportation and communication in those lands.

Doing Things Together

1. Make a list of the chief products of the Balkan countries. After each item on the list write the name of some other European country that has the same product.

2. The people of the Balkan countries wear picturesque and colorful clothes. Watch the papers and magazines for pictures that show different costumes worn and display them on your bulletin-board.

Discussing Europe

1. Again and again you have followed the stories of primitive peoples who became civilized. In some ways the stories of these peoples are alike. Most of them moved about before settling down in the country where they became civilized. Talk over the reasons why peoples move about from place to place.

2. In reading about most of these peoples, you have learned that they made discoveries and inventions which helped them to become civilized. For example, they found a way to write and so make records of their experience. Discuss other inventions and discoveries that were important for all of these peoples.

3. You have found out that the lives of people are affected a great deal by geography. People in a cold land do not live in the same way as people in a warm land. Mountain people make a living in one way; valley people make a living differently. What must you look for in a map before you can describe the nature of the land and the life of the people? In discussing this, do not forget to mention temperature, and rainfall.

4. Study a relief map of Europe and look at Spain and then at Italy. Notice how these regions are cut off from the rest of Europe by mountain barriers. Does that help you to understand why Europe is divided into many different nations? Talk over some of the reasons why there are so many nations in Europe.

5. The United States was still a "young" country when inventions were made that helped transportation and communication. These inventions had a great deal to do with keeping this country together as a single nation. Why did not the same inventions help Europe to become one nation? If there had been modern transportation in the days of Charlemagne, do you think Europe could have become a single nation?

6. A person interested in radio uses words that many people do not understand. The same is true of persons interested in farming, fishing, mining, and other occupations. You might make a short list of some of these words. Perhaps that list will help you to understand why peoples who earn a living in various ways in different regions come to have separate languages. You might talk this over and find out why a common language helps people to understand one another's needs and plans.

7. Remember that when men were savages each person worked for himself. Gradually the number of people who worked together for the good of all increased. You can find at least one example of cooperation in each chapter you have read. Make a list of these examples and discuss them.

8. If you had been a potter in ancient times and needed clay to make dishes, you could have secured it in two ways. You might have traded some of your finished dishes to the owner of a clay pit. Or you might have tried to seize the land where clay could be found. Nations of today also have these two ways in which to get raw materials that they do not possess. Make a list of today's nations which do not possess raw materials which they must have. How are they to get these materials?

9. Some of the nations of Europe established colonies in America in order to get raw materials which they did not have at home. Make a list of the countries which sent colonists to America. These colonists brought civilization to America. Remember what you have learned about these different European nations and discuss the customs, ways, and skills which these colonists brought with them. This will help you to understand what is meant when we say that America "inherited the civilization of Europe."

Keystone View Company

Asia is a land of crowded cities, but it is also a land of tiny villages. There are regions where farms are packed closely together, and there are great stretches of desert wastes where nothing grows. Fertile river valleys are thronged with people, but there are huge mountain-chains where few can live.

XXXIV. ASIA

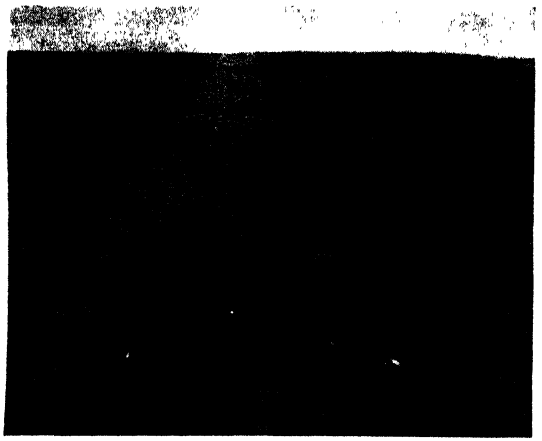
Home of Half the World's People

THE early home of migrating tribes. All through the story of Europe you have read about peoples who left Asia and settled in Europe. Tribe after tribe moved westward out of this huge continent and sought better home lands in the mountains, plains, and valleys of Europe.

You have read how these different peoples from Asia wandered about and finally settled down to become the different nations of Europe. You know that once these tribes were much alike. They lived by keeping flocks and herds, they dwelt in tents which they could move from place to place, and many of them spoke languages that were much alike. But you also know that these peoples changed a great deal after they finally settled down. Today their descendants in Europe are quite different in appearance, in language, and in customs.

A continent of many peoples. Now you will journey to Asia, to the land from which these peoples came. You have already learned about the southwestern corner of that continent. In the story of Mesopotamia you read how Babylonia and Assyria became great and then fell into the hands of the powerful Persians. Later, in the story of the Arabs, you learned how they founded a new religion and built a great empire.

Many times in the stories of the European countries you read about trade with the East,



American Museum of Natural History

The camel train is crossing the Gobi Desert carrying goods from China to Siberia. This desert is about the size of our state of Texas. Do you see how it could form a barrier between China and other lands?

or the Orient, as it is called. For many years the Europeans depended on Asia for silks, spices, and many other luxuries. This trade shows that Asia was not just a large continent overflowing with barbarian nomads. During the time when Europe was becoming civilized, there were peoples in Asia who were also learning the ways of civilization.

Although their ancestors came from Asia, Europeans did not develop the same customs as the inhabitants of Asia. There were peoples in Asia who were as civilized as some of the peoples of Europe, but in a different way.

In reading about the peoples of Asia, you will find that the *land* had just as much to do with their progress as it had in Europe. You remember that people had to live differently and do different kinds of work in various parts of Europe because the land and the climate were not the same everywhere. Living and working in different ways made people progress in different ways.

The Largest Continent

From the tropics to the polar regions. Because the land and climate mean so much in the story of peoples, let us look at the map of Asia on page 465. It will tell us many things that affect the lives of the people in the countries we are about to study.

First, notice how huge the continent of Asia is. There are places in it that are more than fifteen hundred miles from the sea, for Asia is more than five times as large as Europe. Notice its position: its great bulk lies between the Arctic Circle and the Tropic of Cancer, but its southernmost tip is close to the Equator.

The northern lowlands. Now look at the great masses of lowlands and highlands. See how they are arranged in three immense bands across the continent. First, find the lowland area in the north. Here are the basins of the Ob, the Enisei, the Lena, and other rivers. The lower courses of these rivers, which flow into the Arctic Ocean, are frozen during the long, cold winters. Then the waters from farther upstream cannot reach the sea. They overflow, flooding the land until great swamps are formed. The western end of this great lowland plain is the Great Northern Plain of Europe, about which you have read. The low wall of the Ural Mountains

Roy Pinney Photo

Asia is full of cities which are rarely visited by travelers. This is part of Khiva, which is located about one hundred miles south of the Sea of Aral. For centuries Christians were forbidden to enter this Mohammedan city. No railroad comes within miles of it, but it is on an airplane route today.

James Sawders

Can you see the long line of camels on the road in the center of the picture? This caravan is winding its way through the Khyber Pass in the Hindu Kush Mountains. For more than two thousand years this pass has been one of the chief routes into India from the north. Probably the tribesmen, called Indo-Europeans, came through this pass when they left their pasture lands in the north and moved into India.

in Russia cuts across it and separates the European plain from the Asiatic plain.

The central plateau and mountains. South of the great northern lowland plain is the second band. First comes a huge series of plateaus that are like steps leading up to gigantic ranges of mountains. Then there are more plateaus. Among the great ranges are the Himalayas, the highest range of mountains in the world. Himalaya means "home of snow." In that range are forty peaks that are higher than the highest mountains of Europe. Three of them, Mount Everest, Mt. Godwin-Austen, and Mt. Kinchinjunga, are each more than five miles high. Loops of the eastern ranges dip under the sea and then poke their heads up to form islands off the coast of Asia, such as the islands of Japan.

Between the mountain-chains are huge plateaus. Tibet, often called the "roof of the world," is the highest plateau on the earth. In the story of the ancient civilizations in the first part of this book you have read about the plateau of Iran, which makes up most of Persia; the Arabian Plateau; and the plateau of Asia Minor. The Gobi Desert is also a great plateau. Can you locate all these on the map on page 465?

As you look at the map, you see that some of the greatest rivers of Asia run from this mass of highlands. Find the Hwang Ho, the Yangtze Kiang, the Ganges, the Brahmaputra, and the Indus. Trace their courses. In the valleys live most of the people of Asia.

Three southern plateaus. South of the huge mass of highlands are three great plateaus that form peninsulas. These form the third belt of land across Asia. These peninsulas are Arabia, India, and Indo-China. Between these plateaus you will find important valleys. These are the Tigris-Euphrates Valley, the Indus Valley, the Ganges-Brahmaputra Valley, and the valleys of the Irrawaddy and the Mekong. Find out which of these rivers flow from the Himalaya mountain region.

Asia's varied climate. You know that the northern part of Asia, close to the Arctic Ocean, must be cold, and you expect the south-

ern part, close to the Equator, to be warm. The part near the Pacific Ocean will have the mild climate that almost all seacoasts have. But what about the central part? What kind of climate will it have?

In winter, central Asia is very cold. The cold air over the mountains is heavy, and so it presses downward and outward, away from the mass of mountains. This makes cold winds, which blow from the center of Asia in all directions. Being land winds, they are dry. And so the cold season in central Asia is a dry one.

In the summer, the huge masses of land become hot. During March, April, and May the land and the air over it grow warmer and warmer. Warm air rises, and cooler air rushes in to take its place. Winds off the oceans blow across Asia from a southerly direction. They are so full of water that when the winds reach high land, clouds form and it rains. These wet winds are called the summer monsoons.

The lands which have the summer monsoons are southern Asia and part of China. They are called the monsoon lands and have three seasons. The rainy season lasts from early June to October, with pouring rain for part of every day. Everything is damp; clothes are wet; doors stick; glued things come apart; shoes are covered with mold. In October comes a dry, cool season. This is followed by a hot season.

West and north of the monsoon lands is the desert band of plateaus and highlands. There is very little rainfall at any time. In winter it is very cold, and in summer it is very hot.

North of the desert band the climate is much colder in winter and not so warm in summer. This region is so far from the ocean that it, too, gets very little rain.

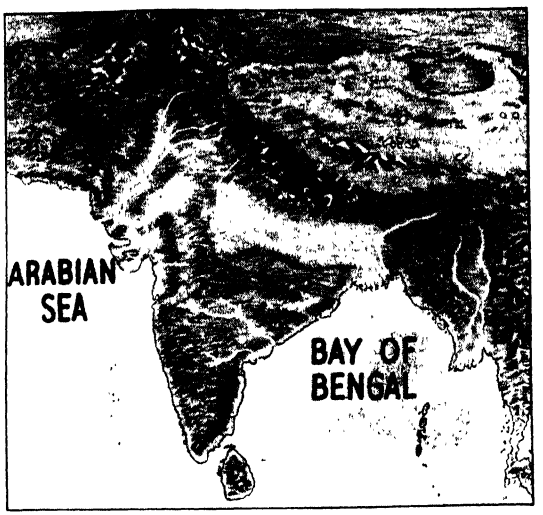
As you see, Asia is quite different from Europe in both its land and its climate. For that reason you should expect to find that the people have different ways of living.

India and Her People

An early cradle of civilization. You have read about two cradles of civilization earlier in this book. In the Nile Valley, and in the valley of the Tigris and Euphrates rivers, peoples slowly discovered ways of living which we call civilization. Now you are to

James Sawders

India is not all jungle and tangled forest. **There are many regions like the one in this picture. You know that such regions must be** rather dry, **because the people would farm, rather than keep goats if the land were better suited to crops. Knowing** what you do about regions that support flocks of sheep and goats, **how would you describe the land in this picture? Does it receive plenty of rainfall?**



A large part of India is a rough plateau as you can see. Wide river valleys separate this rough plateau, the Deccan, from the mountainous region in the north. Notice how the mountain-ranges form a barrier on the west, north, and east. There are a few passes through the mountains.

read about another cradle, in India. This, too, was a valley. In this valley lived people who developed one of the great civilizations of Asia.

Turn to the map on page 465 and find this valley. It is an immense plain, two thousand miles long and from one hundred to two hundred miles wide. It lies at the southern foot of the Himalayas, the mountain-range that borders India on the north. This plain actually consists of the valleys of three rivers, the Indus, the Ganges, and the Brahmaputra. Find each of them on the map.

Early inhabitants and northern invaders. In this great stretch of fertile land once lived a people called Dravidians. At the time when the Babylonians were irrigating fields, building brick houses and palaces, carrying on trade, and studying the stars, the Dravidians were savages. Most of the tribesmen were hunters, although a few of them raised a little grain.

About the time when Hammurabi was making a code of laws for his civilized people in the Tigris-Euphrates Valley, the land of the Dravidians in India was being invaded by a people from the north.

The new-comers were unlike the Dravidians in many ways. They were white, while the Dravidians had dark—almost black—skins. The invaders spoke a different language, somewhat like the languages of the peoples who began to invade Europe a little later. A great many words for common things sound alike in these languages, which are called Aryan languages. So we believe that all these invaders must have come from the same region in central Asia. And we call them Indo-Europeans because their descendants settled Europe and India.

The invaders were farther along the road to civilization than the Dravidians. The new-comers knew better how to live together in peace and how to band together for war. They kept flocks and herds and knew something about agriculture. It was not long before they had conquered the Dravidians.

Some of the Dravidians were kept as slaves, and others were driven into the lands farther south. Now turn again to the map on page 465 and find the plateau of the Deccan. It

James Sawders

The Todas are a small tribe who inhabit some of the hills of southern India. Some people think they are like the original inhabitants of India. They live in arched houses made of poles which are covered with thatch. Notice the low doorway.

James Sawders

In this temple, called the Temple of Three Hundred Million Gods, is a large room known as the Hall of Heroes. In it are eighteen large statues of gods and famous Indian heroes. The carved figures are painted the way the Greeks colored their statues.

occupies most of India. The Dravidians were driven farther and farther south into this poor land. Today their descendants live in southern India.

Life on the rich northern plain. The invaders, or Hindus, as we shall call them, soon found that the fertile valley would support them easily. They settled down in villages along the valley, and you know that settling down is one of the first steps in becoming civilized. After a time, because food and clothing were easy to get and families were large, there were more than enough people to work in the fields. Some men could work at different arts and crafts or become traders.

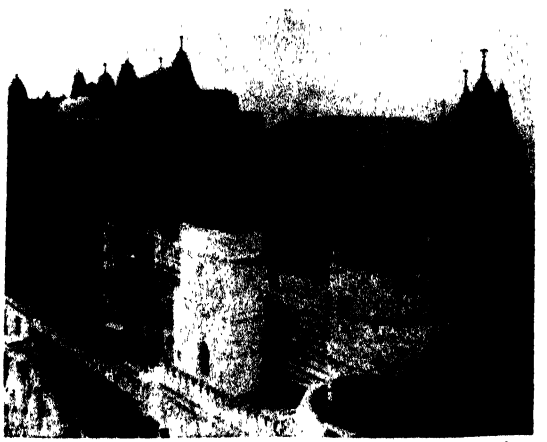
You know what happened then, because you have read the story of two other cradles of civilization. The people found a way to write and keep records. They learned to build better houses and finally to erect great palaces and temples to their gods, just as men did in Egypt and in Babylonia. The Hindus slowly built up a civilization of their own.

In their land, surrounded by mountains and a great ocean, the Hindus did not meet people of any other civilization for many centuries. Their civilization grew up by itself. You know that the Egyptians and Babylonians met and exchanged ideas; the Greeks borrowed from the Phoenicians, the Cretans, the Babylonians, and the Egyptians. But the land of the Hindus, or India, was too shut in for them to have many dealings with other peoples for long centuries.

A few peoples did enter India to get food. Tribes on the highlands and in the deserts to the north and west often suffered from famines. Some of these peoples drifted into India through the mountain passes or along the northern seacoast of the Arabian Sea.

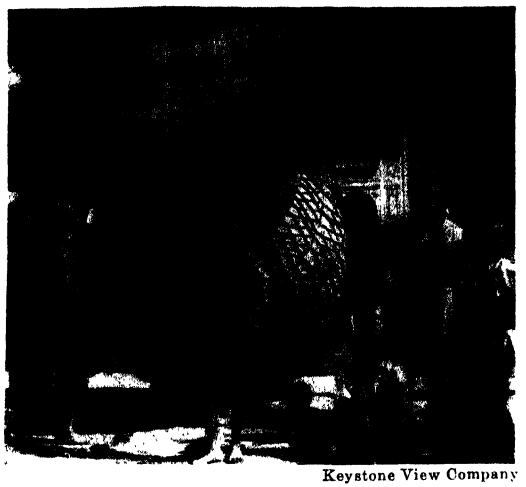
Many of these peoples stayed in India, for the great plain was rich and could support a very large population. Gradually the inhabitants spread out over the plateau to the south and built villages and cities in the hills and valleys of the Deccan.

India meets the outside world. As India grew richer, other peoples came to plunder. You have read how Darius, the Persian, extended his empire into India about 500 B.C. Then in 330 B.C. Alexander of Macedon



James Sawders

Like the cathedrals of Europe, these splendid temples of India represent years of work by thousands of craftsmen. You can see that there must have been good architects and skilful workers to erect them.



Keystone View Company

This temple drum called the people to worship in the temple, just as the bells of churches call people in Europe and America to church. This drum is so large that it is placed on a cart.

marched his army along the Indus River and founded several cities. These were the first peoples of other civilizations that the Hindus met. From Alexander's men they learned about Greek art. From that time on, India kept in touch with the civilizations of the West. Each year a fleet of vessels from Egypt sailed to India to bring back spices and other luxuries.

Huns, the same fierce horsemen who invaded Europe, came down into India to plunder. When the Arabs were building their great Mohammedan Empire, they also entered the Indus Valley. Soon the Arabs, with their land caravans and ocean-going ships, were carrying huge quantities of goods between their cities and the cities of India. Trade made India rich.

But the riches attracted other conquerors. The Turks and the Mongols in turn invaded India. These invasions happened about the same time as the invasions of Europe by these peoples from Asia. You can see, then, that India was no longer cut off from the rest of the world.

A mixed people. One result of all these invasions was that the inhabitants of India gradually became a mixed people. You read about the same thing happening in different parts of Europe as new tribes came in and settled down beside other peoples. Today India is filled with peoples who differ from each other in many ways. There are white people and black people and every shade between. Most of the inhabitants are very dark, but there are others who are mixtures of the yellow and brown peoples of Asia. You would need to know nearly two hundred different languages and dialects if you wished to speak with all the inhabitants.

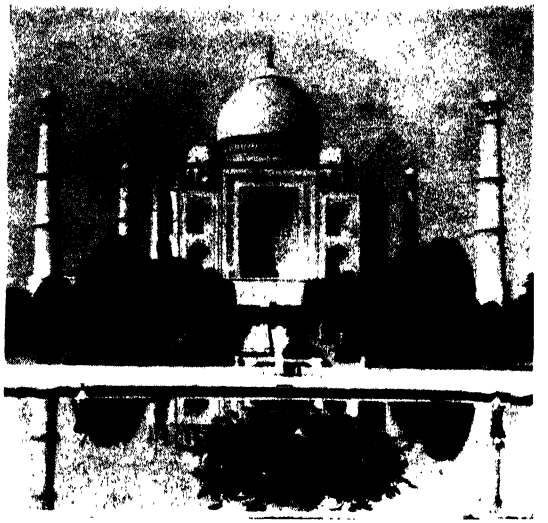
The religions of India. Not only do the peoples of India speak different languages, but they have many religious beliefs. There are more than sixty different religions, although most of the people believe in one of the three principal religions. Two out of every three persons are Hindus. Their religion is called Hinduism. When the Arabs, and later the Turks and Mongols, came, many of the people in India became Mohammedans.

Keystone View Company

This Hindu has painted on his forehead and nose a caste mark. Other caste marks are of different shapes and colors. Some are round dots. Castes are explained on pages 484-485.

Most of the people in the northwest part of the country are Mohammedans. In the mountain section of the northeast the people are Buddhists.

The Buddhist religion gets its name from Buddha, which means "the Enlightened One." This was the name some people of India gave a great teacher who lived about 500 B.C. He was a prince named Siddhartha Gautama, who gave up his riches to see if he could find a way to make men happy. He was really a wise philosopher, like some of the Greek thinkers you have read about; but after his death many people began to worship him as a god. Temples and monasteries were built in his honor. He came to be known as Buddha. There were many Buddhist priests, monks, and missionaries. Buddhist missionaries went from India to convert other peoples of Asia to their religion. Later, people from China came to India to study Buddhism. In this way, India came to know the civilization of China.



James Sawders

Hindu workmen labored more than twenty years to build the Taj Mahal, which means "Gem of Buildings." It was built in the Persian style of architecture by the Shah Jahan as a tomb for his wife. It is surrounded by gardens and shaded pools. Thousands of visitors from all parts of the world go to Agra, India, just to see it.

The castes. Buddhists and Mohammedans believe that all men are brothers and equals, but Hindus divide people into classes which are called *castes*. Once there were only four castes. The most important caste consisted of the priests, or Brahmans, as they are called. Next came the nobles with their warriors. The merchants and farmers followed. Last of all were the craftsmen and laborers.

India State Railways

The blue pottery of Delhi, India, is famous. Some of it is decorated in elaborate designs. The artist is working in his sidewalk shop.

The number of castes among the Hindus increased until today there are hundreds—each with strict rules about what its members may do for a living. There are many other rules about daily life. One caste must use only brass utensils for cooking. Another caste is forbidden to cross the ocean. The members of many castes are forbidden to eat food that has been touched by people of another caste.

A baby is born a member of his parents' caste and must remain in it all his life. He must marry a girl in that caste. Their children will also belong to the same caste. It is hard for us to understand these harsh rules. In the story of Europe you read how serfs became tenant farmers, and how tenant farmers became landowners. We know that boys in Europe were allowed to learn different trades and had many opportunities to lead

more comfortable lives than their parents. In our country we have no laws or rules that prevent people from changing their work and making progress. But in India the Hindus are still held back by the rules of the castes. No one can change his caste. The son of a carpenter must be a carpenter all his life. The son of a merchant must remain a merchant and marry a merchant's daughter. You can see how the caste system, as it is called, has kept India from making progress. Some people of India wish to abolish the caste system.

How the English gained India. As you might expect, there is frequent strife in India, since the peoples have different religions, belong to different castes, and are of different races. India is divided into so many groups that only a strong ruler can keep peace in the land. When the Mongols came into India, their emperors kept peace for a long time, and India prospered. Today England is keeping peace in India.

Perhaps you may wonder why England governs India. England is in control because

Keystone View Company

Compare this picture with the one on page 249. The people in both pictures are doing the same thing—marketing. But this market is in India. What different foods and wares would you expect to find? You must consider differences in geography and climate.

Keystone View Company

A whole family works at the task of weaving this large rug. Because the Indians raise sheep and goats and grow cotton, you would expect them to know about textiles. What other people who make rugs and carpets have you studied?

her trade with India is necessary to British prosperity. But on page 483 you read that the Arabs carried on Europe's trade with India for years. How, then, did England manage to get control?

For many centuries Mohammedans not only carried Indian merchandise to Europe, but also had a great empire in Asia. But the empire fell to pieces, and India again was divided into many small groups. That gave the traders of Europe an opportunity. The Portuguese were the first to see it.

You remember that Prince Henry the Navigator had a school for sailors in Portugal. His men sailed farther and farther down the coast of Africa until they discovered a way to sail from Europe to India. They established a trading-post at Goa, which they still control. Find it on the map on page 465. It is on the western coast of India.

The Portuguese were not so much interested in cotton, rice, wheat, tea, and indigo from the farms of India as they were in spices. So they moved most of their trading-posts to the Spice Islands, or the East Indies, as we call them. The Portuguese share of India's

Keystone View Company

Although this Indian spinning-wheel is not exactly like the European kind, it works in much the same way. The woman, who is showing her daughter how to make thread, must keep the wheel moving with her hand. Have you noticed how these people sit?

trade was taken by the Dutch, who controlled it for more than one hundred years.

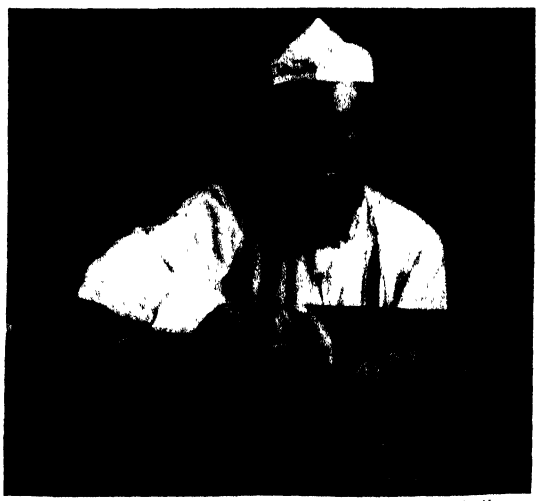
But the Dutch were not able to keep out the English and the French traders. The English had trading-posts at Madras, Bombay, and Calcutta, and the French had a trading-post at Pondichéry. Find these cities on the map on page 465.

The Dutch, French, and English traders then began a race to see who could get the most trade. They interfered in the wars between the native rulers. For example, the British would take sides with one ruler in exchange for the privilege of trading in that ruler's land. Then the rival European nations began to train the natives as soldiers, so that they could have larger armies. In this way they gained more territory in which to carry on trade. But the constant wars kept the natives poor.

You have read how England and France fought many wars against each other in Europe and in America. France finally lost her colonies in North America and all her land in India. Since the Dutch traders had moved to the East Indies, England was left in control of India. The French were allowed to keep Pondichéry and two smaller cities, but that was all.

Why the British needed India. Perhaps you wonder why the British went to all this trouble to gain control of India. The answer is that England needed colonies. England was crowded and could not raise enough food for her own people. Her factories could make more goods than her people could use, but she did not have the raw materials to keep these factories supplied. If England could gain enough colonies, these colonies could supply her with both food and raw materials. And the colonies could use the goods made in England.

After the Industrial Revolution, English factories found ways to make large quantities of goods at low prices. Since that time millions of people in India have been able to buy English knives and tools, cheap cotton cloth made in English mills, and many other articles they have not been able to make for themselves. The people of India get money to buy these things by selling products that they make or raise on their land. Let us see



India State Railways

Another famous product of Indian craftsmen is embroidery in gold. Gold is drawn into wires almost as fine as thread, and then it is carefully worked into a delicate design on the cloth.

Keystone View Company

The large building on the terrace is the palace of an Indian ruler, a maharajah. Notice the cattle in the street. They are a nuisance, but no one will harm them, for they are sacred to Hindus. The Mohammedans of India do not consider any animals sacred.

what these products are, where they are grown or made, and where they go after leaving India. But first you should know something about the land and its climate.

The Land and Climate of India

The climate of India. India is in the monsoon lands, which you read about on page 480. The rainy season begins at different times in various parts of India, but generally the southwest winds, or monsoons, bring rain every day from the middle of June until the middle of October. The season from the middle of October until the end of February is dry and cool. From March until June most of the land is very hot. Then the rainy season comes again and it is much cooler, for the rains cool the air and the clouds keep off the hot rays of the sun.

Not all of India is visited by heavy rains. Turn to the map on page 465 and find the valley of the Indus River. It is a wide, level basin, not very high. In this lowland the clouds do not rise high enough to be cooled so that they drop their rain. This basin land is therefore rather dry and must depend on the river for water. At one side of the Indus you will notice a large desert called the Thar, or Indian Desert. This region, like all deserts, is very dry.

How the People of India Make a Living

An agricultural country and its farmers. You already know that India has rough, mountainous country in the north, a wide plain across the land south of the mountains, and a large plateau. In the plateau, which occupies most of India, there are many river valleys. Much of the eastern edge of this plateau is a coastal plain. Now let us see how the people in these different parts of India make a living.

Seven out of every ten workers in India are farmers. Most of the farmers grow crops for their own use and do not raise enough to sell. You can get an idea of how much food is needed when you realize that India is only two-thirds the size of the United States but has nearly three times as many people.

The best farms are found in the great lowlands of the Indus and Ganges rivers, and in fertile valleys among the northern mountains. The farms are small, except for a few large

James Sawders

Butter is being made in this copper churn in the yard of an Indian farmer. Each girl has a separate rope which has been wound about the dasher several times. Do you understand how the churn works?

Keystone View Company

This Indian farmer is irrigating one of the small fields into which his farm is divided. Each little field has a low mud bank around it. The farmer breaks down the bank between the water ditch and the field and lets the water cover the field. He then closes the opening so that no water is wasted. You can locate the region where this farmer lives by finding Karachi on the map on page 465.

plantations owned by the British. Very little farm machinery is used, because the farmers of India are too poor to buy it. Then, too, they do not like to change their ways.

The farmers live in villages and go out to their farms each morning. The peasant's morning meal consists of porridge cooked in a clay pot. At noon he eats a handful of dried beans, and at sundown, if he is well off, he has a meal of rice, cooked with curry, which is a mixture of hot spices. If he is poor, he has just another handful of beans. He feeds his thin cattle on millet or rice stalks.

At the edge of each village are one or two miserable huts that belong to even poorer people, who do the meanest kind of work. They are the *pariahs*, or outcasts. No one will have anything to do with them, or even touch them.

Farming in the great plain. Between the Himalayas on the north and the plateau of the Deccan on the south lies the great plain. As you know, it is really the valleys of three rivers. In the west is the valley of the Indus, which flows around the western end of the Himalayas and then southward across the western part of the plain. This region is known as the Punjab. In the eastern part of the plain the Ganges River gathers up all the little streams that come down from the high mountains. Near its mouth it is joined by the Brahmaputra River, which has come down around the eastern end of the Himalayas.

These three rivers are fed by enormous snow beds in the high mountains. They furnish a constant supply of water for irrigating the broad, flat plains along their lower courses. They also make good highways for travel and for transporting freight.

For thousands of years these three rivers have been washing down sand and soil from the mountains to the lowlands, until they have formed a huge, smooth field. In the fertile soil of this great plain, wheat and rice grow in large quantities. Yet so many millions of people live there that each farmer, with only

a small piece of land, has a hard time raising enough food for his family.

In the drier western part of the valley, in the Punjab, irrigation is necessary for most crops. Here the British have built wells and a system of canals to help the people. Wheat is sown at the end of the rainy season and harvested before the hot season. It is an important crop, and in good years there is some to sell to Europe. In these drier regions barley and millet also are grown. Here millet is the chief food of the people, as it is in all the drier sections of India. Corn is grown here, too, as food for the people and as fodder for live stock. Sugar-cane is grown under irrigation, but there is not enough for export.

Farming in the mountain valleys. Farmers in the mountain valleys north of the plain raise wheat, barley, and millet during the dry winter season by means of irrigation. During the rainy summer months the crops are cotton and sugar-cane. Higher up the slopes, in the fertile valleys among the Himalayas, various food crops grow, and many sheep and cattle browse. In one of these valleys, known as the Vale of Kashmir, the people make lovely shawls and rugs.

Keystone View Company

Turn back to the picture on page 61 and compare it with this picture. The pictures are alike in many ways. And the reasons for the use of this crude equipment are much the same. Do you know them? On some British plantations modern farm machinery is used.

James Sawders

Thousands of bales of cotton are piled on the wharves at Karachi, India. Here you see workmen weighing bales. The bags in the background are filled with cotton-seeds. Do you know two things for which cotton-seeds are used in our country?

Higher in the mountains there are wandering tribes who dress in thick woolen garments to keep out the cold. They are shepherds, and sometimes they come down to the bazaars in the lowland plain to sell their wool and goat hair. Then they always return to their mountain homes.

At the eastern end of the great valley plain is the large delta land made by the Ganges and Brahmaputra rivers. Here rainfall is abundant most of the year. The important crop is rice, which is the principal food of the people in this part of India. Jute also is grown in the wet lands along the Ganges. Fiber from jute stalks is used for making rope and gunny-sacks. All through the delta a network of streams provides a way to carry produce to market.

To the north of Calcutta, tea plantations cover the well-drained hillsides. Tea leaves are picked several times a year, cured, and sent to markets in other countries.

Farming on the Deccan Plateau. The southern part of India is the Deccan Plateau. It is a rough land of hills, valleys, and level stretches. There are many rocky knobs and

ravines that are covered with dense forests or tall jungle grasses. A narrow strip of lowland, wider on the east coast, runs along each side of the plateau. The mountains bordering the plateau are called the Eastern Ghats and the Western Ghats.

Since the Western Ghats screen the plateau from the rain-bearing winds, in many places the land is dry and the poor farmers have a hard time raising crops.

River banks in the Deccan are so high that irrigation canals cannot be dug to carry water to the farms. The peasant has to get his water from a well, slowly drawing it up in a bucket that is pulled by a bullock. Sometimes low ground is banked up to make a pond for rain-water. The water in these village ponds, called tanks, is used for the crops and also for cooking, washing, and drinking. The Deccan is the cotton country of India. It ranks second to the United States in this crop.

The forests of India. Wherever the rainfall amounts to as much as eighty inches a year, you will find forests, unless men have cut

James Sawders

Elephants are used in many parts of India for heavy work but are too expensive for many farmers to own. This elephant is plowing a rice field in Ceylon. In other places water-buffaloes are used for the work. Most farmers prefer the water-buffaloes because they can use the milk for drinking and making butter.

Keystone View Company

High camel-carts are used in some parts of India for moving freight. But the camel is more useful as a pack-animal. Knowing what you do about them, in what parts of India do you think they are used?

them down. India has so many people to feed that many of her forests have been cleared away to plant rice and other crops as in the flood plain of the Ganges. But forest jungles still cover wide areas among the hills of the Deccan and in Assam, and especially on the lower slopes of the Himalayas.

The two most valuable trees of India are the *teak* and the *sal*. These furnish fine hardwoods, like our oak and maple, for ships, furniture, and buildings. Along the flat, muddy coasts and in the swampy deltas are forests of mangrove trees. In the drier parts of western India the jungles consist mainly of small, thorny trees and bushes. These and other kinds of poorer wood, including the mangrove, are cut for fuel. The bamboo is used in many parts of India for lumber. Along the wet coastal plains grow cocoanut palms, which provide milk and oil for food, and fiber for fishing nets and ropes.

The people of India cut their timber during the dry season. When the rivers rise in the rainy season, elephants or buffaloes drag the logs to streams, which carry them to the sawmills.

Domestic animals and jungle beasts. Large numbers of elephants live in the damp

forests at the base of the mountains in the Ganges Valley. The natives capture the huge beasts by driving them into a strong, narrow enclosure called a *keddah*. Since the elephant cannot turn around in the keddah, he charges against the end of it until he is tired out. Then he is chained to a tame elephant until he is trained to work. He soon learns to drag heavy logs of teak, or to carry them and arrange them in neat piles. Sometimes elephants are used for carrying heavy boxes of freight, and even for such tasks as pulling plows and carts.

In the dry parts of India many camels and donkeys are used. Sheep are raised in the hilly sections, but their meat and wool are of poor quality.

Although elephants are the beasts of burden in the wet eastern lands, the most useful animals in the greater part of India are oxen, bullocks, and water-buffaloes. The farmers use these animals to plow their ground and to haul produce to market. Water-buffaloes supply the people with milk and with a soft butter called *ghee*. Few cattle are killed for meat in India, for several reasons. According to the Hindu religion, the cow is a sacred animal. The Buddhists do not believe in killing any animals. And cattle are worth too much as workers to be used for food. There are more cattle in India than in any other country of the world.

James Sawders

These Indian workers do not seem to be very busy, but they are harvesting sugar-cane on a large plantation. All of them are squatting down to work. This posture would tire you, but they are used to it.

James Sawders

Ceylon, an island at the tip of India, is noted for its tea, which has a flavor different from other teas. These two girls are picking tea leaves from a bush. The leaves will be dried and packed for shipment.

You have read, of course, about the dangerous animals in the Indian jungles—of tigers, leopards, and wild boars, of snakes and crocodiles. These fierce animals kill many people every year.

The mines of India. Perhaps you are wondering about the fabulous wealth of India that was described by early travelers from Europe. In the middle of the peninsula was the famous *Golconda*, or diamond market. For many years diamonds were found in the country near by, although few are discovered today. The famous Kohinoor diamond in the crown of the Queen of England came from the Golconda market.

Just south of the diamond region are goldmines that once produced much gold. Today only a small amount of gold is mined there. Coal, copper, iron, and mica are mined in the plateau of the Deccan. But all the minerals of India put together do not compare in value

James Sawders

This entire mountain in India is made of rich iron ore. Compare it with a similar picture of such a mountain at Kiruna, Sweden. What differences can you see in the two pictures? What other differences do you know?

with the cotton, the cotton cloth, the jute, and the lumber that India sells to the rest of the world.

The industries of India. Although the people of India are mostly farmers, there have always been skilled craftsmen among them. Their hand-woven silks and fine cottons and their hand-made pottery and articles of metal have long been famous. Within the past hundred years the British have established in India many factories and mills that are equipped with modern machinery. Labor for these factories is cheap because there are many people who are willing to work for very small wages.

The most important industry today is the weaving of cotton goods in the mills around Bombay. Cloth is still woven on thousands of hand looms in native homes. At Bombay there is just the right amount of moisture in the air for the mills. Do you remember a British city where this condition exists? Bombay exports great quantities of cotton textiles, as well as raw cotton from the fields of the Deccan.

Another important industry is the spinning and weaving of jute. Calcutta exports raw jute, burlap, and gunny-sacks. Much of the burlap is used to wrap bales of cotton, and gunny-sacks are used for many purposes. What are some of the countries that need burlap and gunny-sacks?

The woolen industry consists largely of carpet-making in the Punjab, in Kashmir, and in parts of the Deccan. These are the drier regions, where there are many sheep. In the higher, mountainous parts of northern India, where the winters are cold, many coarse woolen blankets are woven.

The silk industry, centered in Bengal, is not very important. Raw silk is produced, but not enough for the mills, which are obliged to import raw silk from China.

Although the people have long been skilled in metal work, there are few iron and steel plants in India. Benares and other northern towns have brass-working plants. There are flour mills in the Punjab; rice mills and sawmills in Assam; and oil refineries in Assam and the Punjab.

Keystone View Company

There are many fine buildings in Lahore, which is a Mohammedan city. This great building is the tomb of a famous leader. It required a great deal of labor and a large amount of money to build such a tomb. In what ways is such a tomb like the pyramids?

Keystone View Company

Some of the cities of India are like English cities as this view of Calcutta shows. The large buildings are government buildings. The river you see is an arm of the Ganges called the Hooghly River. Although Calcutta is seventy miles from the sea, it is India's largest and most important commercial city. Of course, the native quarters of the city do not look like this part but are crowded with small buildings.

India's trade. As you already know, cotton is India's greatest crop for export. Usually half of the crop is exported, and much of it goes to Japan. British merchants carry on most of the cotton trade and also trade in other exports, such as jute and lumber. Since there are so many people in India, there is a large market for British goods, such as machinery, iron and steel goods, and cotton cloth. Because of the hot climate, the people wear mostly cotton clothing. You remember how important the making of cotton cloth is to the British mills in England. India offers one of the best markets for these textiles as well as for other British goods.

The Cities of India

Two kinds of cities. A country with a population of 320,000,000 people is sure to have many cities, even though it is a farming land. There are two kinds of cities in India. First, there are the more modern commercial or industrial cities, such as Calcutta, Bombay, Madras, and Karachi. These are located near the coast, or on it, where the great trading nations can easily reach them. Most of them were once little trading-posts belonging to other nations.

There is another kind of city in India. Famous old cities dot the country. Some of these, such as Hyderabad and Agra, were forts for which the native princes were always fighting. Others were holy cities, where religious festivals have been held for many years. Benares is the holy city of the Hindus, and Lahore is the holy city of the Mohammedans.

Four great cities. The largest city and the commercial center of India is Calcutta. It is the second largest city in the British Empire. Although it is seventy miles from the sea on the river Hooghly, it can be reached by ocean steamers. Calcutta receives the products of the great farming country of the Ganges and Brahmaputra valleys.

Bombay, the large port on the west coast, is built on an island. It is a busy cotton textile center and a shipping port for the cotton that is brought by railway from the plateau region to the east.

James Sawders

There are many forests of bamboo in Ceylon. Probably you have seen bamboo fishing poles. They are slender stalks of bamboo about twelve feet long. But here you can see bamboo stalks almost as thick as trees.

The seaport of the Indus Valley is Karachi. It ships cotton as well as the wheat of the Punjab. The only good harbor on the east coast is Madras, the third largest city of India. Its chief industries are spinning and weaving cotton, and tanning hides. It ships out raw cotton, cotton cloth, and leather. On the map on page 465 find all the cities that have been mentioned.

The capital city. Among the famous old cities, perhaps the most interesting is Delhi, the capital of India. Centuries ago Delhi was the meeting-place for the roads that crossed the northern plain and the highlands to the north. Now it is also the center of the railroads that the British have built through many parts of India. Delhi is a very old city, dating back to 1500 B.C. Because of its beautiful buildings, erected by the Mogul emperors, Delhi is the wonder city of India.

On the hills just south of the ancient city the British have built a beautiful modern town. On the streets of Delhi travelers may see descendants of the different peoples who kept pouring into India throughout the centuries, and hear many of the different languages that are spoken in this huge country.

Problems of the Indian people. This land of great cities and of millions of tiny farms has many serious problems. Although some of the Indian princes are among the richest men in the world, most of the people are miserably poor. The land is fertile, but it is badly overcrowded, for nearly one-sixth of all the people in the world are trying to make a living in India. Because the people are kept apart by differences in language and religion and caste, they have not been able to unite to work together for their own good.

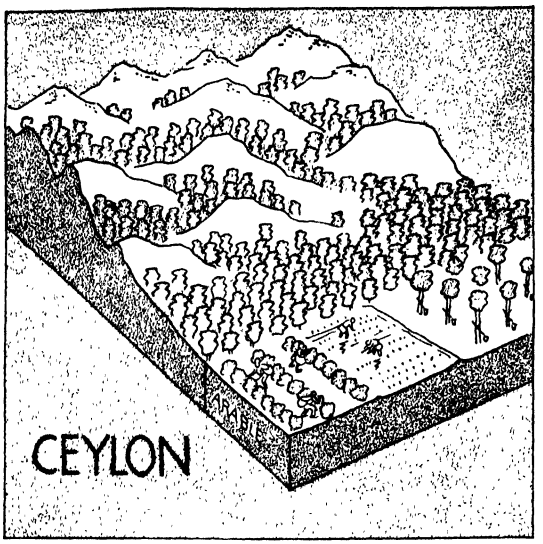
This unhappy condition is due partly to poverty and partly to lack of education. Although their civilization is many centuries old, nine out of every ten persons cannot read or write.

The British have built railroads, factories, hospitals, schools, and colleges, and have bought huge quantities of India's products. But the people of India are not happy, for they wish to control their own affairs.

The British are allowing the people more and more power in the government but are unwilling to let the natives have complete

James Sawders

Large quantities of rice are grown in Sumatra. The people flood the fields and plow the wet soil until it is soft and muddy. There are so many workers here that this picture must have been taken on one of the large plantations owned by Dutch colonists.



Ceylon is about the size of our state of West Virginia. But Ceylon, with over five million inhabitants, must support nearly three times as many people as live in West Virginia. The chart shows that only one-fifth of the land in Ceylon can be used for planted crops. But there are forests which produce valuable crops.

charge. There are about seven hundred different groups in India. Some are ruled by princes, or *rajahs;* others, by British governors. Some of the groups are progressive, but most of them are backward, and the British feel that it will take years of education before the people of this land are ready to govern themselves.

The Island of Ceylon

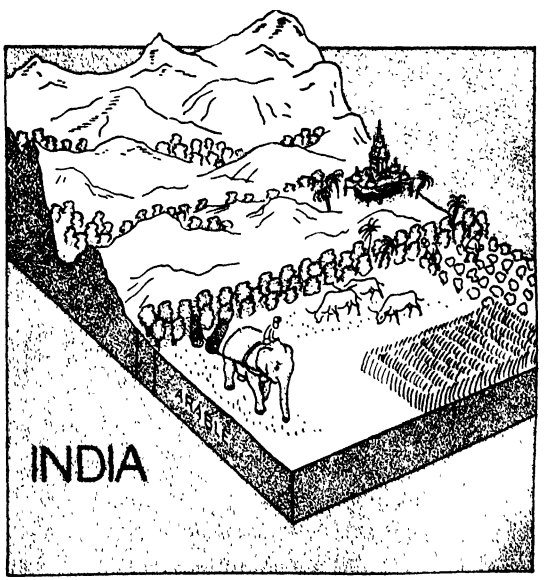
The land and its climate. Ceylon, at the southeastern tip of India, is a British colony. The island is so near the Equator that it is hot all the year round. The monsoons bring rain during the winter months.

The central part of the island is a huge mass of mountains. These mountains are surrounded by a broad coastal plain. Along the northern coast this plain is a dry, waste land, because it lies outside the path of the rain-bearing winds. But other parts are wet lands, where cocoanut plantations produce and export much cocoanut oil and dried cocoanut meat. Two crops of rice can be grown every year on the level, wet lands along the coast.

The people. The natives of Ceylon are descendants of tribes who moved there from northern India nearly twenty-five hundred years ago. In the wildest parts of the island live a people called the *Veddahs*, who are thought to have been driven there when the tribesmen came from northern India. Besides these natives, there are also peoples from Arabia, different parts of India, and the islands to the east.

Occupations of the people. There are no factories in Ceylon, but the people earn a living in many different ways. In olden times the island was important for its spice trade. The trees of Ceylon produce cinnamon, cacao, and cinchona. Do you know what the last two are?

The hills next to the coastal plain were once covered with heavy forests. Now many of these have been cleared away to make room for tea and rubber plantations. It was here that the British first grew "tame" rubber. Today rubber plantations are found in many



This picture chart shows that two-fifths of the land in India is suitable for crops. As India contains more than 1,300,000 square miles, how much of it is cultivated? Do you know how many people must make a living on this land? Will the farms be large or small?

Keystone View Company

There are many thousands of acres of rubber trees in the Malay Peninsula and in surrounding islands. This workman is cutting grooves in the tree so that the sap, called latex, will flow out.

parts of southeastern Asia and on the islands of that region.

Along the coast, fishing is an important industry. Pearl-fishing has been an occupation of the natives for over two thousand years.

Pearls are not the only jewels that come from Ceylon. There are mines which produce garnets, topazes, amethysts, sapphires, and rubies. Graphite, from which pencil leads are made, is also mined.

Ceylon's capital. Colombo, on the west coast, is the capital. It is on the main trade route between Europe and many ports of India, China, and Australia. Locate it on the map on page 500, and see why more steamers call there than at any port in India.

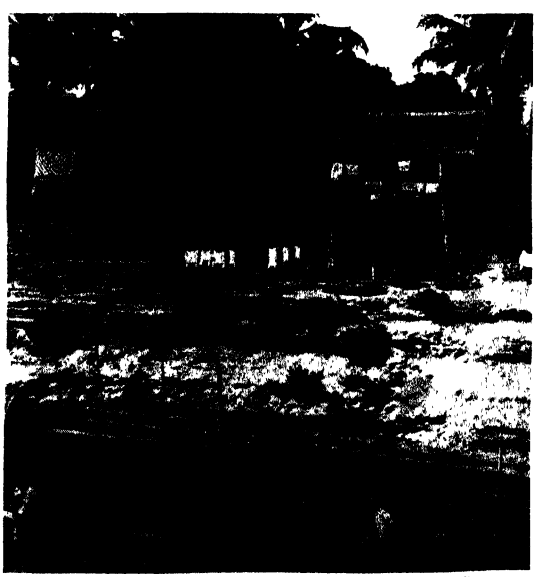
Southeastern Asia and Its Islands

Burma. Across the Bay of Bengal from India is another British country called Burma. Although it is almost as large as our state of Texas, Burma is often considered as a part of India. Turn to the map on page 465 and locate the rough mountain-chain that separates the part of India called Assam from Burma. The passes in this mountain wall are so difficult that travelers from one country to the other usually go by sea.

Down the length of the whole country, nearly nine hundred miles, runs the Irrawaddy River. This stream, which is Burma's great highway, has cut a deep valley through the mountains that shut off Burma from India, Tibet, China, and the countries to the east. In the enormous delta of the Irrawaddy are many rice fields.

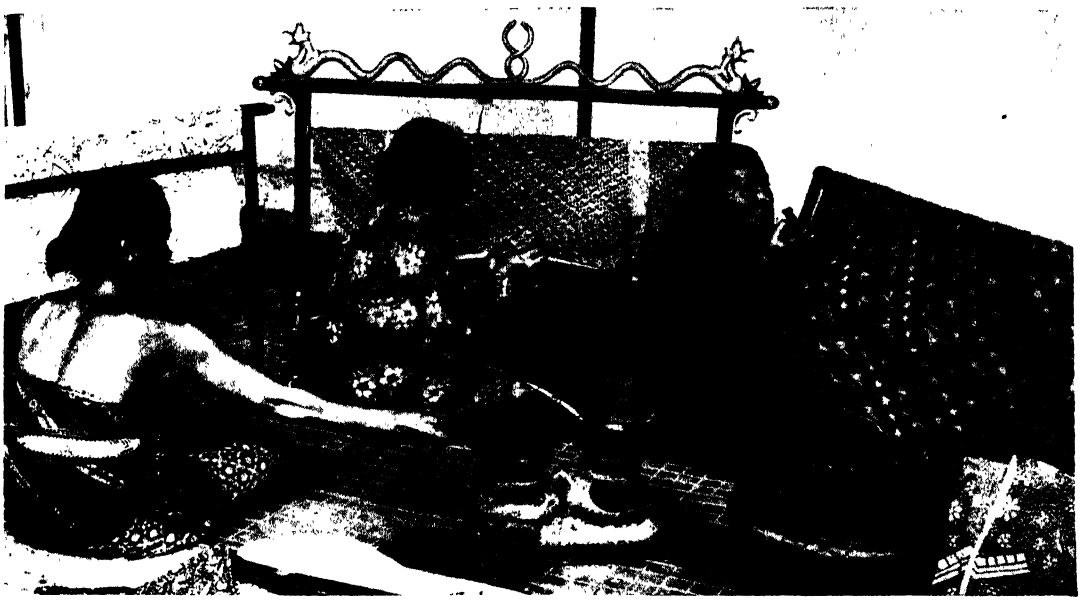
Along this river and its many tributaries live more than fourteen million Burmese. These people are not like the people of India. Mongols invaded Burma many centuries ago, and the Burmese are much more like the yellow races to the north than are the people of India. Most of them are Buddhists, and they do not have the castes that divide the Hindus into classes. The Burmese are better educated than most of the Hindus, as the Buddhist priests have free schools for children.

The capital and chief city and port, Rangoon, is located on the delta. In Upper Burma is Mandalay, a large trade center.



Keystone View Company

Here are two houses in a Burmese village beside the Irrawaddy River. The walls of these houses are made of woven matting. Can you give a reason for thinking that there are floods in this region?



Travel Bureau of Netherlands Indies

These women in the East Indies are making batik designs. They cover all the cloth except the part to be dyed with wax. The wax prevents the dye from coloring that part of the cloth. The cloth must be waxed for each different color used in the pattern. Flowers and leaves are used in most designs. The designs are sketched on the cloth with charcoal before the wax is applied with cotton or a brush.

Most of the oil used in India comes from the petroleum wells of Burma. The world's finest sapphires and rubies are found in this country. The Chinese buy beautiful jade from Burma, and the British buy teak lumber. This wealth helps to make Burma a much more prosperous and contented land than the crowded country of India.

The Malay Peninsula and the East Indies

Next to Burma, in the southeastern corner of Asia, a peninsula reaches southward into the sea. On it are a small kingdom called Siam, part of the French empire called French Indo-China, and a part of the British Empire called British Malaya. This long, narrow Malay Peninsula leads into a group of islands often called the Dutch East Indies. These are the islands for which Columbus was hunting when he found America.

All of these lands are tropical. Turn to the map on page 500 and locate them. Notice how they are made up of high, rugged mountains and low, fertile plains. Heavy tropical rains have caused the growth of dense jungles and forests except in places where the people have cleared the land for crops.

Why these lands are important. There is no place in the world where it is easier to make a living than in these regions. For this reason, in the cleared sections the population is very dense. The cocoanut, the sprouts and shoots of the bamboo, the banana, and the big fruit of the pawpaw furnish abundant food. The natives plant beans, sugar palms, yams, sago palms, and great quantities of rice. This is one of the great rice regions of the world. Enough is raised to feed the natives and to export much of the crop.

While these small countries are not great powers in the world of today, some of their products are important to all of us. More than half the world's supply of tin comes from this region. Much of the world's rubber comes from here, too. Sugar, coffee, petroleum, and spices from Java and Sumatra

are important to the people of the Netherlands. Is there one of these products that your family does not use every day?

Talking Things Over

1. Study a map or globe on which you can see Europe and Asia. Discuss and compare the size and geography of the two continents. Why is it that the civilization of Europe seems to us more important than that of India? Why did the early civilization of India have less effect on medieval Europe than the civilizations of Greece and Rome?

2. Talk over together the caste system in India. Just what is it? Point out ways in which the caste system resembles the system of classes of society in the Middle Ages in Europe. In what ways does it differ?

Doing Things Together

1. List in three parallel columns the products of the great plain of India, the mountain valley, and the Deccan Plateau. Notice what similarities there are in the products of the three sections and what differences.

2. You learned in this section that the chief religions of India are Hinduism and Mohammedanism. Divide your class into two groups. Have each group look up and report briefly on one of the religions.

3. As there are many difficult place names in this chapter, this is a good place to practice the habit of looking up the pronunciation of unfamiliar words. Work separately to make a list of ten unfamiliar names. Look up their pronunciation in a dictionary. Even names which look easy to pronounce, such as Delhi, may surprise you. Compare your lists and practice saying all the names on them.

4. Have you read Rudyard Kipling's *Just So Stories?* Talk over some of the amusing tales in this book. You would probably enjoy Kipling's *Jungle Book* as much now as you did the *Just So Stories* when you were younger. There are other animal stories with settings in India. Collect some books of such stories and arrange them on a table. Do not forget *Gay Neck,* by Mukerji, and *When I Was a Boy in India* by Satyananda Roy. Many of you would enjoy reading them.

5. There are many possibilities for picture collections in this section. You might try to find pictures of the cities of India, particularly some of the very old ones. There are some very interesting temples in India, and some interesting old ruins. The forests, mountains, farms, and animals of India also would make an interesting subject for a picture exhibit. If possible, find pictures that show the difference between an Indian and an African elephant.

DeCou from Ewing Galloway

Outside the palace grounds of the emperors of old China stands this beautiful building, the Temple of Heaven. The roof of the temple is made of deep blue porcelain tiles. Only the emperor prayed in this temple.

CHINA—OLDEST NATION OF THE WORLD

How Civilization Developed in the Orient

A VAST country with an enormous population. The countries of Asia, especially those farthest east, are often called the Orient, which means the place where the sun rises. China is an Oriental land, the largest of all. It is largest both in number of people and in size.

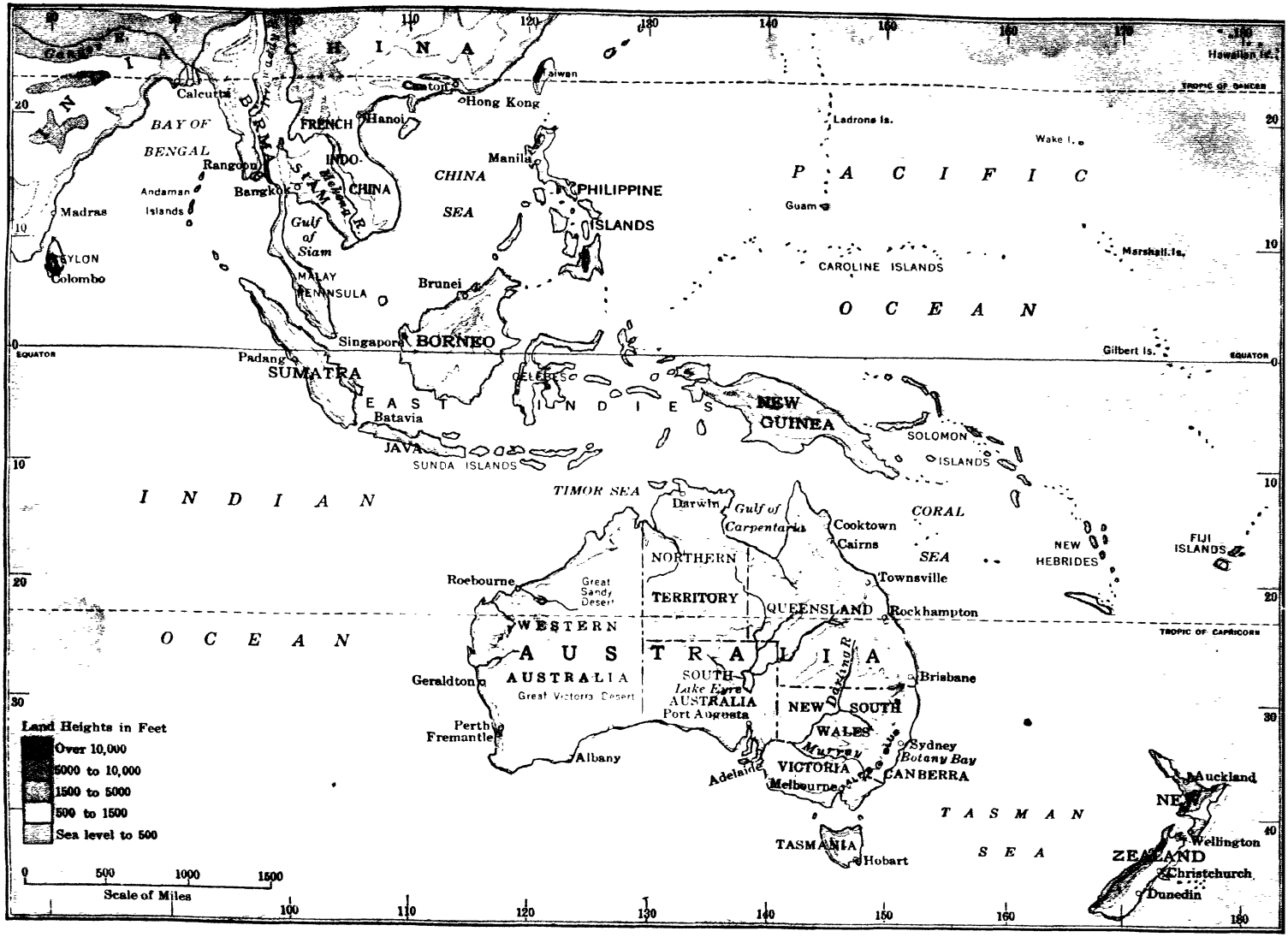
So many people live in China that no accurate census has ever been taken, but probably there are more than 400,000,000 Chinese. The country itself is much larger than the United States. This great expanse is made up of broad grasslands, fertile valleys, sandy deserts, hills with tree-covered slopes, bamboo forests, tangled jungles, and broad, fertile plains.

Today the most important parts of China are the broad plains. Before we learn about them, we shall have to know something about the valleys, particularly the valley which was the Chinese cradle of civilization.

The Chinese cradle of civilization. In the first part of this book you read about four great cradles of civilization. You have already studied about three of them. Turn back to the map on page 25 and locate all of them. Which cradle remains to be studied?

Turn to the map on page 465 and find the little valley of the Wei River. This is the cradle where Chinese civilization began. But archaeologists have not been able to find out as much about this cradle as about the others. Probably about 3000 B.C., when the Egyptians were building the pyramids, nomads from central Asia wandered into the Wei Valley.

These nomads were farther advanced toward civilization than the people who were


INDIA
CHINA
BAY OF BENGAL
Calcutta
Madras
Andaman Islands
CEYLON
Colombo
BURMA
Rangoon
Bangkok
FRENCH INDO-CHINA
Gulf of Siam
MALAY PENINSULA
Canton
Hong Kong
Taiwan
Hanoi
Manila
PHILIPPINE ISLANDS
CHINA SEA
Brunei
Singapore
BORNEO
Padang
SUMATRA
CELEBES
EAST INDIES
Batavia
JAVA
SUNDA ISLANDS
NEW GUINEA
SOLOMON ISLANDS
INDIAN OCEAN
TIMOR SEA
Darwin
Gulf of Carpentaria
Cooktown
Cairns
Townsville
Rockhampton
CORAL SEA
NEW HEBRIDES
FIJI ISLANDS
NORTHERN TERRITORY
QUEENSLAND
Roebourne
Great Sandy Desert
WESTERN AUSTRALIA
Great Victoria Desert
Geraldton
Perth
Fremantle
Albany
SOUTH AUSTRALIA
Lake Eyre
Port Augusta
Adelaide
Darling R.
Murray R.
NEW SOUTH WALES
Brisbane
Sydney
Botany Bay
CANBERRA
VICTORIA
Melbourne
TASMANIA
Hobart
TASMAN SEA
NEW ZEALAND
Auckland
Wellington
Christchurch
Dunedin
PACIFIC OCEAN
Ladrone Is.
Guam
Wake I.
Hawaiian Is.
CAROLINE ISLANDS
Marshall Is.
Gilbert Is.
TROPIC OF CANCER
TROPIC OF CAPRICORN
EQUATOR
Land Heights in Feet
Over 10,000
5000 to 10,000
1500 to 5000
500 to 1500
Sea level to 500
0 500 1000 1500
Scale of Miles

Keystone View Company

North of the Gobi Desert, in Mongolia, there are many tribes of nomads who live today much as their ancestors did centuries ago. The tents you see in this village are made of crisscrossed poles and are then covered with cloth. Judging by what you know of others, how do you think these nomads make a living?

then living in the valley. The natives were hunters and fishermen, while the invaders knew something about farming and probably brought tame animals with them. Soon the invaders settled down, and settling, as you know, is the first step toward civilization.

Just as the peoples in the Tigris-Euphrates Valley and in the Nile Valley spread out, so did the people in the valley of the Wei. Turn to the map on page 465 and see how the Wei River runs into the Hwang Ho. Trace the course of the Hwang Ho from the Kunlun Mountains of Tibet to its mouth. Down this river and up the valleys of its tributaries the Chinese people spread.

What China is like. For many centuries the Hwang Ho has deposited silt from the mountains, and its flood plain forms a level stretch which is called the Great Plain of China. The Hwang Ho Valley is not the only important valley in China. Farther south are several wide basins cut out of the mountains by the Yangtze Kiang, and near the southern border of China is the valley of the Si Kiang. Find these plains on the map on page 465.

Except for these plains and the valleys of smaller rivers, China is a country of mountains. There are also large stretches of desert land and dry steppes. Find the region around Tibet on the map. Here many of the mountain peaks are five miles high. Part of the country is a wind-swept plateau dotted with lakes. To the north of this region find the Takla Makan and the Gobi, two large deserts. They are a part of the desert belt that you read about earlier in the book.

Ancient civilization in China. By 1000 B.C. the Chinese had made many advances in civilization. They had a written language, a system of weights and measures, a calendar, musical instruments, and many useful tools. Craftsmen made pottery and porcelains from clay, and there were workers in gold, silver, bronze, and iron. The women spun thread and wove cloth, while the men busied themselves hunting, fishing, and farming. They lived in thatched houses built of tightly packed mud and knew how to make tables and comfortable chairs. Probably they knew how to raise silkworms and make silk cloth.

Museum of Fine Arts, Boston

A Chinese artist carved this wooden figure before the time of Marco Polo. Do you think that the artist made the figure look natural?

At this time China had a feudal period. The settled part of the country, which was along the banks of the rivers, was divided among many powerful nobles. They were constantly fighting against each other, much as the feudal lords of Europe fought nearly fifteen hundred years later.

All this time the Chinese had been shut away from other civilizations. Probably they had not heard of the great civilizations of Babylonia and Egypt, or even of the civilization of India. Greek civilization had barely begun.

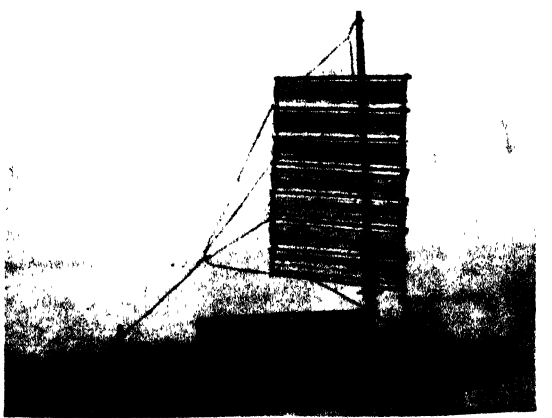
China's great philosopher. During the troubled feudal times in China there lived a great teacher called Kung the Philosopher. We know him as Confucius. His sayings were written down, and even today many of the Chinese follow his rules for leading a peaceful, happy life.

The ideas of Confucius reached beyond the boundaries of China to Chosen (or Korea), Japan, and Indo-China. It was then that the Chinese civilization began to spread. The Chinese way of writing was introduced to those countries.

How China received its name. Just as strong rulers appeared at different times in Europe, as you remember reading, so it happened in China. One of the kingdoms of the region was called Ch'in. Its ruler conquered the other kingdoms around him and made himself emperor of all. Then the whole country came to be known as China, after the name of the emperor's kingdom.

The first emperor of China was Shi Hwang Ti, and he lived just about the time the Romans were fighting the Carthaginians. The emperor conquered all the nobles of his country and then extended his kingdom southward until it included part of what is now Indo-China.

The Great Wall of China. But this emperor is most noted for having the Great Wall built. The Romans, you remember, built walls along the Rhine and the Danube and in parts of England, to keep out barbarians. The emperor of China wanted to keep barbarians out of his kingdom. North of his country was a huge stretch of grasslands inhabited by nomads who often invaded the fertile fields of China. Shi Hwang Ti built a wall about twenty feet high, with a roadway fifteen feet wide on top of it, across the northern part of his kingdom.



Philadelphia Commercial Museum

The Chinese learned to use boats very early in their history. This is a model of a river boat called a junk. It has a bamboo sail and awning.

Keystone View Company

The Chinese began this great wall at about the same time the Romans were fighting the Carthaginians in the Mediterranean. In later centuries they rebuilt it and extended it. In the time of Genghis Khan it extended across the northern boundary of China. Soldiers were stationed in the towers and could hurry along the road on top of the wall to places where danger threatened. Notice how the wall winds over this mountainous country. If you followed the wall, you would have to take a journey as long as a trip half-way across the United States. Thousands of men had to work to finish such an undertaking.

The Great Wall, as it was called, was more than fifteen hundred miles long, and the emperor kept more than three hundred thousand soldiers along it to protect his frontier. Every few hundred yards there was a fortified tower where soldiers stayed. The wall did keep out the barbarians, who gradually moved westward. You have read about them before, because their descendants invaded Europe. We call them Huns. So you see this Chinese emperor did something that changed the story of Europe.

The Chinese learn of Europe and India. After the first emperor died, other rulers extended China even beyond the Great Wall. Chinese traders reached Persia and there learned about the Romans.

Before the year 100 A.D. missionaries from India reached China, preaching the teachings of Buddha, whom you read about in the story of India. In this way the Chinese learned something of the civilization of India. The missionaries from India brought not only religion to the people of China, but also art. During the time when Alexander the Great had invaded India, the people of India had borrowed ideas about art from Greece. In that roundabout way, ideas from Europe finally reached China.

Look carefully at the map on page 465 and notice particularly the mountains and deserts. See how they form a wall about China. When you look at the scale of miles on the map and figure how wide the wall of mountains is that surrounds the country, you will understand why the Chinese did not meet peoples from other countries for a long time.

How the Chinese advanced. Although the Chinese did not learn much from other civilizations during the period between 400 A.D. and 1000 A.D., they advanced more rapidly than Europeans did. At least five hundred years before books were printed in Europe, the Chinese were printing books on fine paper. The letters and pictures were cut into blocks of wood. The Chinese even tried making type out of baked clay.

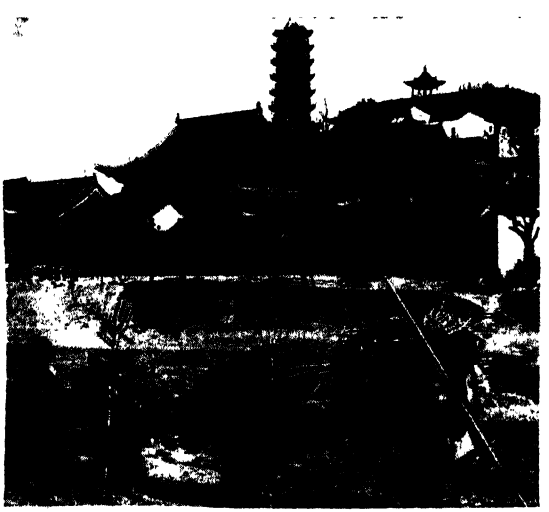
DeCou from Ewing Galloway

In rice-planting time this is a common scene in the southern part of China. From the slopes of the hills can be seen hundreds of flooded fields, each with a mud wall around it. Where do you suppose these farmers get the water?

Arab traders found out how to make paper, and that knowledge was carried back to Bagdad. From there, paper-making spread to Spain, which was then in the hands of the Mohammedans. But the Arabs apparently did not find out how to print books, for they were copying books by hand long after the Chinese were printing them.

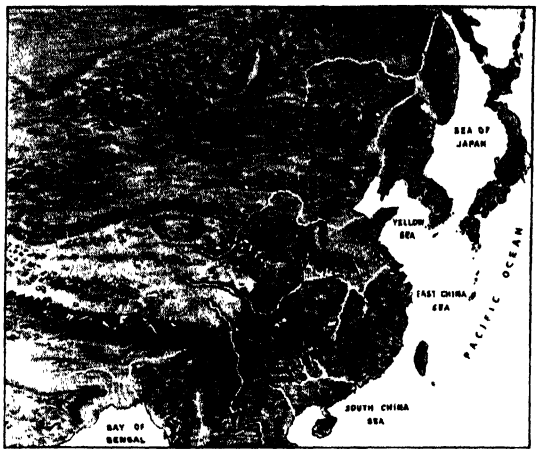
Another discovery during this period was gunpowder. The Chinese used it to make fireworks long before Europeans found out how to use it in guns and cannons. The Chinese are said to have invented the mariner's compass. Arab sailors learned how valuable the compass was for guiding their ships, but Europeans did not learn of this instrument until the time of the Crusades.

During the feudal period in Europe, the Chinese were more civilized than the Europeans. While the nobles were ruling in Europe because they had soldiers to keep them in power, the Chinese were selecting their government officials by holding examinations. In Europe the Church was struggling to establish a few schools in monasteries, while in China there were many schools to teach the sayings of Confucius and to train men for government positions.



Keystone View Company

This farmer and his three sons are returning from work in their fields. You can be sure that the straw they are carrying will not be wasted. Do you see the tall pagoda rising above the roofs of the village? Pagodas are sacred towers. Perhaps they were built for the same reasons that spires and towers were built on cathedrals in Europe.



Notice the great plateau of Tibet and the ranges of mountains that hem it in on the south and east. You can see the river valleys of China and realize that much of China is rough and mountainous. Find the desert region north of Tibet.

How Chinese goods reached European markets. China was not completely shut off from the world, because Chinese silks and porcelains were carried by traders to Europe. But this did not mean that Chinese traders met Europeans, because a single trader did not make the entire journey between the two lands. A merchant carried goods to a distant town and there sold them to a second trader. This trader carried the goods farther and sold them to a third trader. In this way the goods passed through many hands until finally they reached Europe. Look at the map on page 318 and see why this was necessary even in the case of the Arabs, who carried goods by boat from China to Bagdad. Trace all the trade routes.

The empire of the Mongols. The Great Wall did not always keep out the nomads from the north. Just before 1200 A.D. these nomads, called Tatars or Mongols, were united under a great chief, Genghis Khan. He conquered China and then moved west-

ward. His army of a million men rode across Asia into Europe. They conquered Russia and parts of Poland, Hungary, and the Balkan Peninsula.

The grandson of Genghis Khan was Kublai Khan. He conquered even more lands than his grandfather. Look at the map on page 318 and see how large an empire he had. Kublai Khan liked China and moved his capital from Karakorum, in Mongolia, to a city in China which he named Cambulac. It is now called Peiping.

Marco Polo again. You have read about Marco Polo and his journey to China, which he called Cathay. Kublai Khan was the emperor that Marco Polo visited. It was Marco Polo's book that first told the Europeans about the civilization of China.

Traders of Europe were eager to reach the East in order to bring back silks, gold, jewels, and other fine things described by Marco Polo. But the land journey was long and dangerous and very expensive. So Europeans tried harder than before to find a way to reach China by sea. They knew, from Marco's story, that China lay to the north of the Spice Islands.

Columbus, as you know, was hunting for an ocean route to the Orient when he found the New World. He never reached Asia by water, but others did.

Finally, European sailors brought their ships into Chinese harbors. You remember reading of the Portuguese prince, Henry the Navigator, who trained his men and sent them out to find a way to the Orient by sea. It was the Portuguese traders who first began to take the Chinese trade away from the Arabs.

A new invasion from the north. The Mongols did not change the Chinese in many ways, and it was not long after Kublai Khan

Ewing Galloway

This is a one-girl-power flour mill, which any family in the village may use. When the girl has pushed the heavy stone around enough times to grind the grain under it, she will take a grass brush and sweep the coarse meal off the stone platform into a cotton cloth. Not a particle will be wasted, for food is dear in China.

Keystone View Company

Irrigation is used on many Chinese farms. These three men work many hours every day supplying water to their fields. As the long pole is turned by the men's feet, a series of paddles scoop up water from the stream and raise it in a trough to the field.

that the Chinese were again ruling themselves. But later, just about the time when the English were settling colonies in America, China was again invaded from the north. A people from Manchuria, called Manchus, conquered the Chinese and ruled them until 1912. The first Manchu emperor made the Chinese men wear their hair in queues, or "pigtails."

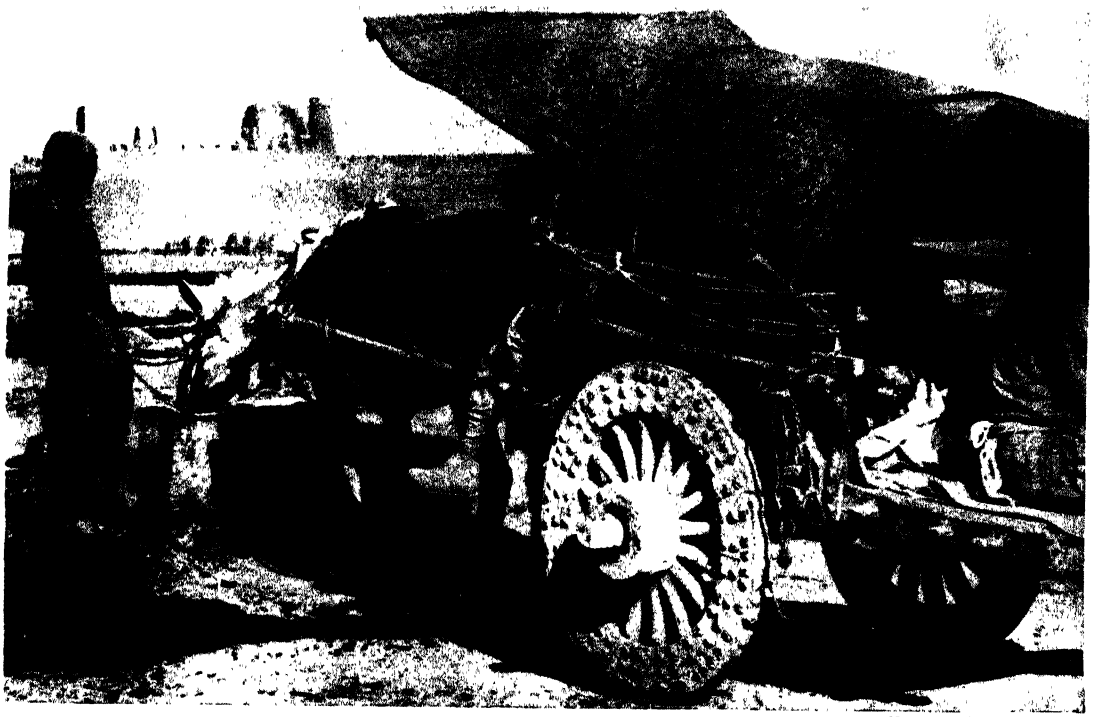
A Chinese George Washington. The Chinese got rid of their Manchu rulers in 1912, under the leadership of Sun Yat Sen. Like George Washington, he led his people in a revolution which established a republic. Today the Chinese are trying to unite their huge country under a democratic form of government and make the best use of their great resources.

Why progress in China has been slow. The new China is having a hard struggle to advance. It seems queer to us that a country which was once farther advanced in civilization than Europe should now be backward. But when we know more of China we shall see why this is true. For many years China stood still instead of marching along the road of civilization. When Portuguese traders from Europe reached China a little after 1500, the Chinese were well satisfied with their civilization. They saw no reason for copying any European ways. They had good irrigation systems in the valleys, and public granaries so that people would not suffer during years when the crops were poor. They had a good trade, and had found out that paper money was easier to use than coins. Europe did not find that out until many years later. The Chinese were building fine palaces, temples, and houses. Their artists produced beautiful paintings and works of art, such as bronzes and porcelains.

The Chinese were so well satisfied with their civilization that they did not care to progress any farther. They seemed to think that everything worth while had been discovered and that there was little use in trying to make anything better than before. In fact, the Chinese looked down on the people of other nations. To the Chinese the ways of other people were not worth copying. European customs seemed as queer to the Chinese as Chinese customs seemed to the Europeans. Perhaps if we try to understand these customs, we shall understand the Chinese better.

Ostrander from Ewing Galloway

In southern China, close to the border of French Indo-China, the houses are made of matting and are thatched with grass. This region is a land of mountains and forests. What does the picture tell you about the climate of this part of China? What does a map of this region tell you about the land?



Keystone View Company

Although much hauling is done with human muscles in China, there are horse-drawn carts such as the one you see here. There are no springs, and when passengers ride in the carts, they usually have a rough journey. The heavy carts have wheels with narrow treads, and the roads are often cut into deep ruts.

How the Chinese Are United

A country inhabited by one race. China is such a big country, broken by mountains and deserts, that transportation between the various parts is not good. Roads are poor, and there are few railways. In some parts, rivers are the only highways leading to other parts of China. The people in different regions have had little chance to travel and become acquainted with other Chinese. The various sections have different ways, different foods, and even different ways of speaking. In fact, the people in one part of the country may not even be able to understand the language of Chinese from another part.

In spite of these differences, the Chinese are united in many ways. One reason they are united is that they are all Mongolians. A Mongolian is a member of the yellow race. A few of the invaders of Europe, you remember, belonged to the yellow race, but most of them were white people, or Caucasians, as they are called. Later you will read about other races of brown and black peoples.

The Chinese language. Although the spoken language is different in various parts of China, the written language is the same everywhere. A written word may be pronounced differently in several parts of the country, but it means the same thing everywhere.

The Chinese began their writing in much the same way as the ancient Egyptians. Early words were pictures. Each one was a drawing of some object. The word for mountain was a picture of a mountain, made like this:

Next the Chinese put two pictures together

in order to write words for ideas that could not be drawn in pictures. For example, to make the word *friendship*, they drew two hands, like this:

Like the Egyptians, the Chinese had to make many written signs, or characters, for words. And so they drew characters to represent the sounds of the word they were writing. Now their language is a mixture of these three kinds of characters.

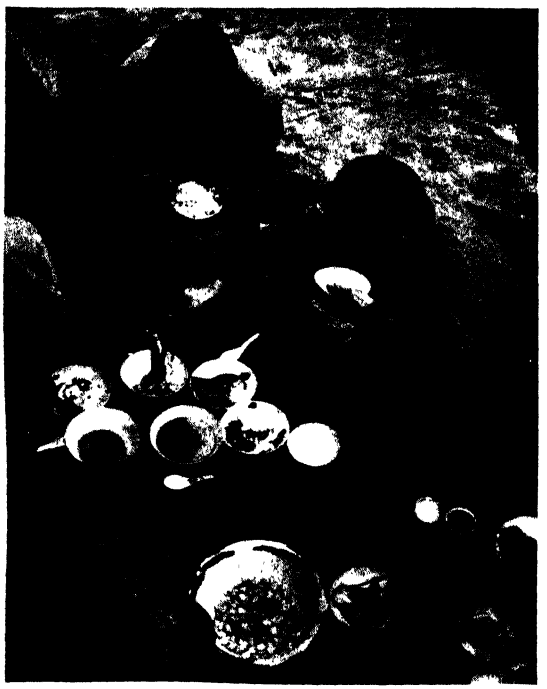
The number of characters in Chinese writing grew and grew, until now there are many thousands of them. It takes a long time for a Chinese youth to learn even a part of the characters.

During the many centuries since the Chinese learned to write their language, the characters have been changed. Most of the pictures have been made simpler, so that they can be easily written with a brush, which the Chinese use instead of a pen. For example, the words *mountain* and *friendship* are now written like this:

山　　友

Ewing Galloway

Although China is a large country, it is crowded with people, and good land is valuable. In the rice country the hillsides are terraced, so that each field is flat. Do you know why the fields must be level?



Ewing Galloway

These passengers on a Chinese boat are having their "rice," which means their dinner. Most of the meal will be rice, but there may be some vegetables, such as cabbage or onions. And if the passengers have money, perhaps they can afford pork or chicken. But for millions of Chinese, rice is the main food.

The religions of the Chinese. As you would expect, there are many religions in this huge land of China. Probably more Chinese believe in Buddhism than in any other religion. But almost all the people follow the teachings of Kung the Philosopher, or Confucius. Confucianism, as these teachings are called, is not exactly a religion, but it does teach the Chinese people how to act.

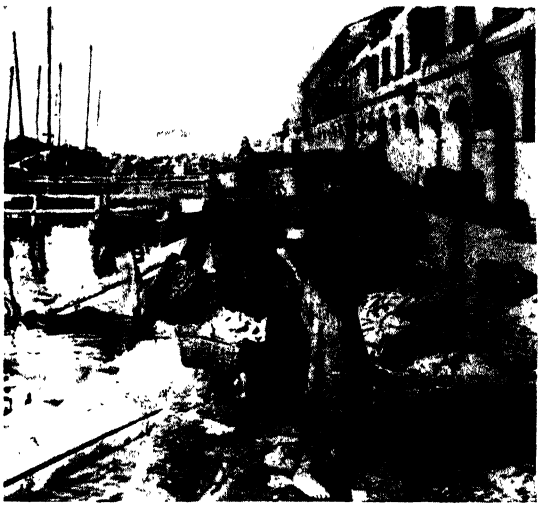
Confucius taught people to reverence their parents, to respect their elders, and to guard the family life. His teachings have been followed so faithfully for many centuries that now the Chinese worship their ancestors. They make offerings of food and other things to the spirits of their ancestors, hoping that the spirits will help the living members of the family.

Ancestor worship has helped to keep the Chinese from progressing. In our country we often abandon old ways that do not suit us and try new ways. But the Chinese do not want to abandon their old customs. To do so would be the same as saying that their ancestors, who followed those customs, did not know the best ways. To a Chinese, that would be an insult to his ancestors. And so the Chinese keep their old customs.

Of course, there are some modern schools in China where young Chinese are being educated in European and American ways. But there are not many of these people compared to the millions of others in China who still live as their ancestors did. Suppose we see how these millions live.

How the Chinese Live

The crowded fertile regions. Nearly one-fifth of all the people in the world live in China. Most of the Chinese live in crowded parts of their land. The high plateaus of Mongolia, Sinkiang, and Tibet are criss-crossed with rough mountain ridges, and the land is so poor that it will not support many people. Some of the plains are so dry that few people can make a living on them. On the deserts, of course, people cannot live. All this means that China's many millions are mostly crowded into the river valleys and the fertile lowland plains. There is an average of three or four hundred people for each square mile in these fertile parts of China. In the United States we have an average of thirty or forty people for each square mile.



Keystone View Company

These coolies are carrying baskets of fish from the docks. It is cheaper to use men than to have animals or trucks for the work. Notice the pole from which the baskets hang. The weight of the coolie's burden is on his shoulders. What do the hats tell you about the weather in this part of China? Such hats cost six cents. What does that tell you about prices?

Ewing Galloway

The man pushing the wheelbarrow has a sail to help him with the load. We would think that four people made a good load for a horse, but the Chinese coolie will manage all right. His wages are very small, and probably it would cost more to feed a horse than to feed him. Other pictures will make you realize that man-power is used in China for many tasks. There are many people in China eager to work.

The great river valleys. Of the three great river valleys, the fertile Yangtze Kiang Valley in central China is the most crowded. Like our Mississippi, the Nile, and other great rivers, the Yangtze Kiang has built up a great delta. Find this river on the map on page 465. To the north of it find the Hwang Ho. Trace its course and see where it flows into the sea, north of the rocky Shantung Peninsula. Tributaries, branches of the river, and canals crisscross the land and are used as waterways and for irrigation.

Keystone View Company

Here you see another proof that human labor is very cheap in China. In this sawmill no machinery is used. These two men work from sunrise to sunset, sawing big timbers into boards. Our saws cut as they are pushed away from the worker. The Chinese saws cut as they are pulled toward the worker.

Once the Hwang Ho flowed into the Yellow Sea (Hwang Hai) south of the Shantung Peninsula. Dotted lines on the map show its old course. For many centuries the Hwang had brought down soil from the mountains. In the lowland valley the river flowed slowly, and the dirt settled to the bottom of the stream. As the bed of the river grew more shallow, the river tried to spread out. But the farmers wanted as much land as possible; so they built dikes along the river, just as we have built levees along the Mississippi. These dikes were all that kept the river from flooding the land.

In 1852 the Hwang broke through the dikes along its northern bank and made a new channel to the sea. Thousands of farmers were drowned in the flood, and many thousands of farms along the old course of the river were left without any water at all. There have been many floods since then, but none so terrible. These floods destroy growing crops, wash away buildings, and drown both animals and people. Then, because crops are gone and the people have no money for food, there are terrible famines, and many thousands die. That is why the Hwang is called "China's Sorrow."

Villages of the Chinese. Although there are many large cities in China, most of the people live in villages, going out daily to work in their fields. In China the villages, as well as the cities, are walled, and the gates in the walls are closed at sundown.

Each house in the village has its gate also. Inside each gate is a screen to keep out evil spirits, for the Chinese are very superstitious. Since spirits are supposed to fly in a straight line, the Chinese place screens in front of their gates to keep them out. The village street is only a narrow lane. The houses of the poor are made of sun-dried brick or of packed mud.

In southern China bamboo is used for building houses. Since this region is rainy, the roofs are heavily thatched. Along the coast between Shanghai and Canton, where the rainfall is sometimes several inches in one day, the roofs of those who can afford it are made of tile. In the drier, northern part of

DeCou from Ewing Galloway

Have you ever seen a man pushing a load like this on the roads in our country? Perhaps you can figure out why this is a common sight in China. The Chinese wheelbarrow has a much larger wheel than ours.

Keystone View Company

These large bins, which look like silos, are storage bins for soy-beans. In the northern part of China the farmers make a living raising these beans. They cannot grow rice, but the climate is suitable for millet. People can live on millet and beans.

the country the roofs are made of willow sticks covered with a rough plaster of mud and straw.

Homes of the well-to-do and of the poor. Suppose we knock at one of the gates before the house of a well-to-do Chinese. Out of a tiny house built into the wall comes a servant, who opens a gate that leads to a courtyard. Within the court are trees, flowers, and a pool in which goldfish are swimming about. Passing through an archway, we are in another court, more beautiful than the first. The house is a series of rooms around this court. The latticed windows have small pieces of paper instead of glass. There is a reception room with tea-tables and upright chairs against the walls. We see also a dining-room and a kitchen, in which there is a brick stove with an opening on top and an oven at one side. Since wood and coal are scarce, straw and weeds are used as fuel.

Only the richer Chinese live in homes such as this. The homes of most of the people are small huts. And there are some who live in caves, strange as that seems in this day. In the province of Shansi many Chinese have dug cave homes for themselves in the banks along the streams or in hillsides back from the rivers. You would think these dark, stuffy caves a poor sort of home, but they provide shelter from the rain and the swirling dust of the wind-storms that are common in this region.

We can see many things in China that seem strange to us. But our land and customs would seem just as strange to the average Chinese. You may be sure, however, that you would never hear him say so, for the Chinese are a very polite people.

The farmers of China and their crops. As you would expect in a land of wide, fertile river plains, there is much farming. Since earliest times China has been a country of farmers. There are so many people crowded on the land that the farms are tiny, averaging less than two acres. Every foot of soil is carefully cultivated to produce the largest possible crop. So scarce is level land in southern China that some of the slopes are terraced and planted as high as eight thousand feet up the mountainsides.

For forty centuries the patient Chinese farmers have tilled their fields year after year.

Sloane Collection

The mountains of China contain valuable minerals, but there are few mines, because transportation is poor. Here you see a mountain of iron ore which is being cut away in steps. This mine is worked by an English company, and if you look closely, you may be able to see the railroad tracks. Earlier in this book you saw a picture of a similar mine in another country.

There is little machinery on the farms, not only because the people are poor, but because the Chinese like to do everything just as it always has been done. They wish to follow the ways of their fathers and grandfathers. And then, too, the Chinese fear that new inventions might anger the spirits.

Every member of the family, as soon as he is able to toddle, helps in the family gardening, pulling weeds and fertilizing each plant separately. Most of the farmers are very poor. If there is enough rainfall, and if it comes at the right time for the crops, the farmers and their families have enough to eat. If the crops fail, thousands of Chinese starve, for few can save up enough money or food to carry them over a time of famine.

The Chinese farmer raises several kinds of grain, a little tea, and a little fruit. He sometimes has also a few mulberry trees for silkworms, and a few pigs or sheep. Since his farm is small, he must grow the kind of crop that produces the most food. In the southern part of China, rice is the principal crop and the principal food. In the northern region the people raise millet and beans. Look on the map on page 504 and locate the regions where China's most important crops are grown.

Ewing Galloway

Chinese rugs are popular in many American homes. This weaver is making a round one on a large hand loom. Good Chinese rugs are worth almost as much as hand-made rugs from Persia.

A visit to the rice fields. Let us visit the rice fields of the Yangtze in April. The river, winding its way through the fertile soil of its valley, slips over its huge delta to meet the sea in a wide bay. We can hardly tell whether we are on land or on sea, for there are so many irrigating canals that they make a watery network in the rice fields. At this time of the year the fields are flooded to soak up moisture for the young rice plants.

The work of the rice farmers begins in April. First the seeds must sprout. The seeds are soaked in water for about a week. When they are ready to break open, they are washed in clean water and covered with straw to keep them warm until they are planted in small nursery beds. There the young rice plants grow, crowded together, until they are a few inches tall.

By the middle of May or the beginning of June, after growing about a month, the rice is ready for transplanting. The tiny plants are lifted from their nursery, washed, and separated into small bundles. Then they are carried to the larger rice fields, which have been carefully plowed, fertilized, and flooded with water.

The season for transplanting is a time for feasting as well as for hard work. Everyone is busy and happy. Men, women, and children, barefooted and with their heads protected from the hot sun by rice-straw hats or by cotton cloth wrapped around them, carry the small wooden tubs filled with the little plants. In the fields the mud is deep and soft. The workers push each little bundle of rice plants down into the mud, making neat rows across the field. All the plants are under water to a depth of about two inches. Every

From "The Good Earth"—Courtesy Metro-Goldwyn-Mayer

This Chinese family is praying to its gods of the fields for a good crop. Notice the clothes of each member of the family. The grandfather is wearing a long gown, but the others are wearing trousers.

little while the fields are plowed. For this work, water-buffalo are used. Or sometimes the farmer softens up the soil with his bare toes. The water is drained off the fields from time to time, and the weeds are pulled out.

By September the rice is ripening. Then the farmer drains off the water for the last time. Soon the yellow rice-ears are nodding over dry fields, and the harvest begins. After the stalks of rice have been cut with a hand sickle, they are tied in bundles and hung to dry. Some of the rice is threshed and winnowed in the fields. Some of it is first taken to the villages. The rice heads are drawn off by pulling the straws through sticks that are set close together like the teeth of a comb. Then the grains are pounded to get the husks off. Last of all they are shaken in baskets until the chaff is blown away by the wind. Then the harvest is over, and there is merry-making—the most joyful of the year.

In this part of the country there are no roads such as we have. There is no space for roads. The people need every inch of land for growing rice. There are paths only along the tops of the earthen ridges that mark the boundaries between the fields. Since these paths are scarcely a foot in width, no wagon can travel on them. As we look over the watery fields, we see only water-buffalo drawing the plows, men and women under their mushroom straw hats, and children bending their tiny backs over the wooden tubs.

What rice means to the Chinese. If you travel in China, you are amazed at the number of ways in which the Chinese use rice. They boil it or steam it. They stew it with vegetables and meat. They fry it with eggs or shrimps. They grind it into flour for making different kinds of bread. They even make the rice into candy and into a kind of drink. These hard-working people do not waste any part of the rice plant. They use the straw for mattresses and for fuel; they make paper and rope from it; they thatch their roofs with it. The roots are left in the field for fertilizer.

In spite of China's great size and its millions of farmers, it ranks only second in the world production of rice. This is because China has only a few regions where rice will

Courtesy Metro Goldwyn Mayer

You can see how a Chinese farmer divides his land into fields and terraces in this picture. The farm you see here is not located in China but in California. It was copied from a Chinese farm when the motion-picture "The Good Earth" was made. On such farms the Chinese raise millet, onions, and many other vegetables.

grow. For rice, you remember, needs an abundance of water and a very warm sun. And so, although the Chinese raise millions of pounds of rice each year, they still have to import some from other countries.

How the climate affects the crops. If you look at the map on page 504, you will see that there are three grains which are important to the Chinese: rice in southern China, wheat in the central part, and millet farther north. China can grow these different grains because it is such a large country that it has many different kinds of climate.

Look on the map on page 465. The island of Hainan lies within the tropics, where heat and moisture are present all year. The only cool time comes at night, when the sun's rays are not pouring their burning heat onto the steaming, tropical jungle. The city of Canton has a climate not unlike that of Havana, Cuba. A little to the north, around Shanghai, the weather is similar to that of Savannah, Georgia. Farther north, Peiping's climate is much like that of New York City. Still farther north, Harbin has the climate of Montreal. Along the northern border of Manchukuo, not far from the Arctic Circle, the days are always either cold or cool, and snow lies on the ground many months in the year.

The rain in the south is much heavier than in the north. Southeastern China is drenched with a heavy rainfall of nearly eighty inches every year. This is a monsoon country. What other monsoon country grows large quantities of rice? The great lowland of the Yangtze Kiang and the delta of the Si Kiang are the two areas of heavy rice production. They are in the monsoon rain area. The summers are hot and the winters mild, so that there are at least two hundred days in the year during which rice will grow. This means that two crops can be raised.

Silk, tea, and cotton. South China also raises other crops. Sugar-cane is grown in considerable quantities; but more important

are the crops raised from the mulberry tree, the cotton plant, and the tea plant.

The mulberry trees are grown in rows along the banks of canals and sometimes along the paths between the rice fields. The leaves are picked and the silkworms tended by all the members of the farmer's family.

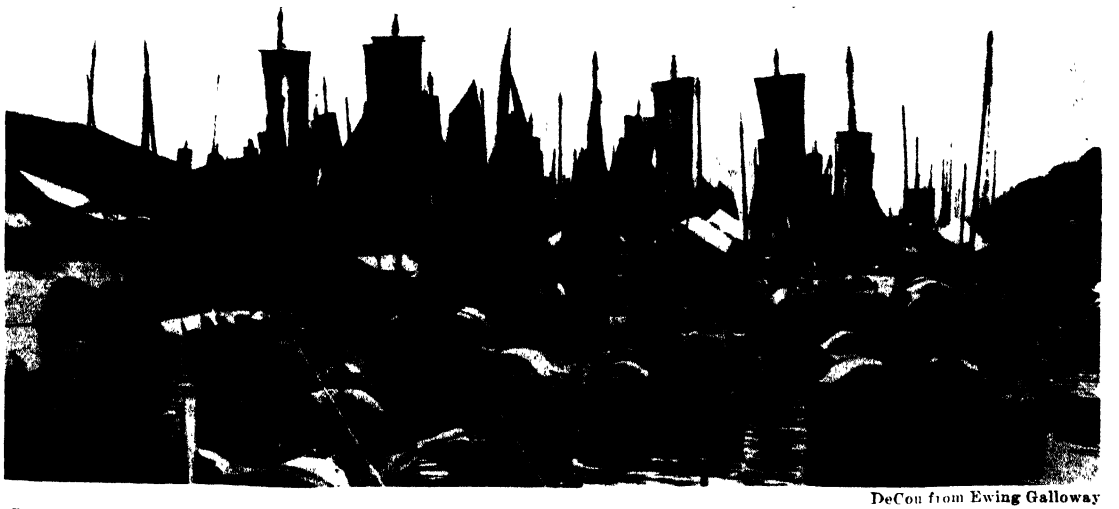
Tea is grown on the sunny, moist, terraced slopes of hilly southern China. Here the tea plants get good drainage for their roots. Unlike rice, tea does not grow well if water stands around its roots. It likes plenty of rain, but not standing water. The tea plants, also, are tended by the whole family, who pick the leaves, dry them, and prepare the tea for market.

Much cotton, too, is grown in the warmer parts of China, chiefly in the level country around Shanghai and on the Great Plain. The Chinese use most of their large cotton crop, for all their common people dress in cotton clothes.

The northern and central plains. During the winter season northern and central China are very cold. No great mountain wall protects this region, as India is protected from the cold winds. Icy winds from the highlands of Asia have a clear sweep eastward. These winds are very strong. They bring terrible dust-storms from the vast interior deserts and drop their dust load in a great mantle on northwestern China. This deposit of dust is now many feet deep and forms a kind of loam called *loess*. In summer the wind blows in the opposite direction, and then the monsoon brings rain to this region.

On the fertile northern plain of China millions of farmers are crowded together. Here in the cooler regions wheat, rye, barley, and millet are grown. One of the largest crops, especially in Manchukuo, is the soy-bean. In northern China this bean is as important a food for the people as rice is in southern China. The Chinese prepare the beans for food in a number of ways. They also sell oil from the beans and great quantities in cake form for fertilizer. Tons of soy-beans are exported to other countries. In America soy-bean oil is used for making soap and paint.

In the interior of China, within the province of Mongolia, the land is very dry, and there is a large desert area. But this desert is not hot like the Sahara. In winter it is very cold. Date palms do not grow in the oases, as in the Sahara, but there are a few spots where wheat and barley are raised.



DeCou from Ewing Galloway

Some of the rivers of China are crowded with boats on which whole families live the year round. Most of them have no other homes and earn their living as fishermen or by carrying freight between cities.

The mineral wealth of China. As China is a mountainous country, you would expect it to be rich in minerals. It contains very rich coal and iron mines. The iron mines of Shansi and those near Hankow are among the richest in the world. Because of this immense wealth of coal and iron, you might expect the Chinese to be a great industrial nation, but they are not. Their ancestors were not much interested in mining, and so they are not. Another reason why the mines are not developed is that there are few railroads or highways to provide transportation of the coal to market.

There are rich copper deposits in Yunnan. Large quantities of tin ore also are mined in Yunnan and in the region north of Canton. The province of Hunan produces half the world's supply of antimony, which is used for making type-metal and pewter and other mixtures of metals. And in a few places some gold and silver are mined. Yes, China is rich in minerals, but she has not yet made much use of them.

Ewing Galloway

Chinese builders carve the roof beams of their temples and palaces in elaborate patterns as you can see by the corner of this building. Sometimes the wood is painted or even covered with thin gold-leaf. The roofs are of colored tiles.

Industries of China

A land of hand labor. In spite of their great mineral wealth, the people of China are not manufacturers. In recent years a few textile mills have been built, and some of China's coal is used to run them. At Canton and Shanghai there are big cotton, woolen, and silk mills, and near Hankow are some great iron-works. But in the main, China is still a land of hand labor, and most of the articles made by the Chinese are produced by skilled craftsmen in the homes of the people. Hand labor is slower than machines, but it is cheaper when there are many people willing to work for barely enough to live on. So there are few big factories in China.

The manufacture of silks and rugs. Silk was the first article exported from China to Europe in olden times. It has remained the most important article for export up to the present day. Silk culture belongs to lands where labor is cheap and where the mulberry grows. At one time China produced all the silk in the world. But the day of China's leadership in this industry is gone. Japan now produces better silk, because the Japanese people are more skilful workers. In north China and in Manchukuo considerable silk is produced from the wild silkworms that feed upon oak leaves. Workers gather the cocoons and make a silk called pongee from them. Pongee is a light brown shade which is the natural color of silk.

The Chinese learned carpet-making and rug-weaving from the nomads who lived on the northern and western borders of the country. Have you ever seen beautiful Chinese rugs or pictures of them? Many of them have backgrounds of rich, dark blue. The wool from which they are made comes from the sheep in Mongolia.

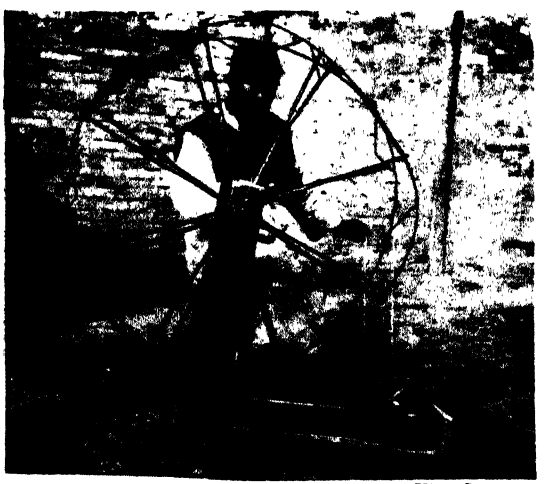
Lacquers and porcelains. There are other old industries in China. Long before the time

of Christ the Chinese were making beautiful articles of lacquer and porcelain.

Lacquer is a kind of varnish made from the gum of the lacquer tree. Lacquer varnish is brushed on the vase or dish or tray, carefully dried, and then polished by hand until it shines like a mirror.

For centuries the Chinese were the only people who made porcelains. With all the fine clays in their river banks, it is no wonder the Chinese are makers of pottery and porcelains. As far back as the fifteenth century, when the French, the Dutch, and the British were trying to establish colonies in the Far East, sailors took home to their families beautiful examples of Chinese porcelain and pottery.

Trade and transportation in China. In a land where millions of people are at work, there are many things bought and sold. But in China there are no great markets such as we have read about in other countries. The goods are carried from house to house by peddlers, or from town to town on small canal boats. Today the trade of China is almost altogether domestic—that is, within the country. As you know, trade with China during the Middle Ages was chiefly in the hands of Arabs and a few traders. It was not until the past century that the Chinese allowed many foreigners to trade at their ports. Even today only certain ports are open to outsiders. And so the Chinese foreign trade is comparatively small. The chief things the Chinese have to sell are raw silk, peanuts, soy-beans, vegetable oils, and raw cotton. Chinese raw silk makes up one-fourth of the world's total. Cotton goods, rice, and metals are imported.



Keystone View Company

Spinning seems to be much the same the whole world over, as you can see by looking at this Chinese spinning-wheel and then comparing it with others you have seen in this book.

James Sawders

An empress of old China had this large boat built on a large artificial lake in her palace grounds. But this boat is of stone and cannot move from its foundations. You can see that Chinese builders knew how to make arches and to support roofs on columns. They also understood how to make peaked roofs.

The inland trade is very large, as you would expect in a country with millions of people. It is carried over a remarkable network of waterways in thousands of barges and boats, some of which are called *junks*. Of the rivers the Yangtze is the most important in trade, carrying an immense amount of traffic from the interior of China.

The Yangtze Kiang is navigable for 1100 miles of its 3000-mile length. The Hwang Ho is 2600 miles long, but its shallow and shifting course is of little value to commerce. A canal known as the Grand Canal connects the lower courses of the Yangtze and the Hwang rivers. This sleepy old canal, built six hundred years ago, is crowded with boats

James Sawders

Shanghai has wide streets, automobiles, and streetcars like modern European cities. The wide street you see here is called "The Bund." Along this street are the offices of many European companies which engage in business in China.

the entire length of its thousand miles. Boats carrying people and produce creep along the canals at a snail's pace, for in China there is no such thing as hurry. There is no other place in the world that has such a system of canals as have the flood plains of China. The Grand Canal and all the other thousands of canals are used not only for travel but also for drainage and for irrigation. Fishing is important, and large numbers of ducks are raised on the canals and rivers.

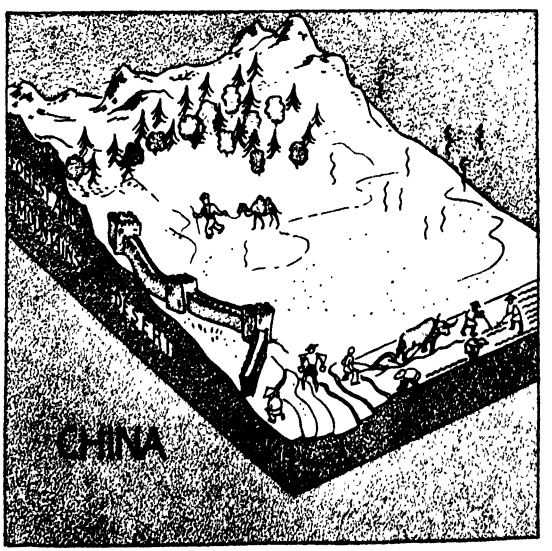
The Great Cities of China

The greatest cities of China are trading centers. Since China is not a manufacturing nation, you would not expect to find manufacturing cities. On the map find Canton, Hong Kong, Nanking, Shanghai, Peiping, and Tientsin. Which one is not located on a river?

The city of Canton. At the mouth of the Si Kiang is Canton, the leading port for southern China. It has a modern business section, where western methods, western buildings, and western people are found. But outside of this section, the city is a maze of narrow streets, jammed with tiny houses and shops that are huddled closely together. Here thousands of people are busy weaving or carving beautiful things in wood, in ivory, or on precious stones. Canton has a few factories, but most of the work is done by hand at home or in tiny shops. The big business of Canton is her trade. Since great ocean freighters cannot reach the docks through the shallow water, small boats carry trade back and forth between Canton and the neighboring port, Hong Kong.

Other river cities. The seaport of Hong Kong is on an island beyond the delta of the Si Kiang. It is under British control and is a "free port." A very large trade to and from southern China passes through Hong Kong, which also contains the most important shipbuilding yards of the country.

Farther north, near the mouth of the Yangtze, are several important cities. One of them, Nanking, is the capital of the Republic of China. Among the other cities that make this the industrial region of the country is Hankow. Antimony, a useful metal, is refined at Hankow.



Only one-tenth of the land in China can be plowed and used for crops. No one has ever measured the land occupied by forests, but we know that a large part of this great country consists of rough mountains and stretches of sand or clay deserts.

Shanghai, old and new. Flowing into the Yangtze River, near its mouth, is a small stream. On its banks is the largest city and the leading seaport of all China. This is Shanghai, which has a population of nearly 3,000,000—almost the size of Chicago in our country. It is the ocean gateway for the fertile Yangtze Valley. Its harbor shelters ships that fly the flags of every nation, as well as thousands of Chinese junks which are used along the coasts of China and Japan.

Shanghai has its modern western section and its old Oriental quarter. In the old part of the city are many workshops in homes, where craftsmen carry on their work just as they have done for centuries. But in the new section are some modern industrial plants, such as one sees in our American cities—cotton mills, silk mills, flour mills, ship-building plants, and other factories.

DeCou from Ewing Galloway

Shanghai also has department stores such as we have in the United States. In the shopping district the traveler sees colorful Chinese signs hanging from the buildings. Notice the direction in which the automobiles at the left are going. Do we drive that way in our country?

The northern cities. The chief port of northern China is Tientsin, on the navigable Pei Ho. It is also at the northern end of the Grand Canal. Tientsin, which is China's third largest city, is the center of the rug-making industry. Each year thousands of rugs are shipped to other countries.

China's most beautiful city is Peiping, formerly called Peking. Peiping is the gateway to Manchukuo and to Mongolia. Before the revolution of 1912 it was the capital of China. Today it is the railway center of the country, if China can be said to have a system of railroads. Peiping is not an industrial city, but has numerous colleges and contains the homes of many of the wealthier people in China. There are walls around these houses, and within these walls are many gorgeous flowers. Peiping's quiet temples, yellow-tinted palaces, and lovely gardens show old China at its best.

Borderlands of China

The dependencies. On the north and west borderlands there are several regions which are called dependencies. These regions are controlled by China and depend on China for government and protection. You can see from the map that the dependencies of Mongolia, Tibet, and Sinkiang cover a large area, but most of these regions are rather barren and thinly populated.

Tibet is one of these dependencies. It is the highest plateau in the world, cold and dry, and surrounded by very high mountains. Few people can live there. Lhasa is the capital.

Sinkiang and Mongolia are great desert areas surrounded by mountains. Most of the people here are nomads who live in the valleys where streams run down from the mountains. The cities of Kashgar and Urga are trading centers for wool and hides and for the few articles that are sent in from the outside world.

The kingdom of Manchukuo. This region once belonged to China, too, but only a short time ago it became an independent kingdom, though it is largely under the influence of Japan. This is a rich land, with a wide, fertile valley in the middle of it. While China still controlled Manchukuo, thousands of Chinese farmers migrated to this region, away from the crowded plains of their home-

Keystone View Company

In the Chinese part of Shanghai the streets are narrower and the shops much smaller. At the right you can see a box-like seat with a white canopy. It is slung on poles so that passengers can be carried. Two coolies are used to carry each chair.

land. On the wide plain that is somewhat like our Central Plains the farms are large, and considerable farm machinery is used.

In this new homeland the people grow millet, wheat, barley, and soy-beans, as they do in northern China. One of the most important industries is the extraction of oil from the soy-beans for use in the manufacture of soap. The remaining part of the beans is pressed into cakes that are used for cattle feed and fertilizer. These cakes are shipped all over the world. So important is the shipment of soy-beans that Dairen, the leading port, is sometimes called the "City of Beans."

Manchukuo also contains valuable coal-mines and iron mines. Near by the Chinese built iron and steel plants. The Japanese, attracted by the good things in this new land, sailed across the Sea of Japan to get a share in them. Now the industrial plants are owned partly by Chinese and partly by Japanese.

Mukden, the largest city, is a thriving town with many cotton, flour, and bean-oil mills. Here, too, many of the famous Chinese rugs are made.

Manchukuo has much better railroad service than China. A large number of the people in this rich and fertile land are engaged in industry. Manchukuo is a rapidly growing country with more than 30,000,000 people.

Talking Things Over

1. You have read that Buddhist missionaries traveled from India to China. Chinese Buddhists went to India in order to study. Other Buddhist missionaries went from China to Japan. In these ways the three countries became acquainted with other civilizations. Do you remember reading of any other civilizations which were spread by the aid of religion? Is civilization still spread in the same way?

2. We say that the Europeans discovered China, but we do not say that the Chinese discovered Europe. Why is this? Can you think of good reasons why the Europeans, rather than the Chinese, discovered America?

3. We have learned in this chapter that the Chinese were well satisfied with their civilization. What remarks have you heard made that show our satisfaction with our civilization? Could you suggest any changes in our ways of living?

Doing Things Together

1. You can make the great size of China clear to yourself and others by maps which compare the size of China and the United States. Be sure you use maps with the same scale of miles. Make a large outline map of China on the blackboard in white chalk. Then take a piece of colored chalk and draw over it a map of the United States.

2. Is your school-room warm enough for rice to be grown in a window-box? What kind of box would you need? Remember that rice must be flooded. Don't try raising rice in winter if your school is not kept warm over the week-end, and do not leave the box on the window-sill on cold nights.

3. If it is impossible to grow some rice, try to raise some soy-beans. More and more soy-beans are being grown in the United States every year. You might make a special report to the class on the uses of soy-beans.

Courtesy Japan Tourist Bureau

Japan is an empire of islands large and small. Many are rocky and mountainous; others, fairly level. There are more harbors and sandy beaches than in any other country of its size. When you look at a picture like this one, you can understand why so many Japanese have turned to the sea to make a living.

THE JAPANESE AND THEIR COUNTRY

The Beginnings of a World Power

A KINGDOM of islands. Bordering the eastern coast of Asia is a group of mountainous islands that are known as Japan. The Japanese like to call their country "Dai Nippon," which means "Great Japan." Turn to the map on page 465 and locate Japan. The central group, known as Japan proper, consists of four large islands and many small ones. The southern group consists of a number of very small islands. Altogether they form a long, dangling chain of about three thousand islands. Their total area is a little larger than that of our state of California. Most of the islands are the tops of volcanic peaks that stick their heads up above the water.

The story of ancient Japan. The early Japanese people were Mongolians who came to the islands from the Asiatic mainland, probably from China or Chosen, ages and ages ago. In their ancient religion they worshiped many gods and goddesses. They believe that their first emperor was the child of a god and a goddess.

In the sixth century after the birth of Christ a new religion was brought to Japan from the mainland across the narrow sea. This religion was Buddhism, the religion of China. Gradually it became mixed with their old faith. A little later the old, old civilization of the Chinese was also brought across. Traders had much to do with this, just as they had in spreading civilization on the other side of the world in the great days of Mesopotamia, Egypt, Greece, and Rome.

The feudal period in Japan. As the Japanese gradually developed a civilization, they adopted many other ideas from the Chinese. Within the little mountain valleys on the islands the people lived in clans. These

Courtesy Japan Tourist Bureau

In the Japanese theaters the plays are given by actors dressed in the old costumes of Japan. On the back wall of this stage you can see a large painted pine tree. Its branches are twisted and bent, which the Japanese prefer to straight branches. At the right are two leafy branches, a favorite design.

clans were much like those that once existed in the mountain regions of Scotland. In Japan the clan chiefs owned the land and governed the people who lived on it. The Mikado, as the emperor is called, ruled the clan chiefs. Although the Japanese emperor was looked on as a god, after a time he could no longer keep order in the land. The country was covered with forests, which were the hiding-places of robbers and outlaws. When the emperor could not protect the people, they found strong lords who could. And so feudalism developed. The emperor's power was taken over by the leader of the military lords, who was called the *shogun*. The shogun ruled as he pleased, but he did not get rid of the emperor. Although the people still looked upon the emperor as a god, for hundreds of years the real ruler of Japan was the shogun. He divided the country among his feudal lords, who ruled their lands just as the nobles of Europe did during the Middle Ages. So you see that Japan, too, had a feudal period. It came much earlier and lasted much longer than Europe's feudal period.

During the hundreds of years when the shoguns were the real rulers, they kept great armies of military helpers, known as *samurai*. The capital of the country was the city of Kyoto, where a beautiful palace was built for the shoguns. The feudal lords in Japan had castles with moats and drawbridges, like those of Europe in later times. Many of the Japanese castles are still standing.

Some of the shoguns were very clever. One of them wanted to build a castle, but found there was not much stone near by. So he announced that he would give a prize to the man who brought him the largest stone for a corner-stone in his castle. From far and near men came, hauling the most enormous rocks that they could find. Before long an immense heap of stones was piled up on the ground. The largest was selected, and the reward was

paid to the man who had brought it. Of course, nobody wanted to haul away the stone that he had brought, and so the shogun had all the stones he needed for his castle. It is still standing near Osaka.

How Europeans first learned about Japan. Marco Polo's stories about the island of "Cipango," as he named Japan, led many explorers to search for this land. Columbus wanted to find Japan. But Europeans did not find the islands until 1543, when some Portuguese sailors were blown there in a storm. Soon English and Dutch merchants and sailors from many European countries came to buy potteries, finely woven silks, and costly articles of gold, silver, bronze, and lacquer. The foreigners were welcomed.

By this time there were many Christian missionaries in Asia. A celebrated Jesuit missionary, Francis Xavier, made the long, difficult journey from Europe to Japan. Other missionaries followed him, and many Japanese became Christians. But the missionaries told the Japanese that their emperor was not a god, and that made trouble.

Courtesy Japan Tourist Bureau

Fujiyama, or Mount Fuji, is a volcano that has been quiet for more than two centuries. To the Japanese it is a sacred mountain, and thousands of pilgrims climb it each year and worship at little shrines along the path to the summit. Japanese poets write about it, and artists are never tired of painting it.

Courtesy Japan Tourist Bureau

Compare this Japanese castle with one of the castles of medieval Europe. It is situated on a steep rock, and a running stream forms a moat. It belonged to a great feudal lord of old Japan.

Japan closes her doors to the outside world. In 1614 the feudal lords decided to destroy the churches and compel the missionaries to leave. Christians were persecuted, and many were slain. The foreign traders who had been welcomed were also forced to go, and the shogun decided not to permit any ships to enter Japanese harbors.

The feudal lords then forbade the Japanese people to leave their own country. Of course that ended all trading between Japan and the rest of the world. The Japanese had locked the doors to their country. And the doors remained locked for over two hundred years. Japan lived in the midst of her feudalism and learned almost nothing about what was going on in the rest of the world. All this happened in Japan just after the reign of Queen Elizabeth in England, when the British were trading in many foreign ports and exploring many new countries in different parts of the world.

European science in Japan. Many countries made efforts to trade with Japan during this period, but only the Dutch were success-

ful. Even the Dutch traders were not allowed to trade freely, but had to live on one tiny island. Japanese doctors became interested in Dutch medical books, and finally the shogun allowed medical students to study the Dutch language. Many young Japanese pretended to study medicine so that they could learn Dutch and read European books on science.

The awakening of Japan. In 1853 Commodore Perry, commander of a squadron of the United States Navy, sailed into Japanese waters. Later he arranged a treaty that permitted American ships and traders to use a few ports in Japan. Then other countries were allowed to do the same thing. Japanese lords were sent on visits to America and Europe.

A few years later the emperor regained the power to rule Japan, and the reign of the shoguns was over. Feudalism began to die out in Japan, just as it had died out in Europe several hundred years earlier.

Japan had a strong and far-sighted emperor named Mutsuhito. In his reign the Japanese were encouraged to find out all they could about the civilization of Europe and America. Students were sent to Germany, France, Italy, England, and the United States to see how European and American ways could help Japan. From Germany the Japanese borrowed ideas of government and ways of managing an army and navy. From England and the United States they borrowed ideas about education and business. Ever since this emperor sent out the first visitors to foreign countries, the Japanese have been eager to adopt all foreign ways that seem an improvement over their own.

Courtesy Japan Tourist Bureau

In the warmer Japanese islands are found forests of bamboo. This giant grass is used by the Japanese for many purposes. Stalks as large as those in this picture are strong enough for use in building. Can you name uses for smaller pieces? Have you ever tried to nail bamboo?

Courtesy Japan Tourist Bureau

Japan is not all tropical, as this picture will remind you. On some of the islands there are mountain slopes which are covered with snow in the winter. The Japanese have borrowed the sport of skiing from Europe. Do you know from which country?

Japan becomes a world power. Japan soon became a trading nation, and then a manufacturing one. But as trade increased, there were quarrels with other nations. In 1894 came a war with China, and in 1904 one with Russia. Japan won both. Korea became Japanese territory and was renamed Chosen. The Japanese were spreading out, you see. By this time they had become one of the important nations of the world. They were not asleep like the Chinese. Today, while China is just waking up, Japan is a strong world power.

The Land and People of the Island Empire

A mountainous land. As you look at the map on page 465, you notice two things. One is that Japan is a mountainous country. The other is that the entire coast is very irregular, making many little coves and excellent harbors. The Japanese are both a mountain people and a seafaring people.

Irregular chains of mountains extend through the entire length of the archipelago, or group of islands. Many of Japan's mountains are more than a mile high. One, Fujiyama, is more than 12,000 feet. (How many miles is that?) Fujiyama is really the top of a volcano.

There are many other volcanoes in Japan; in fact, there are whole chains of them. Volcanic eruptions and earthquakes occur frequently in this part of the world. Some of the earthquakes have been very severe. In one of these terrible catastrophes more than one hundred thousand people were killed, and the cities of Tokyo and Yokohama were badly damaged.

There is very little level land—only narrow plains along the coasts, the valleys of the larger rivers, and river deltas. Swift streams from the highlands have brought down fine soil and laid it thickly in small fan-shaped plains at the base of the mountains. In these small stretches of fertile, level land most of the people live. Many of the little patches of ground are separated from one another by spurs of mountains that extend to the seacoast. No wonder the farmers have a hard time trying to make these few valleys produce enough food to feed the 60,000,000 Japanese people and supply enough raw materials for their factories.

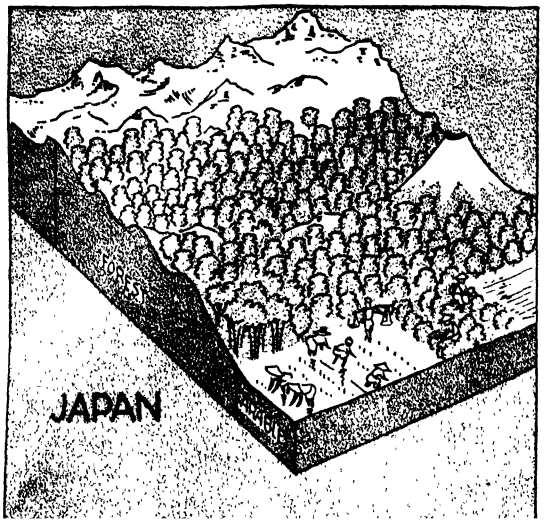
A land of beauty. Japan is very beautiful with its rugged mountains, great forests, rushing streams, and waterfalls. Little villages cling to the mountainsides. The sloping thatched roofs are almost hidden under dense foliage and seem to be part of the landscape. The Japanese homes, nestling in valleys and surrounded by small farms, seem to blend into the scenery. Perhaps it is this beauty all about them that makes the Japanese keep smiling, in spite of all their hard, back-breaking labor. Men and women, working side by side in their fields, seem always cheerful and happy.

Courtesy Japan Tourist Bureau

There are active volcanoes on many of the Japanese islands. This one is tremendous in size. The crater which you see is seventy miles in circumference.

The climate of Japan. If you look at the map on page 465, you will see three things which influence the climate of Japan. You will notice that the islands extend from the Tropic of Cancer northward for three thousand miles. This is about as far as the distance from Cuba to Newfoundland on our continent. This means that the Japanese climate ranges from tropical heat to a cold climate like that of Canada.

Then you will notice that most of the islands lie off the coast of Asia in a part of the world where the winds are the westerlies. You will notice also that the southern part of the group reaches into the monsoon region of southeastern Asia. Because Japan is a chain of islands, the temperatures are more moderate and less variable. The surrounding ocean has the same influence on them that it has on the British Isles.



About one-sixth of the land in Japan can be plowed and used for crops. Six-tenths of the land is covered with forests or bamboo groves. The rest of the land is too wild and rocky to use or else is occupied by cities and towns.

Finally, you will see that ocean currents sweep past the islands. The warm Japan Current, or Kuroshio, means a great deal to the Japanese. It brings warm winters to Japan, much warmer than you would expect in a land so far from the Equator. Part of Japan is also affected by the cold current that comes from the Sea of Okhotsk. This is somewhat like the Labrador Current off Newfoundland.

Throughout most of Japan the summers are long, hot, and rainy, while the winters are mild. Eastern Japan gets most of its rain in summer from the summer monsoons. In western Japan rain falls in all seasons of the year, since the westerly winds are forced to rise over the mountains and give up their moisture. In northwestern Japan the winters are snowy, stormy, and generally disagreeable. Snow falls perhaps a half dozen times during the winter in Tokyo, but melts so rapidly that it is on the ground for only a few hours.

Like all the people in that corner of the world, the Japanese suffer from a very terrible kind of storm. In late summer the southern coast of Japan is from time to time swept by severe wind-storms, called *typhoons*, that destroy life and property. They are somewhat like the hurricanes that at times sweep over the West Indies and southeastern United States. Since typhoons usually come during the harvest season and ruin the rice crop, they are greatly dreaded by the Japanese farmers.

Farming in Japan. England, you remember, long ago gave up trying to grow enough food for all her people. She sells manufactured goods and imports food. Japan, another island nation, also sells manufactured goods; but her farmers still try to raise enough food for all the Japanese. Although they have a good climate for farming, only one-sixth of their land can be cultivated.

The lower slopes of the mountains in the southern half of the country are terraced for rice fields. On the upper part of the slopes are fields of tea bushes. Most of the fields are cut from a slope.

Other rice fields are in the delta plains at the base of the mountains. The Japanese plant more of their land in rice than in all the rest of the crops combined. This is because in the long, hot, rainy summers of Japan, rice produces more food per acre than any other grain.

The flooded rice fields in May and June make the plains look as if they were set with hundreds of little mirrors. During July, August, and September the plains look like patchwork quilts of tiny green lawns, as the young rice plants grow. During the harvest in October and November those green patches have changed to a golden color. Then they are speckled with thousands of busy harvesters, who toil like so many ants.

After the rice harvest many of the fields are drained and then sown to wheat or barley. But it is generally on the drier land that such crops are grown. A crop of winter grains and two or three crops of summer

vegetables, such as beans, sweet potatoes, and radishes, are harvested from the same ground each year. In the northern part of the islands very little tea or silk is produced. The important crops there are barley, wheat, potatoes, and apples. The Japanese got their first apple trees from the United States.

The Japanese farmer. The average farm contains only two or three acres and is made up of a number of separate fields that are scattered around the village. The farmers live in these villages and go back and forth to their farms daily. The Japanese farmer is as thorough in his work as the Chinese in the careful way he works the soil.

There are few barns or farmyards, for there is no live stock, except sometimes an ox or a horse. In the country the traveler may see a few bullocks hauling farm produce in old carts. It takes much more space to raise cattle for meat than it does to raise grain and vegetables. So the average Japanese farmer keeps no sheep, pigs, cows, or goats, though he does keep chickens for the eggs.

The people in the mountain valleys have a hard time making a living. Some of them are miners, for there are a few minerals in Japan. But most of these people raise tea, millet, vegetables, wheat, barley, a very little rice, and mulberry trees. From the mulberry trees, leaves are gathered to feed the silkworms that give the Japanese people their leading export, raw silk. Often the only money a Japanese farmer ever gets is from the cocoons he sells. During the winter the mountain farmers are busy in the forests making charcoal, which is the Japanese fuel. To help out their income many of these farmers also weave beautiful silk goods or make brooms and articles of straw.

How the bamboo helps the Japanese. With such tiny farms it is hardly to be expected that the farmers can support their families from the fields alone. They turn to

James Sawders

Transplanting the young rice plants from the seed beds to the flooded fields is work that can be done only by hand. When the planting season comes, the whole family must work. In this picture you can plainly see the little dikes, or walls, that separate the fields and help to keep in the water. The water must be drained off in the daytime when the sun is bright or the reflected heat will shrivel the tender plants.

the forests that cover nearly half of Japan and make many things of wood and bamboo, such as chop-sticks and inlaid boxes. The Japanese, like the Chinese, also make beautiful lacquer ware.

The bamboo grows as tall as a tree, although it really is a kind of grass. Many groves of bamboo have roads through them, and the Japanese are fond of strolling along these roads beneath the feathery, light-green leaves, for the thick stalks give a dense shade.

You would hardly believe it possible for people to make as many articles from one thing as the Japanese make from bamboo. You have probably seen bamboo furniture here in our own country. The Japanese not only make furniture from this material, but they build houses, bridges, and fences with it. The bamboo is used in walking-sticks, pipe-stems, bottles for Japanese wines, vases, hair-pins, and cups for *sake*, a Japanese liquor. From the pulpy pith in the center of the stalk, paper is made. The Japanese even cook and eat the young shoots as a vegetable, much as we eat asparagus. Bamboo shoots are also pickled and candied.

Japan's forests. Japan has a wide range of forests. In the south there are palm trees,

Keystone View Company

The bushes you see are part of a large tea plantation. Below, down in the valley, you can see flooded rice fields stretching for miles. Very little of this land is wasted, as you see.

Courtesy Japan Tourist Bureau

All the leaves from which tea can be made are thrown into the basket. Later the leaves will be sorted out into different grades. When the basket is full, it will be taken to a shed where the leaves will be steamed in a kettle over a slow fire.

but farther north are forests of oak and cedar. Still farther north the forest becomes a pine growth. Nearly a third of the Japanese lumber comes from a cone-bearing tree like the sequoia of California. This tree is used for replanting the Japanese forests. Trees are valuable, not only for wood but for keeping the soil on the hillsides. Do you know why forests help rivers to flow evenly? The Japanese take good care of their forests, for they do not intend to strip their country of trees as China has done.

Still another important tree is the camphor tree, which grows on an island to the south. This island was formerly known as Formosa, but is now called Taiwan. From the wood of this tree the Japanese get camphor, which they sell to many countries.

Seafaring People and Mountain People

The fishermen and their catch. An island country is usually a land of sailors. The coasts of the Japanese islands are indented with many little coves and inlets that make it

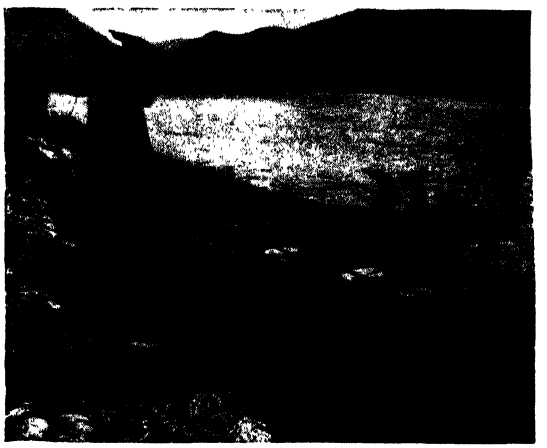
easy for fishermen to learn the ways of the sea. And since much of Japan is mountainous, with little land for cultivation, the people have naturally turned to the sea to increase their food supply. In what countries of Europe have people done the same thing?

Fishermen are always busy in the waters near the Japanese islands. Each morning at daybreak more than a million men put out in fleets of odd-looking fishing boats. They spread their nets and do not return until dusk, laden with their catch. The Japanese also fish at night, using birds called cormorants that are expert divers. About each bird's throat is a ring that prevents him from swallowing the fish. A long cord fastens the cormorant to the boat, in which there is a torch. The flaring light attracts fish in great schools. Down dives the cormorant, over and over again, coming up each time with a fish in his beak, which the boatman quickly takes.

The best fishing is found in the cold waters around the northern group of islands. Here the catch is chiefly cod, herring, and mackerel.

Keystone View Company

The steamed tea leaves are sorted into different grades by expert workers. Then each leaf must be rolled by hand. After rolling or twisting, the tea is placed in baskets and dried in brick ovens. If you soak good tea in water, you can unroll the tightly twisted leaves and see their shapes. Broken leaves and even tiny scraps are used for cheaper grades of tea.



Courtesy Japan Tourist Bureau

The cormorant fisherman works from a large boat such as the one you see drawn up on the beach. In the part of Japan where this picture was taken the fishermen wear grass skirts. Notice the steep, rocky slopes in the distance. Does it remind you of another country where the people are fishermen? You might compare their areas and populations.

The Japanese fishermen also bring in great quantities of lobsters, oysters, and crabs. Canning crab meat is an important Japanese industry.

Japanese textile industries. The Japanese have raised silkworms and woven silk since the fourth century, when they learned silk culture from the Chinese. In ancient times the Chinese had kept jealously the secret of spinning and weaving silk. A story tells how a band of daring Japanese kidnapped four Chinese girls and made them explain the Chinese methods. In this way the Japanese learned how to raise the worms, how to feed them on mulberry leaves, and how to kill the worms by baking them. They also learned how to put the cocoons into warm water and then reel off the delicate threads from which the worm makes his house, and finally how to weave silken goods.

A half-century ago, when the Japanese came into contact with Europeans and Americans, their leaders decided that Japan should become a great commercial and industrial nation. Until then everything had been made by hand in the homes of the people. The

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Girl divers are used to gather oysters in the pearl fisheries of Japan. These girls wear goggles so they can see well when under water. They do not have the help of diving helmets but must hold their breath as long as possible.

Japanese had become so skilful with their hands from generations of craft work that it did not take them long to become skilful in the use of machinery. They soon learned to weave cotton and woolen goods, as well as silk, by machinery. Today thousands of power looms in factories have replaced the old hand looms in the homes. Raw cotton and raw wool are imported. Only about a sixth of the silk needed in the industry is raised in Japan. The Japanese have found it is more profitable to export their fine raw silk and buy a cheaper grade to use in their mills. Raw silk is therefore the most valuable export from the islands. The center of the silk industry is the old feudal city, Kyoto, which is also important for its lacquer industry.

The Japanese are considered the most progressive people of the Mongolian race. They have adopted most of the inventions of the Western world. Every year they send many students to America and to Europe. They have established technical schools and built railways. And they have a large trading fleet, which carries the products of their factories.

The manufacture of iron, steel, and copper goods. The greatest manufacturing center of Japan is Osaka, which is sometimes called "the Pittsburgh of Japan." It is the center of the iron and steel mills, and of factories that make all kinds of iron, steel, and copper products. The Japanese get most of the coal and copper they use in manufacturing from the same huge mountains that make the work of the farmer so difficult. In the mining of copper, its most valuable mineral, Japan stands next to the United States, Chile, Belgium, and the Congo. The iron ore that the Japanese use is brought chiefly from the mainland of China and from Chosen. They also buy great quantities of scrap-iron from the United States. To run their factories the Japanese use not only coal, but also a great deal of electric power, which they obtain from swift mountain streams.

The Cities of Japan

Industrial and commercial cities. Japan has become an industrial nation only in recent years. Yet the large industrial cities of Japan are much like those of our country or

Keystone View Company

In front of these workers, and on the shore back of them are thousands and thousands of shrimps which are being dried in the sun. The dried shrimps are packed in paper bags for sale in the cities.

James Sawders

In the picture at the left you see the moths and several hundred tiny eggs from which will come the silkworms. At the right are several silkworms feeding on fresh mulberry leaves.

of Europe. Turn to the map on page 432 and locate the leading cities.

As you know, the chief industrial center is Osaka. If you look at the map, you will see that this city is on the coast. But its harbor is so shallow that most of its products are exported through Kobe, one of the important ports of Japan.

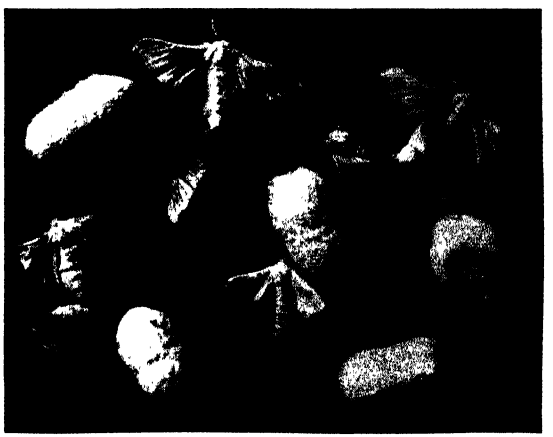
The leading seaport of Japan is Yokohama. Most of the raw silk is exported from there, because the chief silk-producing region is just west of Tokyo and Yokohama. Yokohama is the leading importing center, also, and is the port for Tokyo. The bay on which Tokyo stands is too shallow for large ocean-going ships. It is usually true that the great importing center of a country is close to its largest city, near the region of the largest number of people. Do you see why this is so?

Kyoto is important in textile-making and is the center for making lacquered goods. The rainy climate of Japan is good for the making of lacquer, as the dampness keeps it from cracking while it is drying. All of these industrial cities, busily engaged in making cheap silk and cotton goods, toys, and novelties, are very different from the quaint towns and villages of the Japanese country-side.

The capital city. Tokyo, one of the largest cities in the world, is the heart of Japan. You will remember that London, the heart of Britain, is an old city that has been the capital of England for centuries. Tokyo is a comparatively new city that only recently became the capital of Japan.

Tokyo is a very clean city. A law compels a complete house-cleaning twice a year. Then every bit of wood or bamboo and every piece of matting is scrubbed until the city can almost see itself in every shining stick.

With three large universities and a num-



James Sawders

Some of the cocoons are saved, and the moths are allowed to leave them. This breaks the fine threads of which the cocoon is made, and the cocoon is useless for making silk thread. But some moths must be allowed to live in order to have a supply of eggs. Eggs are on sale in markets in farming communities.

Keystone View Company

The cocoons are placed in pans of warm water to soften the sticky material which holds the tiny fibers together. The girl finds the ends of the long fibers on several cocoons and twists them together. Then the fibers are unreeled from the cocoons while the girls watch to make sure none of the threads are broken. Several fibers twisted together make a single silk thread. After reeling, the thread, or raw silk, must be treated before it can be used for weaving. A pound of raw silk will make more than one hundred fifty miles of thread.

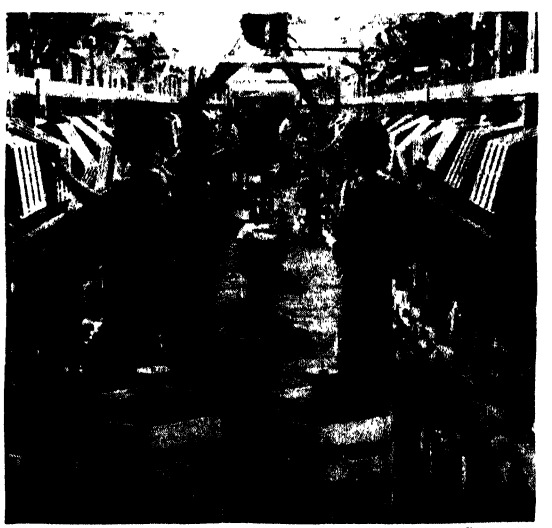
ber of smaller ones, Tokyo is the center of learning for the Japanese. In some parts of the city the traveler might think himself in America, for he sees street-cars, electric lights, and automobiles. But there are many narrow, winding streets, lined with little stalls full of wares to entice the buyer, where the traveler knows he is in another part of the world.

Customs of the Japanese People

Methods of transportation in Japan. The Chinese make great use of their waterways in getting about. But in Japan the rivers are too short, too swift, and too often broken by waterfalls to be useful for travel. So the Japanese have built many railroads that connect all the principal cities and towns. In the cities, too, there are trolleys and automobiles.

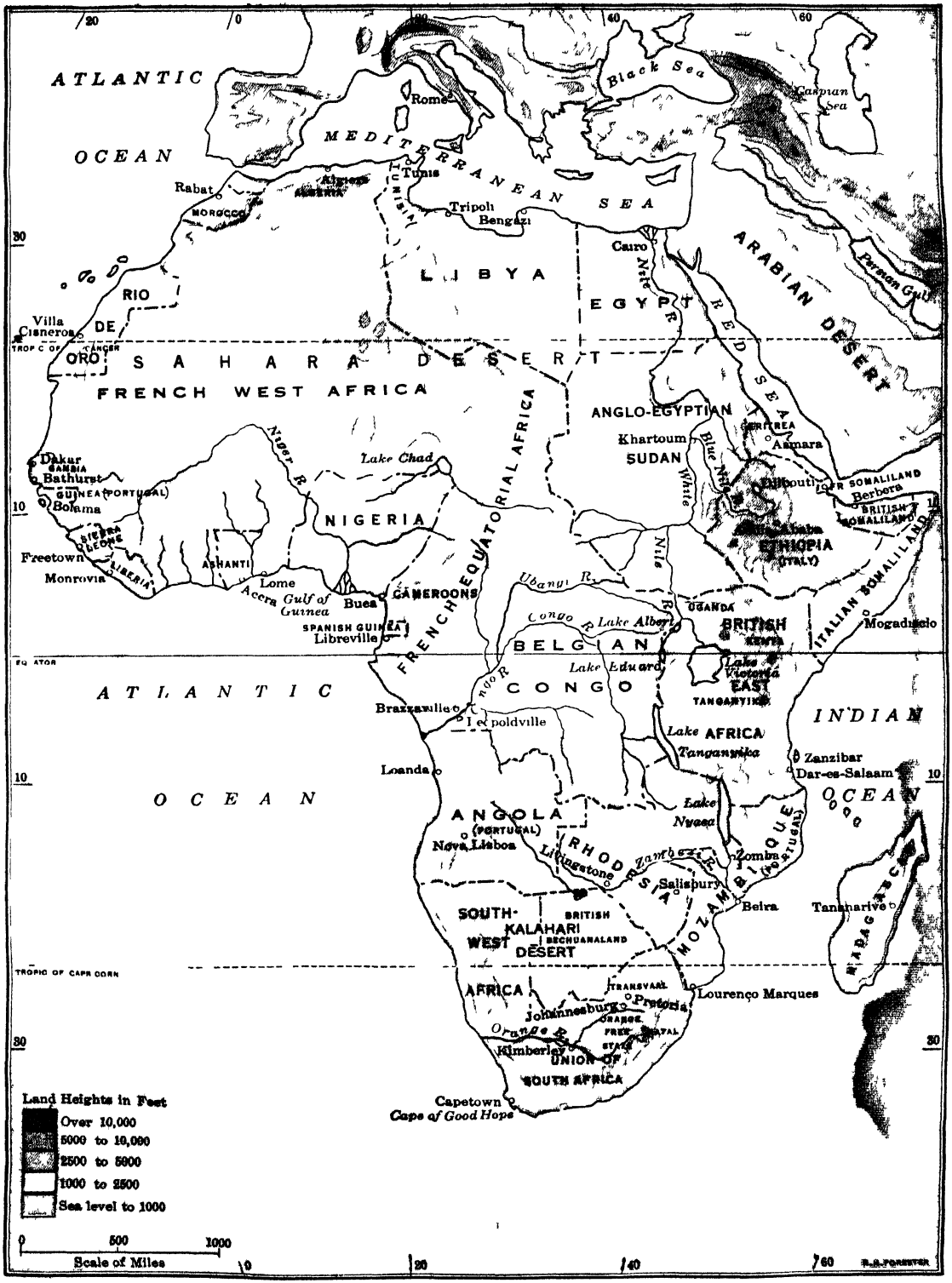
But there are other means of conveyance that are quite different from ours. Trundling down the streets are many queer-looking little affairs called *jinrikishas*. They are somewhat like our old-fashioned buggies, with two high wheels instead of four. Trotting inside the shafts, instead of a horse, is a man. If the traveler's path takes him into the mountains, he will ride in a chair that is strapped to poles and carried on the shoulders of four strong men. There are no railroads in the higher parts of the mountainous districts in Japan, which are the most beautiful sections in the islands. The traveler must either walk or be carried in the queer chair on poles.

Japanese homes. The Japanese have many customs that seem strange to us, but they are a happy people, and their homes are always clean and neat. When you enter a Japanese house, you might think you were walking into a big empty box, for you do not see separate rooms or any furniture except a few screens. You do not see any beds or dining-tables or chairs. But on the floor you see a number of grooves for sliding screens into place. If you should want a room to yourself, the servants would push screens into place, and there you would be, as private as



Keystone View Company

Many girls from country districts come to the cities to work in the large textile factories. Some of the factories have buildings where the girls eat and sleep when they are not working. Do you know of any business in our country which does this?


ATLANTIC
OCEAN
MEDITERRANEAN SEA
Black Sea
Caspian Sea
Rome
Tunis
Algiers
ALGERIA
TUNISIA
Rabat
MOROCCO
Tripoli
Bengazi
LIBYA
Cairo
EGYPT
NILE
RED SEA
ARABIAN DESERT
Persian Gulf
RIO DE ORO
Villa Cisneros
TROPIC OF CANCER
SAHARA DESERT
FRENCH WEST AFRICA
ANGLO-EGYPTIAN SUDAN
Khartoum
Blue Nile
White Nile
Asmara
ERITREA
Djibouti
BR SOMALILAND
Berbera
BRITISH SOMALILAND
ETHIOPIA (ITALY)
Addis Ababa
Dakar
GAMBIA
Bathurst
GUINEA (PORTUGAL)
Bolama
SIERRA LEONE
Freetown
LIBERIA
Monrovia
ASHANTI
Lome
Accra
Gulf of Guinea
Bues
CAMEROONS
NIGERIA
Niger R.
Lake Chad
FRENCH EQUATORIAL AFRICA
Ubangi R.
Congo R.
Lake Albert
UGANDA
BRITISH KENYA
ITALIAN SOMALILAND
Mogadiscio
SPANISH GUINEA
Libreville
BELGIAN CONGO
Lake Eduard
Lake Victoria
EAST AFRICA
TANGANYIKA
Lake Tanganyika
Brazzaville
Leopoldville
Loanda
ANGOLA (PORTUGAL)
Nova Lisboa
Zanzibar
Dar-es-Salaam
INDIAN OCEAN
ATLANTIC OCEAN
Lake Nyasa
RHODESIA
Livingstone
Zambezi R.
Salisbury
Zomba
MOZAMBIQUE (PORTUGAL)
Beira
Tananarive
MADAGASCAR
SOUTH-WEST AFRICA
KALAHARI DESERT
BRITISH BECHUANALAND
TROPIC OF CAPRICORN
TRANSVAAL
Johannesburg
Pretoria
Lourenço Marques
ORANGE FREE STATE
NATAL
Orange R.
Kimberley
UNION OF SOUTH AFRICA
Capetown
Cape of Good Hope
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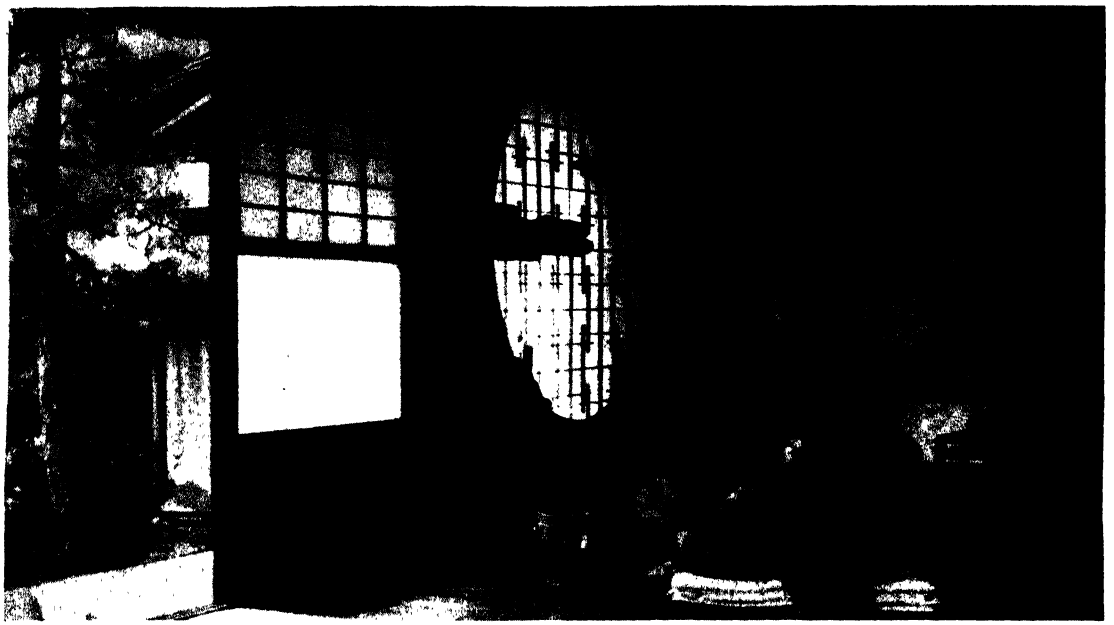
Scale of Miles
R.R.FORSTER



James Sawders

One of the doors of the room has been slid back, and you can look into the garden. There is no glass in the door or the window. Thin paper is used, but it is not transparent. Do you think the window is decorative? Do you notice any chairs or tables such as we use in our homes?

you please. Earthquakes do little damage to houses like this.

The floor is covered with straw mats, each about two inches thick and three feet wide by six feet long. Of course the mats are clean, since everyone removes his shoes whenever he enters a house. When the Japanese sit, they kneel down first and then drop backward on their heels. Some time ago the government decided that this way of sitting has been one of the things that made the Japanese a short people. So a law was passed compelling the schools to furnish chairs for the children. The government wants the people to use chairs in their homes as well; but almost all of them still sit on the floor.

When the Japanese people sleep, they pile a number of thin mattresses on the floor, one on top of another. The pillows are stuffed with bran. The women's pillows are raised on a block of wood, several inches above the mattress. This is to keep their hair from becoming disarranged. It takes so long to dress a woman's hair in the elaborate Japanese style that the average woman arranges it only every week or two. When morning comes, the mats, pillows, and bed covering are all rolled up and placed in the cupboards that line the walls. Then you would never know there had been any sleeping. When it is time to eat, out of the cupboards are brought little trays on legs, one for each person. The food is brought on these trays.

The absence of bulky furniture gives the Japanese house a roomy, airy feeling. The back of the house is bordered by a porch and usually opens on a garden. At night the porch is enclosed by thick shutters that slide into place as the screens do in the house. You can see how easy it is for the Japanese to get out-of-doors quickly, for it is only a step into the garden.

How the Japanese dress. As you might expect in a land where there are no sheep, Japanese clothing is made not of wool but of silk or cotton. Today some of the men

are beginning to wear the clothes of the Western world, but not many women have adopted western dress. They wear kimonos of silk or cotton, often richly embroidered or printed in colors, tied with a large *obi*, or sash. Among the upper classes the family crest is sometimes on the right sleeve of the kimono. The Japanese people think a great deal of their crests, which are relics of feudal days. The people pay great respect to their nobility, who are the descendants of those feudal lords.

Many of the laborers wear coats marked with letters that indicate the kind of work they do. This also is a custom remaining from feudal times.

The Japanese shoe is a flat piece of wood, attached to the foot by two thongs that pass between the great toe and the middle toe. Under this flat piece of wood are two small crosswise pieces to keep it off the ground. In wet weather the crosspieces keep the wearer above the mud and the puddles. No one enters a house or shop wearing these shoes. They are left outside the door, and straw sandals are worn indoors.

Japanese children. The babies and children in Japan are happy youngsters. In the first place the babies are never lonely, for until they can walk, they are carried on the back of the mother or of an older sister. Japanese babies seldom cry; if they do, no one pays any attention to them, and so they soon stop. As they grow up, they have plenty of little friends to play with, for the Japanese have large families. They spin tops; they play tag; they play at being soldiers; and they play baseball. They have the same pets that American children have, such as dogs, cats, and rabbits, but they have some pets that would seem strange to you. These pets are called *cicadas*—you would call them crickets if you saw them—and they are kept in tiny bamboo cages.

Courtesy Japan Tourist Bureau

Many Japanese men wear European clothes, but most of the women wear their comfortable costume inside the home. This couple is having dinner. All the dishes are within easy reach on little tables.

James Sawders

Any room in a Japanese house can be a bedroom. At night soft mats are taken from cupboards and spread on the floor. But would you like to sleep on the padded wooden pillow these girls are using in order not to disarrange their hair? At the head of the bed stands the kind of lantern used in homes.

The big playtime for Japanese boys each year comes on the fifth of May. They do not have separate birthday celebrations as we often do in our country. Instead, all Japanese boys celebrate their birthday on what is known as the "Boys' Festival." On the fifth of May, flying above each house where there is a son is a gayly painted cloth or paper fish. Toys and household relics are brought out to be played with. There are toy soldiers, flags that have been in the family for generations,

Courtesy Japan Tourist Bureau

In a country sometimes visited by earthquakes the people do not want very high buildings. This low building with the graceful sloping roof is a famous temple. It is located in the midst of a park. Most Japanese temples have beautiful surroundings.

and swords that have been carried in war. Father, grandfather, and great-grandfather have played with some of them. On this one day of the whole year these treasures are brought out for the boys to enjoy.

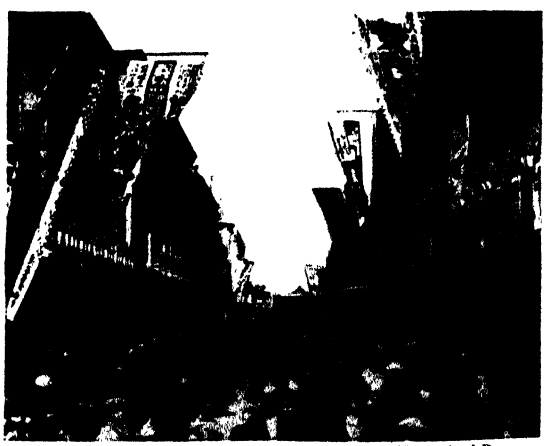
The girls have their festival day, too. It is celebrated on the third day of the third month of the year and is called the "Feast of the Dolls." Then on every shelf in every house are the loveliest dolls that a girl could wish to see. On the top shelf are dolls dressed in the splendid clothes of the emperor and the empress. Below them are other dolls, dolls' houses, and doll furniture.

Japanese school-boys study many of the same things we study in our country. Until recently the girls were taught only to play some musical instrument, to sing, to sew, to arrange flowers, and to write poetry. Nowadays, however, most girls learn reading, writing, arithmetic, geography, and other things, just as the boys do. Above all, both boys and girls are taught to love their country.

The religion of the Japanese people. If you should visit Japan, you would want to make a trip to Kamakura. There you will see a famous statue, a great figure in bronze. It is a seated figure, so tall that its eyes of gold are level with the tops of the trees. At its base is a gateway leading into a hall that is large enough to hold nearly a hundred people. The figure represents Gautama Buddha, a man who lived in India five hundred years before Christ. He taught his followers that men need not suffer if they live according to his rules. For seven hundred years the calm, thoughtful face of the Buddha statue has looked down upon the millions who have visited and reverenced it.

Gautama Buddha lived in India, but his followers carried his teaching to many parts of the earth, to Alexandria, Ceylon, Persia, Siam, Burma, China, and Japan. Today Japan is an important center of Buddhism. There are many beautiful Buddhist temples on the islands, and millions of Japanese worship in them every day.

But Buddhism is not the only religion of Japan. Chinese missionaries brought Buddhism to the Japanese in the sixth century. At that time the people on the islands worshiped a great number of gods—in fact, about eight million of them! Most of them were supposed to be the souls of departed relatives or friends, but some were objects in



Hudson Historical Bureau

The Japanese like outings and picnics and have borrowed many ideas for amusement from Europe and America. This crowded street is in an amusement park in Tokyo. The signs advertise motion-picture shows, theaters, and other recreations.

nature, such as a mountain, or a waterfall, or a tree, or a granite boulder. This religion is somewhat like the ancestor worship of the Chinese. Among the Japanese it is called Shintoism, or the "Way of the Gods." In spite of the coming of Buddhism, there are still a hundred thousand temples of the old religion in Japan. Strange as it seems to us, many Japanese worship according to the Shinto and the Buddhist faiths, both at the same time. But the national religion today is Shintoism, which really is a kind of patriotic worship of the homeland.

The Empire of the Japanese

Japan's colonies. Japan is only a little larger than California, and the Japanese population has grown so very large that the islands have become crowded. There are 400 people to the square mile in Japan, and in some of the crowded lowlands there are 1000. It is as crowded as California would be if half the people in the United States lived there. A number of years ago the Japanese, because of these crowded conditions, went across to the mainland and occupied Korea. They changed its name to Chosen.

In Chosen, where the land is not so crowded, the Japanese can raise enough farm produce for themselves and have some to sell to others. They raise large quantities of rice, cotton, and soy-beans. The oil from the soy-beans is in great demand, since Japan has almost no animal fat, such as butter and lard. Chosen is also of great value to the Japanese because of its coal, copper, and iron mines. The principal town of Chosen is Keijo, once called Seoul.

In recent years the Japanese have also gained control over Manchukuo. They own iron mines and blast furnaces in Manchukuo and ship the pig-iron out through Dairen. What railroad is connected with Dairen? Look at the map on page 432.

The Japanese have also occupied the southern half of the island of Sakhalin, where the inhabitants are chiefly fishermen. There are valuable coal-mines and forests, and much good land on which Japanese farmers are settling.

Courtesy Japan Tourist Bureau

Japanese prints are known the world over for their beauty of coloring and artistry. The artist must carve a wooden block, sometimes several, in order to print the picture. Each block must be inked separately.

There are a number of other small islands in the Pacific Ocean that are governed by the Japanese. These are called the Marianne, Caroline, and Marshall Islands. The chief product that comes from most of them is dried cocoanut, or *copra*.

How Japan resembles Britain. Japan, as she lies sprawled along the eastern coast of Asia, keeps her eye on the mainland, and is called the "Gateway to Asia." Britain, which lies off the western coast of Europe, has been called the gateway to Europe.

See how the shores of both Britain and Japan are washed by a warm ocean current —Britain by the North Atlantic Drift, and Japan by the Kuroshio, which means "dark stream," or current. You remember how both the English and the Japanese began early to make use of the sea. Both people, living in small countries, found it necessary to trade with the rest of the world in order to get enough to eat. They shipped to other

Courtesy Japan Tourist Bureau

Have you ever seen a Japanese lantern? They are made of paper stretched over a frame of thin bamboo. This man is decorating them. When the paint is dry, he will fold up the lanterns and carry them to one of the shops that sell such things.

countries products of which they had more than they needed, and thus got money to buy other things. Both nations not only have become great traders, but have expanded, sending their people out to colonize. And so both nations have become empires.

Britain and Japan are alike in another way. Both have many cotton textile factories. Since neither raises cotton, both import great quantities yearly. Both have iron and steel mills and many other kinds of manufacturing plants, and both import much raw material, as well as foodstuffs.

The Japanese export more than half of the articles they manufacture. The British have never exported more than a fourth, while we Americans export less than a tenth of our manufactured articles. Japan finds large foreign markets because she sells more cheaply than other countries can. Japan can sell cheaply because she pays very low wages to the workers in her factories and mills.

Oriental artists and their work. The Orient has given many beautiful things to the world. Even in our far-away country we enjoy many beautiful things that are made in Japan. Perhaps we like best the Japanese prints, the graceful pictures in delicate colors, with simple, flowing lines. Many of them show scenes from the everyday life of the island empire a century ago. One of the most famous makers of these prints was Hokusai, who called himself "Old Man-in-love-with-drawing." You may find his prints in some of our great art galleries.

It is not alone the artists in Japan who love beauty and express it in their work. Every man, woman, and child who makes anything with his hands has the same feeling—that useful things can, and should, be beautiful.

The Chinese, too, are an artistic people. They were the first to develop landscape painting. In these Oriental countries painting is not done on canvas or with oils as in our country. The artists paint on paper or silk, and their colors are mixed with a liquid glue. Almost always they paint a scene from nature. Even in the delicate carvings for which the Chinese and Japanese are famous there are many scenes from nature. An amber or a jade vase may have a lacy carving that shows a bridge across some woodland stream. The buildings of both these Oriental peoples seem almost a part of the landscape. So also do their landscape gardens, for the people of the Orient have always been leaders in the art of landscape gardening.

During the thousands of years when the Chinese and Japanese were advancing their civilization, they were constantly making beautiful things. And so, when we think about these far-away people of the Orient, we remember their lovely works of art.

Talking Things Over

1. You can find out more about the feudal period in Japan in library books. Discuss it in class and compare it with the feudal period in Europe. Why did it last so much longer in Japan than in Europe?

2. Japanese bamboo is a kind of grass. So is American corn. Discuss the different ways in which

each can be used. What are some of the similarities and the differences in the two?

3. You have read in other chapters that nations are becoming more interested in caring for their forests. What are some of the ways in which this is done? What are some of the reasons for protecting forests?

4. Japanese students are sent to America and to Europe to study other ways of living. Many American students have gone to Europe to study music, art, and medicine. But fewer Americans study in foreign countries nowadays. Do you know why? Can you find out something about the Rhodes scholars who go to Oxford University from America? Discuss the reasons why it is a good thing for students of one country to study in another.

5. The rivers of Japan are swifter than the rivers of China. What makes a river swift? What makes it muddy?

6. The chief kinds of cloth are made of silk, cotton, and wool. Discuss the special advantages that each kind has for various uses. Why is it that silk is not produced in the United States? Why do the people of the United States use quantities of silk, even though it must be imported? Why is silk material more expensive than cotton material? One of you might make a report to the class on rayon.

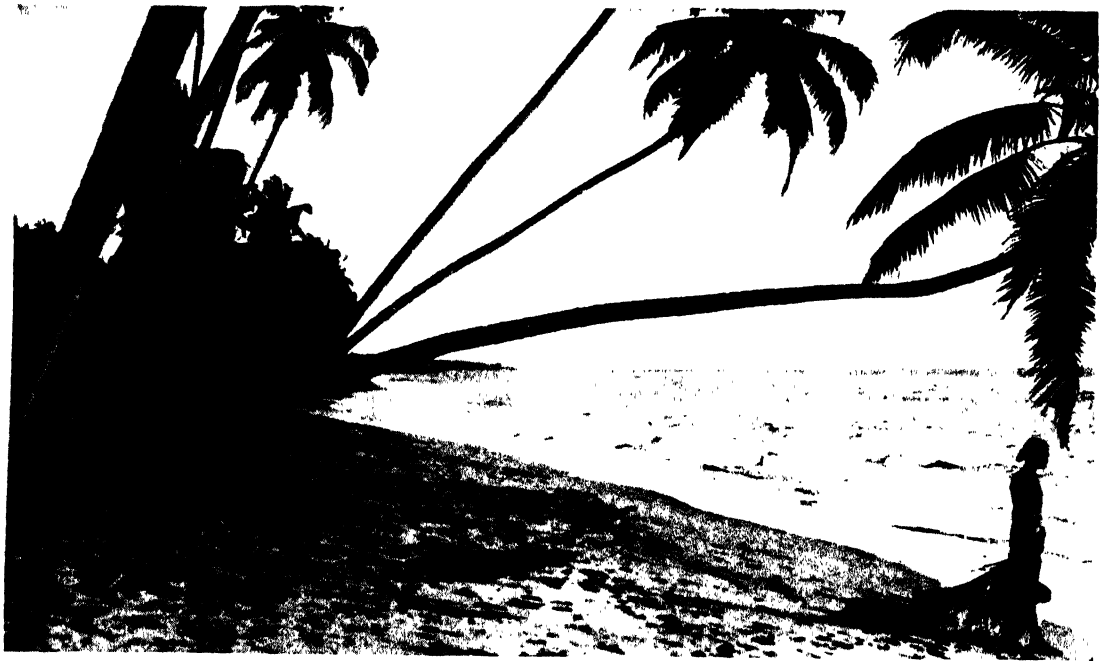
Doing Things Together

1. Plan an exhibit of Japanese imports. Many articles in the ten-cent stores are labeled "Made in Japan." Look for labels on boxes, cartons, toys, and on the bottoms of dishes. It will not be hard to show that Japan is a country of manufacturers and traders.

2. An exhibit of Japanese works of art would be beautiful. There are lovely Japanese prints. Fine porcelains, printed cotton cloth, silks, and lacquer ware are some of the things you could bring to class for such an exhibit.

3. You might have a Japanese day. For luncheon you would be sure to have different sea-foods. Some of the class might be able to bring kimonos to school. In Japan, the girls would have an exhibit of dolls, and the boys would bring kites.

4. Do you think you could paint in the light and delicate manner of the Japanese? You might begin by copying a Japanese print. Later you might make some Japanese screens for your room.



James Sawders

In the southern part of the Pacific Ocean there are thousands of small islands. Most of them are in the tropics. But the largest island of all is partly in the tropics and partly in the temperate zone.

XXXV. AUSTRALIA AND THE PACIFIC ISLANDS

Parts of European Empires

SOUTH of Japan in the Pacific Ocean are many islands, as you can see by the map on page 500. Some of these islands are just specks on the map and are uninhabited. Some are large enough to support thousands, and even millions, of people. One is large enough to be called a continent.

Almost all of these islands are parts of empires belonging to European nations. A few of the islands are under the protection of Japan, and some are protected by the United States. This means that these larger countries are responsible for keeping order and making sure that the people have a good government.

Civilization came very late to most of these islands. You have read about the Spice Islands and remember that for many centuries Europe traded with these distant lands. But the merchants and seamen were interested only in loading their ships with profitable freight. They met the natives on the seashore and traded with them for spices, pearls, or whatever the natives had that the merchants could sell. In many places it was dangerous for Europeans to remain, and so years passed before there were any settlements of Europeans on these islands.

Some of the islands were out of the way of trade routes and were discovered only by chance. Some looked so barren and forbidding that merchants passed them by, while others were inhabited by savages so fierce and warlike that traders hesitated to land.

Now, however, traders in merchant ships may visit the islands without fear. Many of

them are visited regularly by steamers, and Europeans live safely on even the most remote ones.

How Australia Was Explored and Settled

A big country with a few people. Australia is about the size of the United States, but instead of being divided into forty-eight states, it has only six. In these states there are only about six and one-half million people. How does that compare with the number of people in the United States?

More than half of the Australians live in five cities — Sydney, Melbourne, Brisbane, Adelaide, and Perth. You see, most of the people who came to Australia had been used to city life in England and did not wish to change their way of living. The Australians who live outside the cities have settled around the edge of the continent. In the interior there are many large regions where the land is too dry for people to make a living.

Captain Cook's explorations. Portuguese and Spaniards saw Australia while on their voyages of exploration. The Dutch sailed at least part way around it. For a long time the map-makers called this great island *Terra Australia*, which means "Land of the South." But the country did not seem inviting to Europeans, and the natives did not produce anything the merchants wanted. Australia was a long way from the regular trade routes, and for many centuries it was not explored. It had no products which Europe could use.

About the time of our Revolutionary War, an English explorer, Captain James Cook, planned a long journey of discovery in the Pacific Ocean. Exploring was difficult and dangerous in those days. There was no way to carry fresh food, and sailors had to eat salt meat and hard bread. Many of them died of a terrible disease called scurvy, which was caused by the lack of proper food. But Captain Cook planned his voyages so well that he did not have to turn back on account of sickness or to secure fresh food. He made room in his ship for a variety of foods that most ships did not carry. He even took along cows, sheep, and chickens.

Chicago Aerial Survey

Sydney has a large harbor with plenty of shelter for ocean ships. Arms of the sea extend into many small bays, so that the city has more than two hundred miles of water-front. With such a fine harbor Sydney has grown until it is larger than Liverpool, England. Does this picture remind you of an American city?

Captain Cook spent many years sailing among the islands of the southern Pacific Ocean. He sailed along the east coast of Australia and landed about where Sydney now stands. His expedition explored the land to the north and claimed it for England. He then cruised among the other islands and also claimed New Zealand for England. Cook very carefully observed everything in the lands he explored and wrote down the information. He also made maps of the southern Pacific region.

The first settlements in Australia. During the time England ruled the colonies in America, she sent many prisoners to our country in order to get rid of them. But after the colonies became free, England could no longer do this. So she decided to make a prison colony of Australia. In 1778 a ship loaded with convicts was sent to Botany Bay, where Sydney is now located. This region was named New South Wales, and it is now one of the states of Australia.

All the first settlements were made along the southeastern coast. As none of the settlers had been farmers in England, the farming was poorly done. The colonists endured many hardships until people came who were not convicts and who knew how to farm. They showed the first settlers how to raise good crops.

Keystone View Company

Australia is still a land of pioneer homes. Like the settlers in early America, this farmer had to clear his land of trees, build his house and barns, and even put up fences to keep wild animals out of his garden. In a few years he will have a good farm, and his dairy cattle will find pasture on the grassy slopes.

Keystone View Company

The savages who lived in Australia when the first settlers came are called "black fellows." Not many of them are left. This hunting party has killed three kangaroos. For weapons they have long, thin spears which are thrown with the aid of a stick. The boomerang is another weapon used by these people, but only for smaller game.

Other colonies were settled, but the country grew very slowly. English people did not care to make new homes so far from the old country, which was eleven thousand miles away. Besides, few people wanted to go to a convict land. At last England stopped sending convicts. Then more farmers left England to settle in Australia, and the colonies began to prosper.

A land with strange forms of life. The settlers found a land with forests different from those that covered the hills of old England. The new-comers were astonished at the eucalyptus trees, which were two and even three hundred feet high. And in the valleys were ferns as big as trees. In the dry sections there were trees which gave almost no shade, for the leaves were tilted on edge, so as to

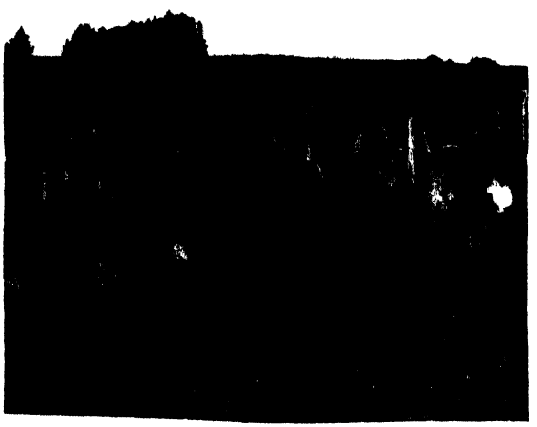
receive little sunlight to dry up their moisture. Even the color of the leaves on many plants was different—a gray green unlike the green of leaves at home.

The animals were strange, too. There were kangaroos and other animals that carry their young in pouches. There were other queer animals. One was the platypus, an odd creature with a bill like a duck and four webbed feet, but covered with fur and having a tail like a beaver. Another comical little animal, the koala, slept in a tree and looked like a fuzzy "Teddy-bear." And there were "dingoes," a kind of wild dog. Even the birds were unusual. There were cockatoos and parrots, lyre-birds with odd and beautiful tails, the bower-bird, which builds a playhouse, and huge emus and cassowaries, which are cousins of the ostrich. These birds do not fly, but run very swiftly.

Even the savages who lived in Australia were queer. There were not many of these black people, who were like the men of the old Stone Age. They used stone weapons and could throw a curved stick called a boomerang. If the boomerang missed its mark, it returned to the foot of the hunter who threw it. These "black fellows," as the English called them, could not count beyond three or four and had the crudest kind of homes. Some of them were nomads, who had no homes but found shelter anywhere. They were not farmers, but lived on plants, bark, animal flesh, and even insects.

Sloane Collection

The little koala, or honey bear, looks like a toy "Teddy-bear." It spends most of its life in trees. The koala is but one of the many animals which are found in Australia but in no other countries.



James Sawders

There are ostrich farms in Australia where these great birds are raised for their feathers. Do you know what the feathers are used for? You might look up the ostrich and its cousins, the emu, the rhea, and the cassowary, in an encyclopedia.

Scientists think that Australian plants and animals are different from those of other countries because this huge island, or continent, has been shut off from other continents for many, many ages. Australian plants and animals had no chance to mingle with those brought in from other parts of the world and to develop in new ways. Perhaps the plants and animals in other parts of the world were like those of Australia far back in the distant past.

With such strange plants, animals, and savages, it is not surprising that few settlers felt at home and wanted to remain. But something happened which made people wish to go to Australia.

How mineral wealth was discovered. When gold was discovered in California, in 1848, a farmer of New South Wales sailed

Keystone View Company

Not only the animals of Australia but also the plants are different from those found in other parts of the world. Beside this waterfall are growing giant ferns as tall as ordinary trees.

for the American gold-field. He had no luck in finding gold in America, but when he returned to Australia, he looked for the precious metal in the Australian mountains. And he found it.

As soon as news of his discovery reached England, thousands of men left farms, stores, and offices and flocked to the new gold-fields. All of them expected to become rich easily, and a few of them did. But most of them discovered that gold-mining was hard, poorly paid work. Thousands of people who came for mining remained in Australia and settled on farms, just as settlers remained in California after the gold excitement died down.

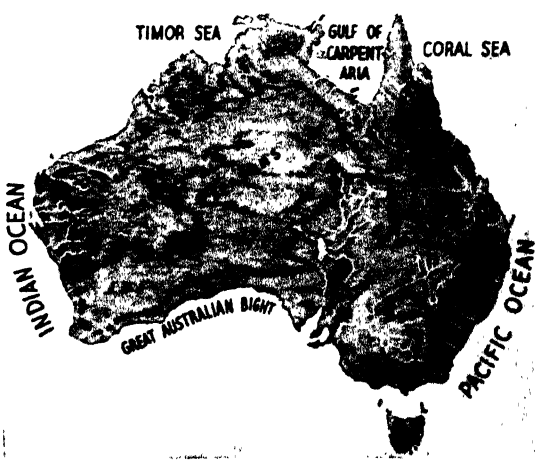
The rich mines of Australia are still being worked. There are not only several gold-fields, but also important copper, silver, tin, and lead mines. Along the southeastern coast of New South Wales there are valuable coal-mines. The value of the coal is greater than that of all other minerals combined. There are iron mines, too, but these are not close to the coal-mines. When there are more railroads and a greater population, the Australians will build more factories in order to make use of their coal and iron.

In spite of this mineral wealth, the Australians are mainly farmers and ranchers. Let us see what the land and climate are like and how they influence the kind of work that is carried on.

The Land and Its Climate

Highlands and lowlands. In clear weather the settlers on the narrow coastal plain along the east side of Australia can see the Blue Mountains and the Australian Alps. These mountains, which are often called the Dividing Range, are not very high, but they are hard to cross because the range is wide and rough.

Turn to the map on page 500 and notice how this range runs along the eastern and part of the southeastern edge of the continent. Lying inside this curved range of mountains is a huge lowland. This region is dry, and the land is poor. West of this region is a wide plateau which occupies almost half



This map shows clearly where the mountains of Australia are located. You can also see the plateaus in the desert region and the valleys of the only two large rivers in the whole country. The lake you see has no outlet. What happens to such lakes?

Keystone View Company

One problem the sheep farmers have to meet is that of supplying their flocks with water. Most of the farms have deep artesian wells. At the end of the long trough you can see a round water tank.

of the continent. Parts of the plateau are deserts.

Wet and dry lands. The east side of Australia receives its rain from the southeast trade winds. These winds lose most of their moisture when they strike the mountains. This means that the eastern slopes of the Dividing Range are well watered, while the western slopes are dry.

The westerlies bring rain to the southwest corner of the island, and the monsoon winds water the northern coast. Northern Australia receives very heavy tropical rains from November to April. Along this coast there is a fringe of forest and mangrove swamps. Grasses grow so rank and heavy that this region is almost useless for pasturing. But inland there is a fringe of good grassland bordering the deserts.

With so much of the inner part of Australia dry, it is not surprising that there are only a few rivers for such a large land. The only important ones are the Murray and Darling, which meet and flow toward the south. Trace them on the map on page 500. The Darling has almost no water in the dry season, but steamers can go for miles up the Murray at any time. Along part of the Murray, farmers use the water for irrigation.

The seasons in Australia. The northern part of Australia lies within the tropics, while the southern part has a temperate climate. As Australia is south of the Equator, it has winter in all except the tropical part while we are having our summer. When we have our winter, the Australians are having summer. Of course, in the tropical northern part it is always summer.

How Australians Earn a Living

Farm crops and markets. In the tropical northern coastal plain there are sugar plantations that grow enough cane to supply the Australians, although there is little to export. Bananas and pineapples are also grown, as well as rice and corn. The heavy rains make the hot tropical air moist and unpleasant for white people, but the dampness is good for crops like sugar, rice, and tropical fruits. The only port of any size along this coast is Darwin.

Most of the crops are raised along the southeastern and southwestern coastal plains. More than a third of the population lives in these two regions. In the well-watered southwestern corner, the people plant orchards

Keystone View Company

Wool is baled for shipment and moved to market on great trucks. This one is drawn by eight horses.

and vineyards, just as in Mediterranean countries. Here there is plenty of rain, all of which comes in winter. Fruits make up the chief export from this region. The largest city here is Perth, at one end of the only railroad which crosses Australia. Fremantle is the first Australian harbor at which the great steamers stop when they come from Europe, Africa, and Asia.

Inland from the southwestern coast is a great wheat country. Usually there is rain enough for a good crop of wheat, as well as for oats, barley, hay, corn, and potatoes. But occasionally there will be a dry winter and dry summer, and then the crops fail.

In the southeastern coastal plain the farmers raise alfalfa, vegetables, and such fruits as apples, peaches, plums, and pears. There is plenty of good pasture for large herds of dairy cattle. There is plenty of rain, and the climate is so mild that the cattle can remain without shelter throughout the year. On the coast here is Sydney, the largest city of Australia. It is one of the greatest ports in the whole British Empire. Its harbor is often called the most beautiful in all the world.

James Sawders

Giant trees such as this are cut for their lumber. Such trees make travelers think of the redwoods of our own California. Besides groves of such trees, there are forests of trees of ordinary size.

Keystone View Company

In this river valley of Tasmania the farmers raise quantities of apples for shipment to England. In what kind of climate can apples be grown?

Farther inland, on the side of the Dividing Range away from the coast, is another great wheat country. Less rain falls here than along the coast. In places where there is too little rain for wheat, the land is used for sheep pastures. The drier the region, the more sheep and the less wheat you find.

How rainfall affects crops. In Australia it is easy to see how the land and the climate affect the crops. Most of the crops depend directly on the rainfall. If you should take a trip from Sydney to Lake Eyre, in the central part of the continent, you would find different belts or regions of crops. Find these two places on the map on page 500.

On the moist coast you will see gardens, orchards, and green meadows for pasturing dairy cows. As you climb the Blue Mountains, you pass through heavy forests. On the east side of the mountains everything is green and flourishing. But once you are over the mountains and start down the west slope, you notice that the forest thins out and the country begins to look more brown than green. You see, the winds have dropped most of their rains on the east slope.

In the valleys of the western slope, where grass still grows green, you find cattle ranches. There is enough rain here for wheat; and on

the level stretches are thousands of acres of wheat fields. In the drier regions sheep nibble the short grass.

The farther west you go, the drier the land becomes. You leave the cattle and wheat lands behind and see only sheep. But finally the land is too dry even for sheep. Then you are in the desert interior of Australia. Here is Lake Eyre, a body of salt water that has no outlet to the sea. It is like Great Salt Lake in Utah.

The great sheep country. For a long time no settlements were made west of the mountains. Then the need for more pasture land caused people to cross the mountains. The first settlers raised sheep for their meat. Then a retired army officer thought there might be money in raising sheep for their wool. He knew that English mills bought large quantities of wool. So he bought a few fine wool sheep in Capetown, South Africa, shipped them to Australia, and put them on his big ranch there. Soon he had large flocks and was making money by shipping wool to England.

The grassy plains to the west of the mountains proved to be just the place for sheep-raising. Such plains, almost without trees, occupy a large part of Australia. Locate the land marked "Dry at all seasons" on the map on page 544, and you will see how large the sheep country is. Then you will not wonder how it happens that more sheep are pastured there than in any other place of equal area in the world.

Hudson Historical Bureau

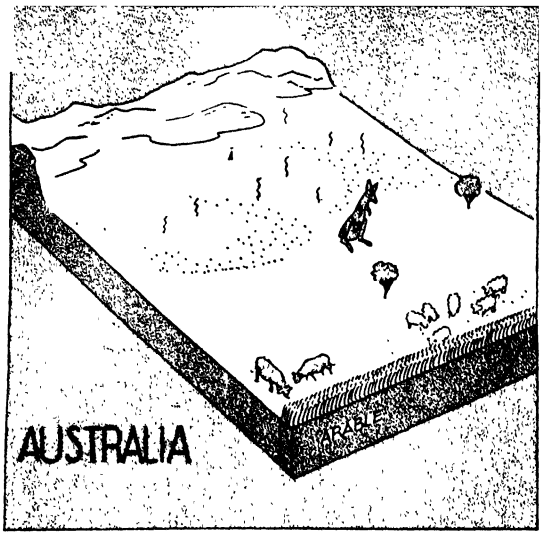
Gold has been found in many of the streams in Australia. These two prospectors are "panning" the gravel of a small river in the hope of finding gold. This way of finding gold was used in California and Alaska by many prospectors. Most of the Australian gold is now mined by companies that use machinery.

Hudson Historical Bureau

Many products can be grown on the farms which are in the tropical part of Australia. Beyond the field of pumpkins is a field of pineapples. There are several rows of banana trees between the rows of pineapples and the tropical forest.

The sheep ranches in Australia are called sheep stations. They are of enormous size, some of them as large as one hundred fifty miles square. In most parts of the dry country the sheep men get water for the sheep from deep wells. When the wells fail, as they do in very dry seasons, the poor sheep die by the thousands. Nowhere in the world is the weather of more importance than on these great sheep stations.

The sheep men also have trouble with rabbits that eat the grass which the sheep depend on for their food supply. Thousands of miles of wire fence have been built to keep these rabbits out of the grain fields and orchards. Once Australia had only a few rabbits that had been imported as pets. They have in-



This diagram shows that only one-fiftieth of the land in Australia is plowed and seeded to crops. A great deal more than that amount is used for pasture.

creased so tremendously that now they are a pest. Tons of them are killed every year, but still the rabbit family increases.

In spite of all such troubles of the sheep men, however, Australia leads the world in the production of wool. Most of the sheep raised are merino sheep, which have a very fine wool. Sheep are also raised for meat, and refrigerator ships carry many tons of lamb and mutton to England.

Cattle-raising. For many years Australian farmers did not raise cattle in large numbers, as they did sheep. Wool can be shipped long distances without spoiling, but most dairy products cannot. The early settlers had enough cows to furnish them with milk, butter, and meat, but none of these products were exported until refrigerator ships were built. Then the Australians began to raise more beef cattle and keep larger dairy herds. Now beef as well as mutton is exported, and thousands of tons of butter and cheese are shipped to other countries. Look at the map and see where the cattle region is.

Industries of Australia. Most of the industries of Australia are connected in some way with the products of Australian farms. Hides must be prepared, wheat must be milled into flour, and milk must be made into butter and cheese. In addition to agricultural products Australia has other resources. Mines produce metals, and there is lumber on the western slopes of the Blue Mountains.

The center of the manufacturing industries is Melbourne, the second largest city. Its factories turn out tools for the farms and mines, and some railroad equipment. The Australians, however, are not a manufacturing people like the English, but rather ranchers and farmers, who import most of their manufactured goods.

Only a short distance from Sydney is Canberra, the new capital of Australia. It is a made-to-order city, like our own Washington. Instead of just growing up from a small town, it was planned as a large city by an American architect.

The government of Australia. Australia is a part of the British Empire. You read in the chapter about Great Britain that the British Empire is really an association of independent nations and colonies which have the British king at their head. Australia is called a commonwealth, and governs itself. There is a parliament elected by the people to make laws and decide what taxes shall be collected. The Australians are proud of their independence and self-government.

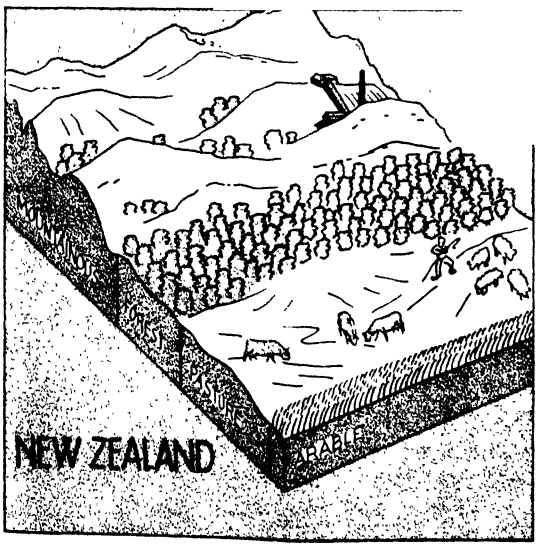
The Islands of New Zealand

The land and its people. On the map New Zealand seems close to Australia, but when you measure the distance by the scale of miles on the map, you see that the two large islands in the New Zealand group are more than a thousand miles from the southeastern tip of Australia. That is one reason why the islands were not visited or settled by white men until modern times.

New Zealand was discovered by a Dutch captain, Tasman, in 1642. He named the land from the province of old Zeeland in the

Netherlands. For many years no one visited the islands. Captain Cook, the famous English explorer, who made maps of this region, explored the coasts in 1769. But he did not go far inland, because New Zealand was inhabited by tribes of savage people, the Maoris, who made constant war on each other. It was not until after 1800 that settlements were made by missionaries. The English who settled the islands had constant trouble with the Maoris until about 1870. Now most of the Maoris are civilized and law-abiding, for they are much more intelligent than the savages of Australia.

The islands of New Zealand have a mild climate, since they lie in the path of the westerly winds of the southern hemisphere, just as England does in the northern hemisphere. The climate of some of the islands, particularly the southern ones, is temperate, like the climate of England. Englishmen, therefore, feel much at home there. The island called North Island, being closer to the Equator, has an almost tropical climate, and frequent rains make it very moist.



Less than one-twentieth of the land in New Zealand is plowed and seeded to crops. One-fourth of all the land is used for pasture. One-fifth of the land is covered with forests and low growths of trees.

James Sawders

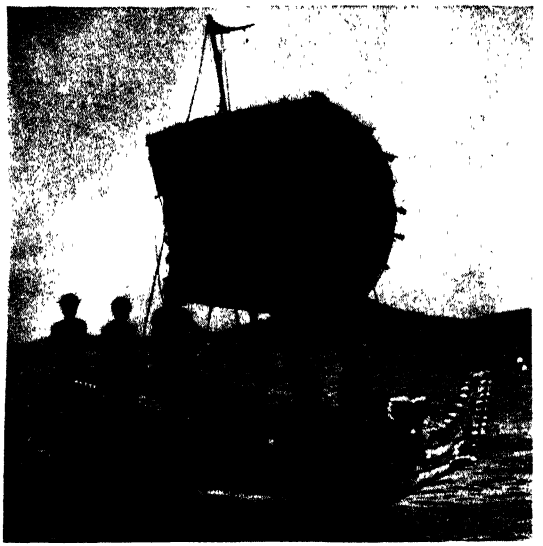
Notice the carving on the wooden post at the corner of this Maori building in New Zealand. The roof beams of the porch are decorated with painted designs in several colors.

A backbone of mountains runs through both large islands. What difference in rainfall would you expect between the east and the west sides of the mountains? Which side would be drier?

Since much of the land is good pasture, most of the people engage in dairying. Sheep and cattle roam over the rolling hills on the eastern side of the mountains. Like Australia, New Zealand ships wool, mutton, beef, butter, and cheese to England.

Because of the mild climate and the heavy rainfall, the mountain slopes are covered with dense forests that provide valuable lumber. The most valuable forest product is *kauri* gum. It is a resin that dropped from trees hundreds of years ago and hardened. This gum is exported in large quantities to European and American factories that make varnish and linoleum.

Mineral wealth. There is coal, as well as gold and other metals, in New Zealand. But not much use is made of the mineral wealth, as there are few factories, and most of the people are engaged in farming.



Keystone View Company

The sail of this boat is not made of cloth, but of cane and strips of bark. The boat is as narrow as a canoe but is easy to use because it has what is called an outrigger. You can see this wooden float in the foreground of the picture. It is fastened to the canoe with sticks. The men are natives of New Guinea.

A strange land of wonders. North Island contains volcanoes, boiling springs, geysers, and other natural wonders that remind Americans of our Yellowstone Park region. Another curious thing about New Zealand is that there are almost no animals except tame ones. The white men found only the tame animals of the Maoris. Of course there were birds, but there were no snakes or other land animals, and very few insects. There were no queer creatures like the ones in Australia, and no familiar wild animals such as wolves, bears, or deer.

The cities of New Zealand. The chief seaport of New Zealand is Auckland. Other large cities are Wellington, Christchurch, and Dunedin. Locate them on the map on page 500. These cities look like English or American cities.

The government of New Zealand. Like Australia, New Zealand is a part of the British Empire. It, also, is independent and is called a dominion. The head of the government is called the governor-general, and he is appointed by the British king. But the laws are made by representatives who are elected by the people.

Other Pacific Islands

A sea full of islands. East of New Zealand are the Chatham Islands. Southward are the Aucklands and the Campbell Islands. All these islands are governed by New Zealand. Notice how many other islands there are in the South Seas, as this part of the Pacific Ocean is called. There are thousands of them.

As you know, many of these islands have been known to Europeans for centuries, but others were not discovered until modern times. There are three groups of these islands.

The first group is called Melanesia, which means "islands of the blacks." The natives of these islands have very dark skins.

The second group of islands lies to the north and is called Micronesia, which means "little islands." The natives of these tiny islands are a mixture of black, brown, and yellow peoples.

The third group of islands is called Polynesia, meaning "many islands." The natives are mostly light brown and have straight, black hair.

Products of the islands. Oceania, as all these islands together are sometimes called, does not produce much for the world to use. Cocoanut palms grow in abundance on many islands, and the dried meat is shipped to European and American factories, where the oil in it is used chiefly for food and for soap-making. Oysters containing pearls are also found along the shores. Some of the larger islands, as you have read, contain mineral wealth, and some have climates suitable for growing rubber trees, rice, or sugar-cane. But the natives find it so easy to live by taking what nature provides that it is difficult to get enough labor either for mines or farms.

Why European nations rule the islands. The great nations of the world have taken charge of these small islands. Most of them are now ruled by the French, British, Dutch, or Japanese. Australia and the United States control others. Ships of these countries trade in the islands as the natives want more and more goods and as the islands produce more materials which the world can use. Many of the islands are close to Asia, which will some day want large quantities of manufactured goods. That is one reason why European countries wish to rule these far-off places.

Talking Things Over

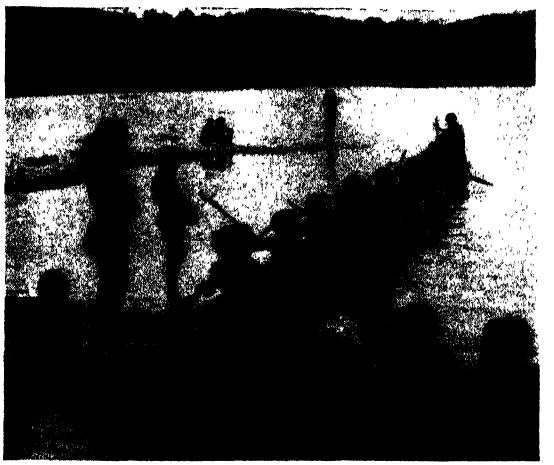
1. Have you a large map of the world in your room? If not, find one in a book. Locate the Atlantic and Pacific oceans. Which is larger? Just from looking at the map, can you explain why Australia and New Zealand were not settled as soon as North America? Do you know of any other reasons why they were late in being settled? As Asia is crowded with people, why didn't settlers from India or China seek a living in these lands?

2. New South Wales was one of the first regions in Australia to be settled. Have you noticed that colonists often named a new land after the mother-country, or the town or district from which they came? There are a number of examples of this in our country. Try to think of some of them.

3. What would seem queer to us about Australia's climate at Christmas? Which months of the year do the Australians call winter, and which summer? Have you a globe in your school? Find Australia and see if you understand why it is sometimes said to be at the "bottom of the world."

4. Do you know of a section of America, besides California, which attracted settlers because of gold? If not, look up something about the early history of Alaska and discuss it in class.

5. Many strange plants and animals were found in Australia. Discuss the reasons why they were found in Australia and not in any other continents.



Keystone View Company

These bushy-haired savages are Papuans. The canoe is one of the great war canoes which these people once used. This one holds a dozen men. Such canoes at one time furnished the only means of transportation between the islands. Steamers now visit most of the larger islands for trade.

Doing Things Together

1. Plan a picture exhibit about Australia. Divide your class into several groups to look up different things. One group may find pictures of the animals of that continent. Many of the animals, such as the kangaroo, the dingo, the koala, and the platypus, are found only in Australia. Another group might find pictures of birds. Other picture subjects for groups might be plants, natives of the country, and weapons used by the natives.

2. Pretend that you are a group of English colonists trying to decide whether you will settle in Australia or in New Zealand. Discuss and compare all the different things that should be considered, such as climate, crops that can be grown, and industries that might be developed.

3. Put two parallel lines on the blackboard. Show on the first the important dates in exploration and colonization, beginning with 1492. On the other line show when Australia and New Zealand were explored and when the first settlements were made.

Cowling from Ewing Galloway

Human labor is cheap in most parts of Africa, just as it is in China. In many regions all transportation is done by men. In some places there are no roads, and goods must be carried over trails too narrow for vehicles. In other places pack-animals cannot be used for many reasons.

XXXVI. AFRICA—A CONTINENT OF COLONIAL EMPIRE

Land of Forests, Deserts, and Grasslands

WHY European nations wanted colonies. You have seen how Europe came to be divided into nations, and how the peoples of those nations live. You have seen that in the western half of Europe people are crowded together in busy cities, earning their living chiefly in mills and factories. In the eastern half of the continent there are fewer people, and most of them are farmers who raise foodstuffs or raw materials to be used in the factories.

But the farmers of Europe cannot raise enough to supply the needs of everyone. Also, there are many different kinds of food and materials that cannot be produced in Europe. Europeans want coffee, tea, chocolate, hemp, rubber, spices, and many other things that grow only in tropical lands. Other supplies which Europe wants, such as wool and hides, cannot be raised in crowded countries. They must come from countries with a temperate climate where there are large regions with a small population. Can you explain why?

You have read how European countries took large parts of Asia because they supplied some of these things. You will remember how the different European nations struggled to win these colonial empires in the sixteenth and seventeenth centuries. As the nations became more and more crowded, still larger amounts of food and raw materials were needed to feed the people and to supply the factories.

Asia was the first place where colonies were planted by European nations. There were many reasons for this. Trade routes led from Europe to Asia. Traders had passed over those routes, as you know, since early times. There were civilizations in Asia, even though they were different from the civilization of Europe. The civilized peoples of Asia were accustomed to trade.

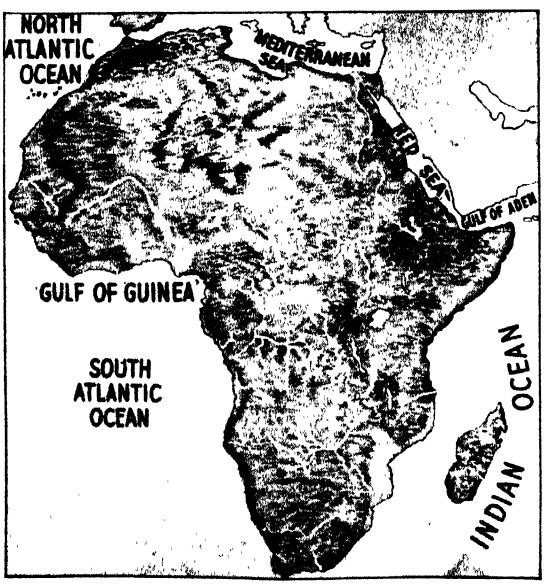
North and South America were colonized by European nations. But in the search for colonial lands why was Africa left to the last? It was close to Europe, and it could supply

many tropical products and other materials Europe wanted. As you read on, you will find the answer to this question.

What the map shows us about Africa. When you look at the map on page 533, you see that Africa is a very large continent. It is three times as large as Europe. The coast is smooth, not jagged and broken by bays and gulfs like the coast of Europe. This means that Africa, unlike Europe, does not have many good harbors for ships.

You will also notice that Africa has no great lowland plain like that of Europe. Most of it is a huge plateau, standing three or four thousand feet above the sea. The coastal plain which surrounds the continent is narrow, and in some places there are mountains close to the sea. Mountain-ranges border the plateau on the north, east, and south. From the southern ranges the land "steps down" to the coastal plain.

The climate and seasons. The Equator runs directly across Africa, cutting it nearly



The southern tip of Africa is about as far from the Equator as is the northern coast along the Mediterranean Sea. Find Africa on a world globe and compare it with other continents as to size and position. Notice how the large rivers lead far into the interior of this great continent.

Underwood & Underwood

If you look closely, you can see the head of the dog which the native porters are carrying in a basket slung between poles. In the distance you can see two more porters with boxes on their heads. There is no road through this rough grassland.

in half. Turn to the map on page 533 and find the Tropic of Cancer and the Tropic of Capricorn. The region between these two is the Hot, or Torrid, Zone. In this zone the heat is intense the year round. You know that tropical regions receive the greatest amount of heat from the sun because the rays are most direct. Such equatorial regions are very wet, also, with rain almost every day.

On each side of the hot, wet country that is close to the Equator is a region where there is a dry season for six months, followed by a wet season lasting six months. North of the Equator the wet season is from May to October, while south of the Equator the wet season lasts from November to April. So lands south of the Equator have weather just the opposite of weather in lands north of the Equator.

The trade-wind deserts. Beyond the regions that have a wet and a dry season are large tracts of land which are dry all through the year. In the north there is the Sahara Desert, and in the south is the Kalahari Desert.

Perhaps you wonder why there are deserts in these places. The winds are the cause. In

regions close to the Equator the air is very warm. Warm air rises, and as it rises, it moves off in the direction of the poles of the earth. As it goes toward the colder regions, the air cools. Cold air sinks, of course, and so this air which has cooled off sinks to the earth. Then it moves back toward the Equator.

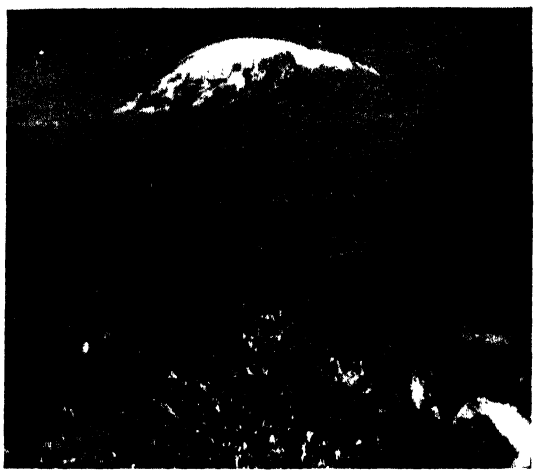
Because the earth rotates, or turns, the winds cannot blow straight back toward the Equator. North of the Equator these winds blow from the northeast. South of the Equator they blow from the southeast. These winds are called the trade winds because in the days of sailing-vessels they blew ships from Europe to the rich lands of the West Indies and helped the trade with those lands.

The trade winds start from regions in the interior of a continent and are dry because they have not yet blown over an ocean. As they blow over the land, they make deserts. These deserts, both north and south of the Equator, are known as the trade-wind deserts.

Trees and plants of Africa. With three such different regions you expect to find great differences in the growing things in Africa. In the lowlands near the Equator there are dense forests that are green throughout the year. In these equatorial forests the tall, straight trees have green crowns of leaves at the top, and their branches are covered with ferns or creeping vines. Since the leafy crowns are thick, little sunlight finds its way through them, and the forest floor is dark and gloomy. Such forests are found in the basin of the Congo River, along the Guinea Coast, and on the low plain of the East Coast. In these forests there are no large animals, but there are millions of small creatures, such as monkeys, birds, frogs, lizards, and swarms of insects.

Underwood & Underwood

Explorers in Africa had to make their way through country like that in this picture. Except for the river and its muddy banks, this region is thickly covered with dense forests. The only way to travel is on the water by means of native canoes.



Lieb from Ewing Galloway

There are mountains in Africa whose peaks are covered with snow. This peak, called Kilima N'jaro, is in the part of Africa called Tanganyika, east of Lake Victoria. It is almost twenty thousand feet high. It seems to rise out of a gray haze. The wet, misty country around it is a hunting-ground for elephants. The elephants feed in the dense tropical forest.

Bordering the equatorial forests, north and south, are great grasslands with scattered trees. Such regions are called tropical *savannahs.* Turn to the map on page 533 and locate the savannah on the eastern side of Africa, where the eastern highlands are too cool and dry for anything but grass.

In these savannahs there are two classes of animals. First, there are the plant-eating animals, such as the antelope, giraffes, and many others. And then there are the enemies

of these animals, the large flesh-eating beasts, such as the lion.

Northward and southward, the grassland grows poorer and poorer until the desert is reached. Here there are special kinds of plants and animals. Desert plants have leaves or stalks that can store up water and long roots to reach deep into the ground, seeking water. The chief animal of the desert, the camel, can go for days without water.

In the southern part of the high African Plateau is a grassland known as the *veldt*. Here the grass is shorter and less luxuriant than in the tropical grasslands. But it provides pasture for grass-eating animals such as the horse, sheep, and donkey.

Along the southwestern coast is a region very much like the northern coast, which is a Mediterranean land, as you know. What climate and products would you expect there?

Exploration of Africa

Difficulties of the explorers. Africa has been a hard continent for explorers to enter. For many years it was known as the "Dark Continent." When explorers first came to North America, they made their way up the streams into the interior. But Europeans could not enter Africa by its rivers.

You will notice, as you look at the map on page 533, that the African Plateau has few streams that connect the interior with the sea. The rivers wander across the great plateau until they come to the edge. Then they drop down to the coastal plain in falls or in series of rapids. Since boats cannot go upstream past these falls and rapids, the explorers could not enter Africa by means of the rivers.

There were other barriers to entering Africa. On the north is the Sahara Desert—

Ewing Galloway

The natives of Africa are not industrious people as are the Chinese. It is easy for them to make a living with little work, and they do not want to work hard all day as people must do in colder countries. On this plantation the English owner must have an overseer to keep the men at work. The workers are planting a field of sisal. The fibers of this plant are used for rope and twine.

Acme Newspictures, Inc

There are marshy regions in Africa where travel is particularly difficult. A dozen oxen are having a hard time in pulling a single wagon through this swampy country. The water is above the men's knees. In spite of cheap labor, transportation is expensive.

a vast, sandy, rocky waste almost as large as Europe itself. In the lowlands of the African interior there are poisonous insects that are as murderous as any ferocious beast could be. And there were savages in Africa who made exploring very dangerous.

It was not until the nineteenth century, when Europe was overcrowded and the factories needed more and more raw materials, that Europeans overcame these difficulties and made their way into the interior of Africa. Steadily they pushed on, claiming land for their home countries, until now Africa is almost entirely split up among the nations of Europe. Britain owns the greatest part, while France is second in the extent of her African territory.

Natives of the Dark Continent. Earlier in this book you have read about the Egyptians, and also about the Arabs who conquered most of northern Africa. These two peoples occupied only a fringe of the great continent. The Egyptians, and later the Romans, looked upon the rest of Africa as a country of black men who could be captured as slaves. But when Europeans at last entered Africa and explored it, they found that not all the natives of central and southern Africa were Negroes, although most of them had dark skins.

There are two great groups of Negroes in Africa. In the north live the Sudan Negroes. They live in the region that stretches from the Guinea Coast eastward to the sources of the Nile. They are farmers. South of them live the Bantus, divided into many tribes. They live in the region of the great forests and southward to the tip of the continent. Besides being farmers, the Bantu tribesmen are cattle-raisers.

In addition to these two groups of Negroes, there are a people called Bushmen. Bushmen are not really Negroes. They are short and have yellow skins. In many ways they are unlike the Negroes.

Besides these peoples, there are Pygmies, Hottentots, and other peoples who are mixtures of the different tribes who live in this great continent. Some of the tribes are large, with many thousands of people, while other tribes are small. Although there are many tribes, Africa is not thickly settled. There are vast regions with only a few scattered inhabitants.

Underwood & Underwood

Explorers had to trust themselves to narrow canoes like this one in order to penetrate parts of the interior of Africa. It would take many canoes to carry the supplies and men for one expedition.

Acme Newspictures

Only an aviator can actually see Victoria Falls as it is in this picture. Notice the clusters of rocks and tiny islands above the falls. The falls themselves are almost hidden by the spray. You can see the narrow gorge through which the river rushes after it has gone over the falls. Would you expect to see a railroad bridge like this one in Africa? There are more air-lines than railways in Africa.

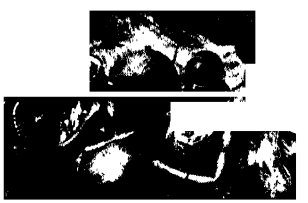
White settlers in Africa. You remember reading about Prince Henry of Portugal, who sent his seamen along the coast of Africa. The Portuguese, who first explored the narrow strip of western coast, stopped at the tip of the continent and traded with the natives for food and water. Later the Dutch, on their way to India, stopped to trade at this same place, which is near the place where Capetown is now located.

The thrifty Dutch thought they would have a better source of supplies for their traders if they had a colony and raised their own food. Farmers from the Netherlands came and settled there. The Dutch word for farmer is *boer*, and so the Dutch in Africa were called Boers. They held the country for a while, but later it was taken by the British.

Livingstone, the English explorer. What really opened up Africa was the exploring done by David Livingstone and Henry Stanley. Livingstone, an English missionary, went to South Africa to establish missions among the natives. He remained in Africa for thirty years and explored the wildest parts of the continent. Some of the natives he met were cannibals, but Livingstone was able to win their good-will. In time he came to know a great deal about the different tribes.

From the map on page 533 you can see that Livingstone followed the Zambezi River from its source to its mouth. One day when his men were paddling down the river, he heard a great rumbling noise. The natives told him that it was the roaring of the "falls of the sounding mist." A few miles farther on, Livingstone came to one of the most beautiful waterfalls in the world. The river drops over the rocks into a pool four hundred feet below. The water splashes and roars, and there is a constant spray of mist, which drenches everything near it. Livingstone named the falls "Victoria" for England's queen.

In one region that Livingstone explored lived a rich and powerful Arab chief who cap-



Underwood & Underwood

These women are not carrying pottery vessels but large gourds, which are used for water and for storing grain and other foods. The people of this tribe in British East Africa wear leather clothing. What does that fact tell you about their occupation?

Ewing Galloway

Drums seem to be the chief instrument in this native band, which belongs to an African chief. These people, who live in Uganda, surround their homes with stockades such as the one you see in the background. This wall is made of woven canes.

tured black men and women and sold them as slaves. The slaves were marched to the coast and carefully guarded until slave traders bought them. Then they were shipped to other countries. Livingstone later persuaded many countries to pass laws which forbade the trade in slaves.

A reporter who became an explorer. Livingstone was so long in Africa without being heard from that the people in England thought he was lost. A newspaper reporter, Henry Stanley, was sent to look for him. After eight months of searching, Stanley heard from natives that there was a white man with a long white beard living near Lake Tanganyika. Finally he reached the little settlement and found Livingstone there, ill and half-starved. When Stanley saw the old missionary, he held out his hand and said, "Dr. Livingstone, I presume?" just as though he were meeting the famous man on some city street.

Livingstone refused to go back to England and stayed in Africa until he died, a year later. He did not think of himself as a great explorer, but he really did more than any other person in opening up Africa for white men.

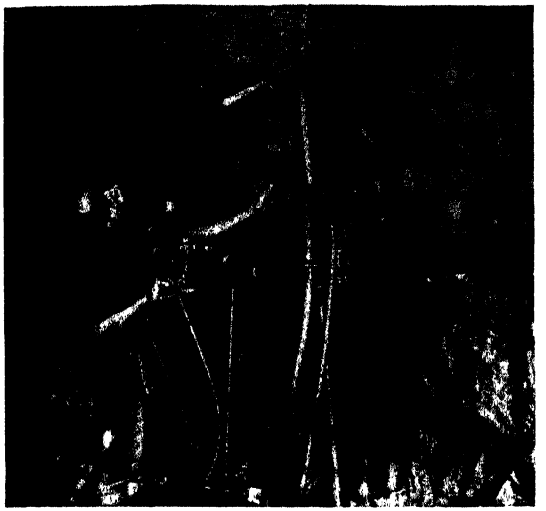
Stanley went back to Africa to make further explorations. One day, when in central Africa, he thought he had discovered the source of the Nile. He launched his boats on a large river that flowed toward the north. But he found that this river, after flowing north for many miles, turned to the west. Then Stanley realized that he was on the Congo. Find that river on the map on page 533 and trace its course. By his explorations Stanley helped to open a vast territory for Europeans.

The English and the Boers. During the time when Livingstone and Stanley were exploring the country near the Equator, the English and the Boers were having wars with the native tribes in the southern part of the continent. The white settlers had to fight for their homes and their lives just as the farmers in America had to fight the Indians.

The English and the Boers did not get along well with each other. The Boers would not agree to come under British rule, and so they moved to the north into what was called Orange River Colony and the Transvaal.

Ewing Galloway

Trusted men sort over the pebbles from diamond mines and select all the gems. These two men are carefully looking over every piece of stone. Even a tiny diamond is valuable. The rough stones will have to be sent to Europe in order to be cut and polished.



Ewing Galloway

Modern machinery is used in the gold-mines of South Africa. Expert miners from Europe show the native workmen how to use the tools. Much of the gold is shipped to London by airplane.

The discovery of diamonds. At this time there were not many white people in South Africa. Then something happened that brought people by the thousands. Diamonds were found. Men came flocking to work in the mines that were opened near the meeting-place of the Val and Orange rivers. These diamond mines proved to be the richest in the world, although they are now nearly exhausted. Today the principal mines are near Pretoria. Find that city on the map on page 533.

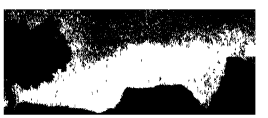
Almost overnight a city named Kimberley grew up near the mines. You would not choose such a dry region as a site for a city. At times the dust there is so thick that men must stop work. Food has to be brought in from more fertile regions. The farmers of the Orange River Colony made as much money by selling food to the city people as most of the diamond-hunters made from the mines.

Gold in the Transvaal. During the boom time of the diamond mines, the Boers in the Transvaal were having a hard time. They were not paying their taxes and were quarreling among themselves. Then gold was discovered in the Transvaal, and that changed everything.

Thousands of people flocked to the Transvaal from all over the world. But they found that the mining was difficult in this region. Gold could not be washed out in pans from the gravel along the rivers, as it could in other places. It was found in rocks that had to be crushed by machinery. Companies were formed, and they brought in machinery and hired natives to work in the mines. Today a large part of the gold mined in the world comes from the region around Johannesburg.

At the time of the discovery of gold, there were no railroads in the country. All the machinery for the mines and all the materials for building the city had to be hauled by bullocks and mules for hundreds of miles. But railroads were soon built, and the quiet Transvaal became a bustling, progressive country.

The Boer War. The Boers were making money, but still they were not happy. They had moved into this country when it was a wilderness, to get away from crowded regions. They wanted to be free to do as they pleased. Now swarms of new-comers from England and America were settling around them. The Boers disliked the "Outlanders," as they called the new settlers. The Outland-



Underwood & Underwood

The rough range of the Drakensberg Mountains separates Orange Free State from Natal. Some of the peaks are from ten to twelve thousand feet high.

ers did not like the old-fashioned ways of the Boers. Soon a bitter war began between the British and the Boers. When the Boers were finally beaten, the Transvaal and the Orange River Colony became a part of South Africa, which was British territory.

British Territory in Africa

The territory in Africa that is a part of the British Empire is marked on the map on page 533. It includes the Union of South Africa, Northern and Southern Rhodesia, Tanganyika, Uganda, British Somaliland, Ashanti, Sierra Leone, Gambia, and the Anglo-Egyptian Sudan.

The Union of South Africa consists of the provinces of Natal, Cape of Good Hope, Orange Free State, and the Transvaal. Also in this union are the native states of Basutoland, Swaziland, and Bechuanaland, which are under British protection.

African farm-lands. South Africa is a great table-land, bordered by narrow coastal lowlands and by a mountain ridge. This ridge causes heavy rainfall on the coastal lands, while back of the mountains there is very little rain. Because of the dryness, only a small part of South Africa is suitable for farming.

The farming country of South Africa is the coastal lowland around the port of Capetown. It is known as the Mediterranean region, since it has the same climate we know as Mediterranean climate. Here the first settlements were made by Europeans, and here today is the garden spot of southern Africa. Such Mediterranean fruits as grapes, peaches, and oranges are grown. Wine-making, fruit-canning, and jam-making are industries in this country.

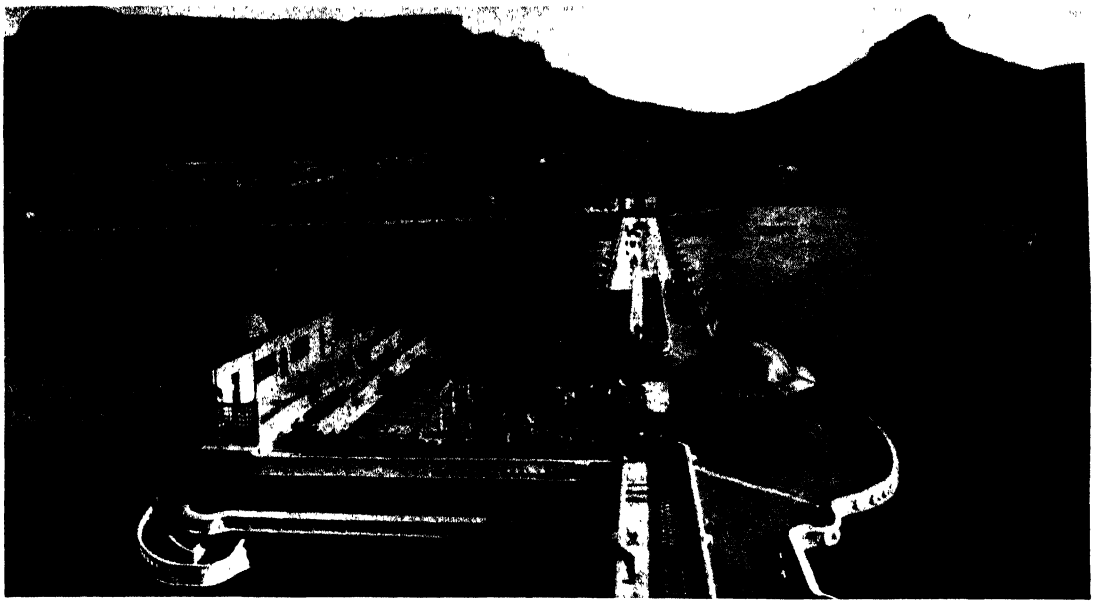
On the southeast coast the trade winds bring heavy rains in summer. The region is thickly populated. The principal food of the native tribesmen is maize and kaffir corn. Large crops of sugar-cane and tobacco are also grown here.

The Little and the Great Karoo plateaus are like huge steps of a ladder leading to the higher plateau. Here the country is very dry, and grass is so scanty that about all the farmers can raise is sheep.

On top of the plateau a few crops are grown. But the land is used mostly for grazing sheep. Wool is the one big business of

James Sawders

In the Transvaal the farmers haul their products to market in ox carts such as this one, which is drawn by ten oxen. What does that tell you about the roads and the kind of country over which the farm products must be hauled? The Boers, who live in the Transvaal, call this kind of land the "veldt," meaning field. If the veldt could be watered, it would make fine farming land.



Ewing Galloway

The city of Capetown is at the foot of the mountains which hem in most of South Africa. This picture gives you a good idea of the narrow coastal plain and the height of the land in the interior. The long pier you see is a public recreation pier. Do you know of one like it in our own country?

this region. Some goats and cattle are also raised, but the wealth of South Africa lies in its wool and minerals.

Mining lands. Near Johannesburg a rich ridge of gold-bearing rock, known as the *Rand*, runs through the eastern part of the plateau. This plateau, which is called the veldt, is somewhat the same kind of country as our American Great Plains. The Rand produces a large part of the world's annual supply of gold. Besides the gold-mines here and the great diamond mines at Pretoria and Kimberley, there are extensive coal-fields near Johannesburg.

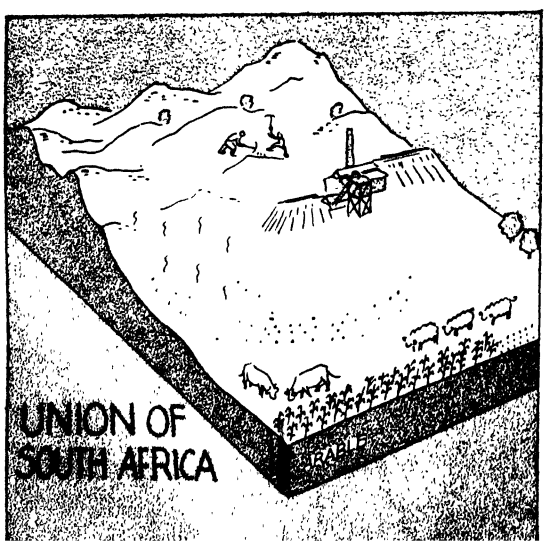
Cecil Rhodes and Rhodesia. To the north of Johannesburg the land slopes downward, and the grass becomes thinner and thinner. Gradually the country changes into vast stretches of desert toward the west. This is Rhodesia. The British colonies of Northern and Southern Rhodesia are four times the size of the British Isles, and yet there are fewer people in Rhodesia than there are in Liverpool and Manchester.

These colonies were started by Cecil Rhodes and named for him. Cecil Rhodes was a young Englishman, one of the many thousands of men who came to mine diamonds in Africa. He was a big, raw-boned youth who had been threatened with tuberculosis and was sent to South Africa to be cured. When he got well, he went into the diamond mines. Before long he had formed a company that now owns all the mines.

Rhodes wanted to make much of Africa a part of the British Empire. He believed that some day Rhodesia would be a wonderful land. This country, however, has not grown very fast, because it is far from other settled places and because it has no seaport. Its nearest port is through the Portuguese town of Beira. Find this port on the map on page 533. Rhodesia is a grassland country, good for cattle and sheep and for growing wheat, cotton, and fruit. Parts of Northern Rhodesia suffer from the tsetse-fly, whose bite is fatal to cattle and horses, so that these animals cannot be raised there. Southern Rho-

desia is rich in gold and in chromium, which is used in making hard steel and for plating many things. Asbestos is also mined. South Africa and Rhodesia are probably the most valuable parts of the continent because of their natural resources.

Cecil Rhodes wanted to build a railway from one end of Africa to the other. You can imagine what that means when you stop to think of the size of Africa. Rhodes lived to see the railroad run into his beloved Rhodesia. It passes so close to the Victoria Falls that the spray falls on the cars. But the railroad does not go all the way across the continent. It runs from Capetown into Northern Rhodesia, crossing the Zambezi over a wonderful bridge. In north Africa, between Cairo and the Sudan, it is possible to travel by river steamer and train; but between Northern Rhodesia and the Sudan there are several gaps where the only way to travel is through the forest with native carriers. It is impossible to use horses because of the tsetse-fly. In the last few years, however, motor-cars have been used to a limited extent.



Less than one-twentieth of the land in the Union of South Africa is used for crops grown on plowed and seeded land. No one has measured the amount of land used for pastures, but we do know that a large part of the land does not produce anything.

Underwood & Underwood

These workmen in the Kenya Colony are baling sisal, a fiber which is used to make rope and twine. The plant which furnishes the fiber grows wild, and many tribesmen make a living selling the fiber. But there are English plantations in Kenya where sisal is planted and grown for the market.

The land of circus animals. The high country of Tanganyika, Uganda, and Kenya is the big-game land from which circus men get animals for their menageries. Elephants roam the tall-grass country. They are big fellows, and not so gentle as the elephants that haul logs in Burma or carry the native princes of India. In this big-game country lions roar in the distance, while giraffes amble away without a sound.

The colonies of Tanganyika and Kenya are composed of a high "lake-plateau" and a coastal lowland. On the lowland natives gather cocoanuts and prepare copra, the dried meat of the cocoanut, for export. There are also plantations on the sides of the mountains that produce coffee and sisal, a plant fiber that is used in making rope. A few white people live here, but most of the labor is done by natives. On the plateau grasslands white people and natives grow cotton and corn and raise cattle. The chief export is cotton.

The Anglo-Egyptian Sudan. North of Uganda and Kenya is a part of the British Empire that may some day become an impor-

tant cotton-producing region. This is the Anglo-Egyptian Sudan. The British share control of this land with the Egyptians. The Sudan is a land of more than a million square miles—a third as large as our country. Although it is eight times the size of the British Isles, it contains fewer people than live in London. Today it exports cotton, millet, and gum arabic. Gum arabic, which is obtained from a small tree growing on the open plains, is used in medicine and in candy-making. The chief city of the Sudan is Khartoum on the Nile River.

Other Colonies in Africa

Portuguese and Spanish territory. Centuries ago Spain and Portugal owned much more of the earth's surface than they do today. Their widespread colonial empires have shrunk until they are now unimportant.

The most valuable colony of Portugal is Mozambique, called Portuguese East Africa, on the coast of eastern Africa. Here copra, rubber, and sugar-cane are produced. Rice is the chief food grown. Beira and Lourenço Marques are ports that serve as gateways into the interior of the continent. On the plateau of the west coast Portugal has another colony, Angola. It is an immense grassland, fourteen times as large as the mother-country. A little cotton and sugar-cane are grown here, but the farm-lands have to be irrigated. The chief city and port is Loanda. Portugal also owns a small region on the coast of the Gulf of Guinea and a few islands off the coast.

Spain owns the Canary Islands off the west coast of Africa, and a number of small islands in the Gulf of Guinea. She also has the unimportant colony of Rio de Oro on the west coast of Africa and a small strip of Morocco. Most of Morocco, however, belongs to France.

Italian possessions. Although the total area of the Italian colonies in Africa is much larger than the area of Italy, most of this region is desert or semi-desert. The inhabitants are shepherds or cattle-raisers, who wander

Ewing Galloway

You have seen many pictures of markets in earlier chapters of this book. This picture of an African market should help you to understand that there are markets all over the world where farmers bring what they have raised and other people come to buy what they need from traders and dealers.

Underwood & Underwood

Many of the tribes in Africa keep cattle. These humpbacked cattle are the property of two Masai herdsmen. As cattle are used for money among these tribesmen, these two herdsmen can consider themselves well-to-do. Masai women wind their arms with long strands of copper wire.

with their flocks and herds. The Italian colonies are Eritrea, Ethiopia, Italian Somaliland, and Libya on the northern coast. Along the Mediterranean coast of the Italian colony great quantities of sponges are gathered. Mediterranean fruits and barley also are grown. Farther south in the Libyan Desert are many rich oases. From them important shipments of dates go by camel caravan to Tripoli, which is the leading seaport of Libya.

Belgian Africa. Within the heart of Africa is the Belgian colony of the Congo. It occupies the saucer-shaped basin of the Congo River within the plateau. Since the Congo is in the Torrid Zone, the rainfall is heavy, and there are thick jungles. But the Belgian colony is not all jungle. Some of the high table-lands are good grass country for cattle, although the tsetse-fly is often troublesome. Its bite causes a disease known as sleeping sickness.

The Belgian Congo is not an easy colony to develop. Much of the ground is covered with dense forests. For this reason there are few crops and therefore few people. The Belgians obtain palm-nuts, palm-oil, copper, diamonds, tin, and gold from this colony. Ivory, from elephant tusks, is also an important product. The most valuable export is copper.

The plantations are managed by the Belgians, for the natives are not hard workers. People are seldom very energetic where they can get plenty of vegetables, fruits, and fish with little effort. Most of the natives live in small villages along the rivers.

French possessions in Africa. France ranks next to Britain in the extent of her colonial empire. Nine-tenths of the French colonial empire is in Africa. It is nearly twenty times as large as the area of France itself but contains fewer people because most of it is too dry to be of great value, since it includes the Sahara Desert.

Among all the French African possessions, only the part north of the Sahara is suitable for white people. Within this region there are six Arabs to one European settler. The Sahara makes up the southern part of three of the French colonies—Morocco, Algeria, and Tunisia. North of the desert in each of these colonies is a hilly country, crossed by high ridges of the Atlas Mountains, and patched with plateaus. In the fertile coastal lowland at the foot of the mountains wheat and barley are grown. And here are truck gardens from which considerable produce is carried across the Mediterranean to French markets. Dates and tobacco are also grown.

Cattle, sheep, and goats graze on the highland slopes of this region; while on the lower slopes are cedar trees and groves that grow cork-oak, olives, oranges, lemons, and figs. Still lower down, the slopes are occupied by vineyards. Little is known of the mineral possibilities here, although some iron ore, lead, zinc, and phosphate are mined. There are great possibilities for the French people in this northern African coastal country, but they have trouble in ruling it. The natives are nomads, living in the most primitive way, and bands of brigands pillage the farming districts. Near the city of Tunis are the ruins

Ewing Galloway

You have seen pictures of huts somewhat like this in other chapters of this book. The framework of this Zulu hut is made of sticks and is covered with grass or reeds. The floor is covered with matting. Notice the ornaments of woven grass and the pottery utensils. The native builder selected a spot where two tree trunks could be used to support the roof of the hut.

of ancient Carthage, which remind the traveler of the days of the Roman Empire.

The Sudan, bordering the Sahara on the southeast, is a vast grassland with scattered clumps of trees. Here the natives raise cattle and farm crops in a very primitive way. From the Sudan the French get hides and peanut oil.

The French also have colonies on the west coast. Here the native Negroes raise cacao for export to countries where cocoa and chocolate are made. They collect the kernels of the wild oil-palm, and cut mahogany logs in the tropical forest. Because of the intense heat and the heavy rainfall, few white people live in these regions.

The French island of Madagascar also has few white people. On this island the natives raise great quantities of rice and large numbers of cattle; while Europeans, mostly French, have coffee, cacao, and sugar-cane plantations. Little mining has been developed, although there is much mineral wealth. The chief export is graphite from the mines. It is a mineral which is used in the manufacture of pencil leads.

The French colonial empire is made up of lands valued chiefly for tropical foodstuffs and for the tropical raw materials that are needed by the French factories. Although the French keep the brigands of northern Africa in check, they have not developed their colonies as successfully as the British have developed theirs.

Independent countries. There are two independent countries in Africa: Liberia and Egypt. The Republic of Liberia is on the coast of the Gulf of Guinea. It was founded for the Negro slaves who were liberated in the United States. Liberia is a little larger than the state of Ohio and now has about 2,000,000 people.

Acme Newspictures, Inc.

Some of the mahogany used in making furniture comes from Africa. The logs are cut in the forests and floated down the river to the ports. Many of the new woods which are being used in modern furniture also come from the forests of Africa. Will such woods from Africa be cheap or expensive?

You have already learned about Egypt in an earlier part of this book. Turn back to the second chapter and reread the story of Egypt.

Talking Things Over

1. Do you remember that one of the earliest civilizations we studied was located on the continent of Africa? Which one was it? Can you think of reasons why our story of civilization moved to Europe instead of dealing with the rest of Africa?

2. Find a map of Africa and with its help show some of the difficulties of exploring and settling Africa. Why was Africa harder to explore than North America?

3. You have learned that almost all the important nations of Europe were eager to have colonies. Which nations were the first to have many colonies? Which nations started their colonies later? Talk over together the reasons the nations wanted colonies. Did the Industrial Revolution have any effect on this wish for colonies?

4. This chapter tells you that the climate around Capetown in South Africa is much like that in Mediterranean countries. Do you know what the reasons for this are?

5. You have read, before this chapter, that the discovery of gold caused people to rush to a new land. Do you remember the name of that land? Why do you think the discovery of gold or diamonds brings more people at once than the discovery of good farming land or fine pastures? Are these people as likely to stay as those who come to farm? Why? Can you think of some region in our own country where the discovery of rich mines or other resources brought people in large numbers?

6. Talk over the different races of people which are found in Africa. Are they as much alike as the people in the various nations of Europe? See if you can give good reasons for your answers.

7. What effect did the slave trade have on Africa? Can you think of some effects it had on the rest of the world?

Doing Things Together

1. Make a collection of pictures of Africa. Try to find some that are very different from the ones you have seen of Egypt. There are many different kinds of land in Africa; so your pictures can be varied.

2. Many different peoples live in Africa. It would be interesting to find pictures of them. Include some pictures of Egyptians, Moors, and other North Africans, but try also to find pictures of Pygmies, Hottentots, Bushmen, Zulus, Ethiopians, Dahomans, and others.

3. This chapter speaks of part of Africa as the land of circus animals. Why is this? List the animals from Africa that you have seen in a circus or a zoo. You might plan a picture exhibit of these, too. You might also make a large map of Africa on wrapping paper and on it draw pictures of these animals. Be sure to locate the animals in the proper regions. For example, you would not draw a picture of an elephant in the middle of the Sahara Desert.

4. There are many interesting books of adventure in Africa. Some of the most interesting tell of hunting for big game—lions, elephants, rhinoceroses. Theodore Roosevelt wrote of his experiences while hunting. Martin Johnson was more interested in taking pictures of animals than in killing them. See what other books you can find in the library and report on the stories you have read.

5. One of the most interesting and beautiful places in Africa is Victoria Falls. See what pictures of it you can find. You might also find a picture of Niagara Falls and then compare the two. Which one is larger?

REFERENCE TABLES

[These reference tables have been arranged for convenience, and are not intended to take the place of almanacs, encyclopedias, and other reference books.]

EUROPE

Country	Area	Population	Capital	Country	Area	Population	Capital
Aegean Islands	977	135,364	Rhodes	Malta (with Gozo and Comino)	122	256,140	Valletta
Albania	10,630	1,003,124	Tiranë	Monaco	8	22,153	Monaco
Andorra	191	5,231	Andorra-la-Vieja	Netherlands	12,692	8,474,506	Amsterdam
Austria	32,369	6,760,233	Vienna	Norway	124,589	2,884,300	Oslo
Belgium	11,775	8,299,940	Brussels	Poland	150,052	33,310,000	Warsaw
Bulgaria	39,825	6,090,215	Sofiya	Portugal	35,490	7,260,000	Lisbon
Czechoslovakia	54,244	14,729,536	Praha	Romania	113,884	19,319,330	Bucuresti
Danzig	754	407,517	Danzig	San Marino	38	13,948	San Marino
Denmark	16,575	3,706,349	Copenhagen	Spain	196,607	24,583,096	Madrid
Estonia	18,353	1,126,413	Tallinn	Sweden	173,347	6,249,489	Stockholm
Finland	134,557	3,667,067	Helsinki	Switzerland	15,944	4,143,500	Bern
France	212,659	41,905,968	Paris	Union of Soviet Socialist Republics	8,095,728	168,000,000	Moskva
Germany	181,699	66,030,491	Berlin	United Kingdom:			
Greece	50,270	6,746,000	Athens	Great Britain	89,071	44,937,870	London
Hungary	35,875	8,943,533	Budapest	Northern Ireland	5,237	1,293,000	Belfast
Iceland	39,709	115,870	Reykjavik	Vatican City	108.7 acres	1,025	
Irish Free State	26,601	2,965,854	Dublin	Yugoslavia	95,558	14,950,372	Beograd
Italy	119,714	42,527,561	Rome				
Latvia	25,395	1,950,502	Riga				
Lithuania	21,488	2,499,529	Kaunas				
Luxembourg	999	296,913	Luxembourg				

ASIA

Country	Area	Population	Capital	Country	Area	Population	Capital
Afghanistan	245,000	12,000,000	Kabul	India, French	198	282,397	Pondichéry
Arabia:	1,003,600	10,000,000		India, Portuguese	1,537	579,969	Pangim
Aden and Perim	42,075	48,388	Aden	Iraq	116,600	2,857,077	Bagdad
Kuwait	1,950	50,000	Kuwait	Japan	147,611	69,254,148	Tokyo
Oman	82,000	500,000	Masqat	Japanese mandates in the Pacific (623islands)	829 (land area)	108,361	Parao, in the Carolines
Saudi Arabia	112,500	1,500,000	Mecca and Riyadh	Marianas Islands			
Yemen	75,000	3,500,000	San'a	Marshall Islands			
Bahrein Islands	250	120,000	Manama	Caroline Islands			
Bhutan	18,000	300,000	Punakha	Jebel Druse	2,400	51,780	Es Suweideh
Burma	261,610	14,667,146	Rangoon	Karafuto	13,935	331,943	
Ceylon	25,332	5,312,548	Colombo	Kwangtung	1,438	1,656,726	Dairen
China	2,903,475	422,707,868	Nanking	Latakia	2,800	286,920	Latakia
Chosen	85,228	22,899,038	Keijo	Lebanon	3,600	862,618	Beyrouth
Cyprus	3,584	347,959	Nicosia	Macao	7	157,175	Macao
French Indo-China	286,119	23,230,000	Hanoï				
Hong Kong	388	966,341	Victoria				
India	1,318,346	263,400,000	New Delhi				

ASIA: Continued

Country	Area	Population	Capital	Country	Area	Population	Capital
Malaya, Br.:				Mongolia,			
Br. North				Outer	495,000	540,000	Urga
Borneo	31,106	270,223	Sandakan	Nepal	54,000	5,639,092	Káthmándu
Brunei	2,500	33,732	Brunei	Netherlands			
Federated				Indies	735,268	60,727,233	Batavia, Java
Malay				Palestine	10,100	1,336,518	Jerusalem
States	27,540	1,813,891	Kuala Lumpur	Persia	628,000	15,000,000	Tehran
Sarawak	42,000	475,000	Kuching	Siam	200,148	13,502,000	Bangkok
Straits Set-				Sikkim	2,818	109,808	Gangtok
tlements	1,356	1,114,015	Singapore	Sinkiang	550,340	1,200,000	Urumchi
Unfederated				Socotra	1,400	12,000	Tamarida
Malay				Syria	49,100	1,696,638	Damascus
States	22,088	1,472,389		Taiwan	13,940	5,282,719	Taihoku
Maldive				Tannu-Tuva	64,000	65,000	Kysylchoto
Islands	115	70,000	Malé	Tibet	463,200	700,000 to	Lhasa
Manchukuo	503,013	34,200,923	Hsinking			6,000,000	
Mongolia,				Trans-Jordan	34,740	300,000	Amman
Inner	328,065	6,040,000		Turkey	294,492	16,200,694	Ankara

AUSTRALIA AND ISLANDS

Country	Area	Population	Capital	Country	Area	Population	Capital
Common-				Norfolk Island	13	1,231	
wealth of				Papua, Terri-			
Australia	2,974,581	6,753,114	Canberra	tory of	90,540	276,200	Port Moresby
Fiji Islands	7,083	202,052	Suva	Samoa,			
Gilbert and				Western	1,133	54,778	Apia
Ellice Is-				Solomon Is-			
landsColony	180	34,334	Ocean Island	lands, Brit-			
Nauru Island	9	2,922		ish	11,000	94,105	Tulagi
New Caledonia				Tahiti, etc.	1,520	40,392	Papeete
and depend-				Timor, Portu-			
encies	7,200	57,165	Nouméa	guese	7,330	460,655	Dilli
New Guinea,				Tonga Islands			
Territory of	94,100	505,921	Rabaul	(Friendly			
New Hebrides	4,632	50,900	Vila	Islands)	385	30,724	Nukualofa
New Zealand	103,410	1,573,810	Wellington				
New Zealand,							
island de-							
pendencies							
of	869	18,123					

AFRICA

Country	Area	Population	Capital	Country	Area	Population	Capital
Algeria	847,307	7,234,684	Algiers	Tanganyika	360,000	5,104,633	Dar-es-Salaam
Anglo-Egyp-				Uganda	93,981	3,661,099	Entebbe
tian Sudan	969,600	5,767,818	Khartoum	Zanzibar	640	137,741	Zanzibar
Angola	487,788	3,225,015	Loanda	Pemba	380	97,687	
Belgian Congo	909,339	9,843,326	Leopoldville	British South			
British East				Africa:			
Africa:				Basutoland	11,716	631,000	
Kenya	224,960	3,084,351		Bechuana-			
Nyasaland	37,596	1,606,438	Zomba	land	275,000	265,756	

AFRICA: Continued

Country	Area	Population	Capital
Br. South Africa, Cont.			
Rhodesia, Northern	290,320	1,376,325	Lusaka
Rhodesia, Southern	150,344	1,289,441	Salisbury
Swaziland	6,705	155,530	Mbabane
British West Africa:			
Ashanti	24,379	578,702	Kumasi
Cameroons, British	34,081	817,616	Buea
Gambia	4,068	199,520	Bathurst
Gold Coast	23,937	1,937,792	Accra
Nigeria	372,364	19,918,516	Lagos
Northern Territories	30,486	717,275	Tamale
Sierra Leone	30,000	1,773,967	Freetown
Togoland, British	13,041	293,714	
Cameroons, French	166,489	2,340,819	Yaounde
Cape Verde Islands	1,557	156,923	Praia
Comoro and other islands	790	130,000	
Egypt	383,000	14,217,864	Cairo
French Equatorial Africa	914,820	3,428,401	Brazzaville
French West Africa	1,798,374	14,575,973	Dakar
Guinea, Portuguese	13,944	390,403	Bolama
Guinea, Spanish and islands	10,831	163,846	Santa Isabel
Ifni	965	20,000	
Italian East Africa:			
Amhara	350,000	7,600,000	Addis Ababa
Galla and Sidamo			Gondar
Harrar			Djimma
Formerly Ethiopia			Harrar
Eritrea	45,754	600,573	Asmara
Somaliland, Italian	194,000	1,021,572	Mogadiscio
Liberia	43,000	1,500,000	Monrovia
Libya, Italian:	677,000	717,663	
Cirenaica	73,000	165,000	Bengazi
Hinterland	256,500		
Tripolitania	347,500	552,663	Tripoli
Madagascar	237,950	3,772,569	Tananarive
Mauritius and dependencies	809	407,020	Port Louis
Morocco:			Fez
French zone	200,000	6,242,706	Rabat
Spanish zone	13,125	795,202	Tetuan
Tangier	225	60,000	
Mozambique	297,657	4,028,740	Lourenço Marques
Réunion	970	198,000	St. Denis
Rio de Oro and Adrar	109,200	840 (white)	Villa Cisneros
Ruanda and Urundi	20,535	3,385,583	Astrida
São Tomé and Principe	384	59,060	São Antonio
St. Helena	47	4,318	Jamestown
Ascension	34	188	
Tristan da Cunha	45	163	
Seychelles and dependencies	156	29,803	Victoria
Somaliland, British	68,000	344,700	Berbera
Somaliland, French	8,492	69,000	Djibouti
South-West Africa	317,725	360,067	Windhoek
Togoland, French	20,072	750,000	Lomé
Tunisia	48,300	2,603,385	Tunis
Union of So. Africa	472,550	9,530,649	Capetown and Pretoria

INDEX AND PRONUNCIATION LIST

To the pupil: This index will help you to find things in this book. Many of the words are marked to show you how to pronounce them.

Abbreviation Key

Some of the page references in this index are preceded by italic letters. Page numbers which refer to charts are indicated by *c.*, those which refer to maps, by *m.*, and those which refer to pictures, by *p.* The abbreviation for population is *pop.*

Pronunciation Key

a at, can	ą beggar, opera	o on, not	ū use, pure
ā came, face	e end, bend	ō more, open	ų nature, picture
ä far, father	ē equal, be	ö move, to	ţ picture
â all, ball	ė her, certain	ô off, song	ŦH then, they
à ask	ę prudent, towel	ǫ actor, second	ċh as in German *ach*
ã care, dare	i it, pin	u up, but	ṅ as in French *bon*
ạ alone, company	ī line, mine	ù full, put	

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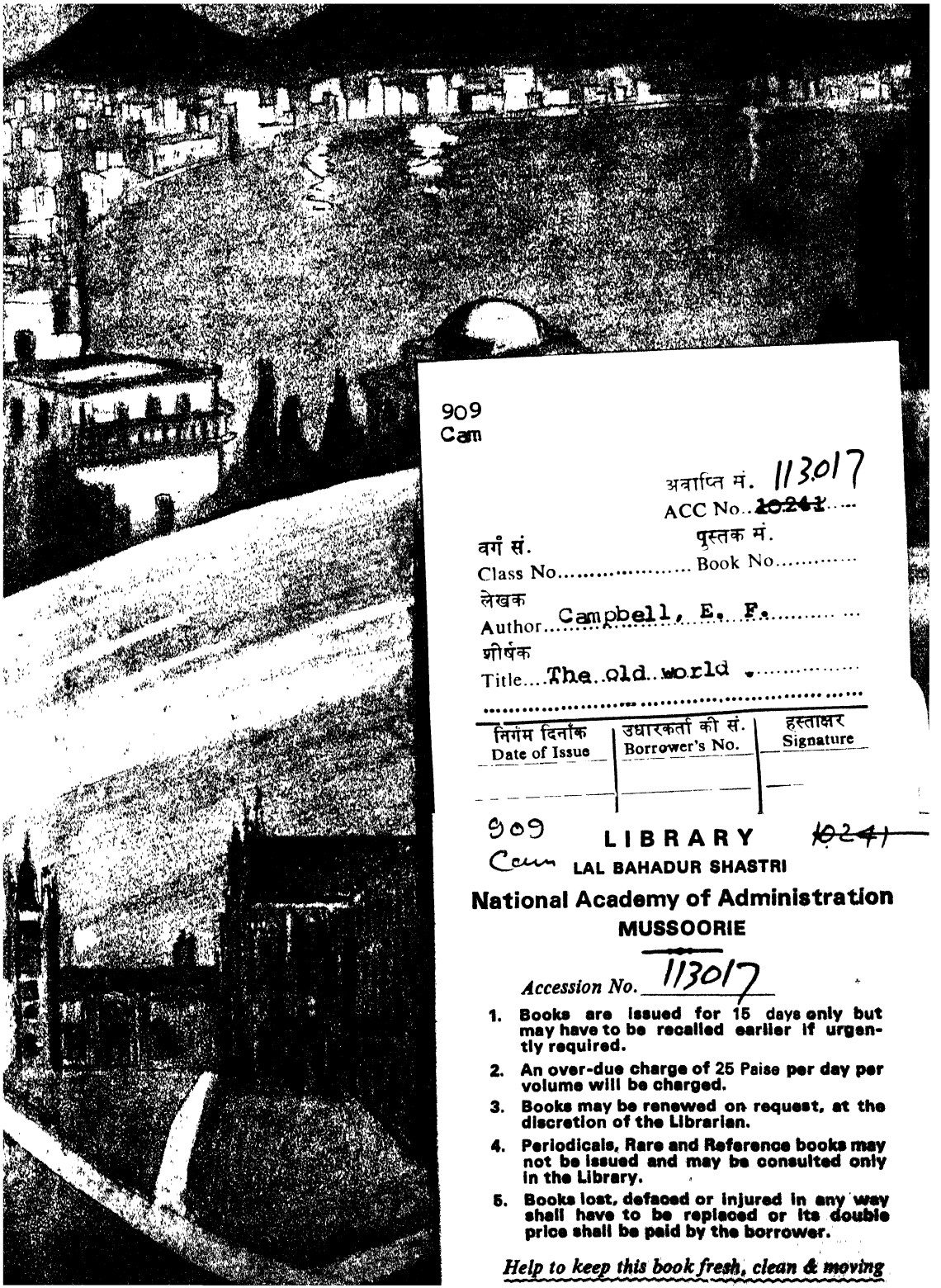

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