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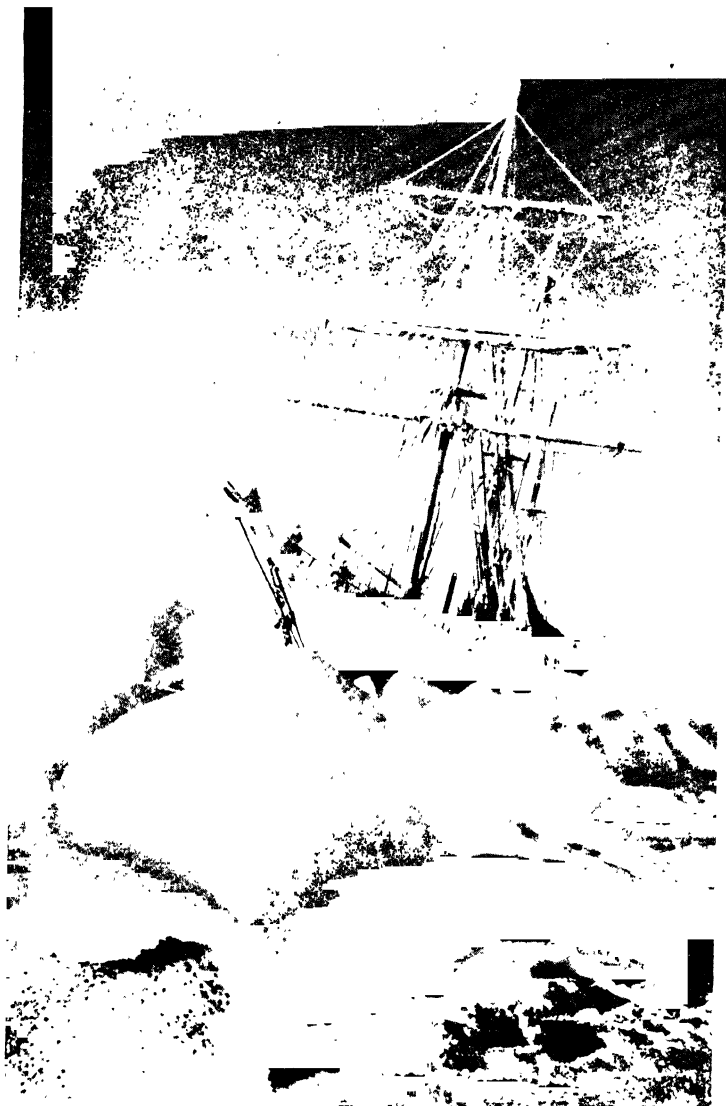
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#### IN THE GRIP OF THE ICE

Shackleton's doomed ship, the *Endurance*, lit by the rays of the returning sun  
(From Sir Ernest Shackleton's "South," by permission of Mr. William Heinemann)



# THE CONQUEST OF THE POLES

AND MODERN ADVENTURES  
IN THE WORLD OF ICE

BY

ALFRED JUDD

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LONDON : T. C. & E. C. JACK, LTD.  
35 & 36 PATERNOSTER ROW, E.C.  
AND EDINBURGH



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PRINTED IN GREAT BRITAIN BY  
THOMAS NELSON AND SONS, LTD.



TO ALL  
PIONEERS

TO  
THOSE WHO SURVIVED THE TRIUMPH  
AND TO  
THOSE WHO GAVE THEIR LIVES.

"To seek, to strive, to find, and not to yield."







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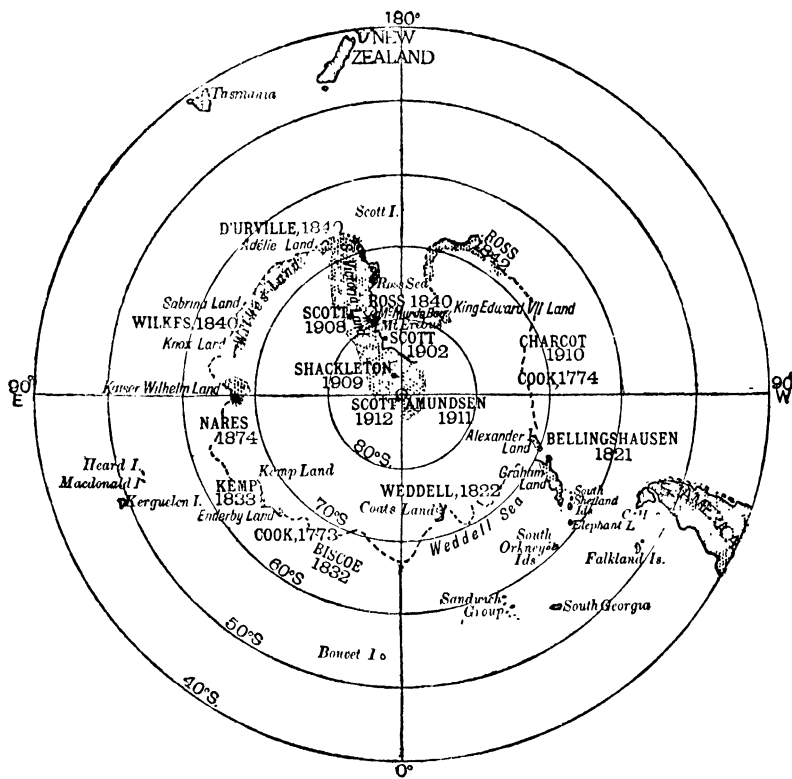
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# North Polar Regions







South Polar Regions







## PART I

### THE CROSSING OF GREENLAND

"Let us probe the silent places, let us seek what luck betides us ;

Let us journey to a lonely land I know.

There's a whisper on the night-wind, there's a star agleam to guide us,

And the Wild is calling, calling—Let us go."

ROBERT W. SERVICE



# THE CONQUEST OF THE POLES

## CHAPTER I

### SIX MEN ADRIFT

THE name of Fridtjof Nansen must ever rank high in the story of Polar exploration, and, in any book dealing with modern achievement, it is only fitting that his conquests in the Arctic should be given a leading place.

Nansen, besides being physically robust, was—and still is—a man of outstanding intellect, one of the most practical dreamers of his day. Much solid work in and around the Polar regions had already been done by Greely, Lockwood, Nordenskiöld, Nares, Kane, Parry, and the older explorers before them, but the Pole itself seemed as far off as ever. There were, at all events, other ice-worlds nearer home to be conquered first.

Especially this applies to the continent of Greenland, which, with its vast deserts of “inland ice,” had hitherto baffled men’s strongest attempts at penetration. The chief part of its coasts had been visited and named, but the great heart of it remained as much of a mystery as ever.

Various attempts by seekers after new land were being made from time to time, Nordenskiöld’s effort, in 1883, being followed by another three years later, led by no less a person



than Robert E. Peary. Neither of these had penetrated far, though an account of the first-mentioned quest is admitted by Nansen to have inspired him greatly. Ski had been used—the Norwegian form of snow-shoe—and a party of Lapps belonging to that expedition had covered an extraordinary distance in a very short space of time.

“The idea flashed upon me at once,” declares Nansen, “of an expedition crossing Greenland on ski, from coast to coast.”

The dream matured, and in the autumn of 1887 he announced his scheme. He was convinced that all former adventurers had made a serious mistake in beginning from the west coast, as they were then always working towards the most desperate part of their journey. Better far, he contended, to tackle this from the other side; getting over the worst first by crossing the broken ice-belt, which, a floating barrier, stretched all down along the eastern coast.

It was in a magazine article that Nansen first stated his purpose, some extracts from which serve to sum up the project.

“My plan,” he wrote, “described briefly, is to leave Iceland in the beginning of June on board a Norwegian sealer, make for the east coast of Greenland, and try in about lat. 66° N. to get as near to the shore as possible. If our vessel is not able to reach the shore—though the sealers, who have often been close in under this unexplored coast, do not consider such a thing improbable—the expedition will leave the ship at the farthest point that can be reached, and will pass over the ice to land.”

So far so good, but the idea in its further details became less simple and more disquieting. For the passage of the floe-belt would have to be accomplished partly by boat and



partly afoot, which meant that boats, sledges, and the whole impedimenta would at times have to be hoisted out of the water and dragged bodily over the rugged tracts of floe-ice.

The upshot was that all the experts at home thought Nansen's project distinctly mad, and his Government flatly refused to help. This, in any case, would not have deterred Nansen from carrying on somehow; but Herr Augustin Gamel, an enthusiast who had already helped other explorers in a similar way, came forward with the funds required. It is also notable that, despite the grim prediction made, some forty men immediately volunteered to accompany Dr. Nansen and freely accept all the risks.

Choosing carefully, he selected three of his own countrymen. These were Otto Sverdrup, a retired ship's captain; Oluf Dietrichson, a lieutenant in the Norwegian Infantry; and Kristian Trana, a peasant from the north. This trio, born to seafaring, forestry, and sport, could be steadfastly relied on.

Two Lapplanders were also enrolled, Balto and Ravna. It is true that the last couple were really hired hands, being engaged to attend the reindeer which Nansen had first thought of taking on the trip. When, however, the perils of fording that floating ice-belt became clearer to the mind, it was decided that animals of any sort, whether reindeer or dogs, had better be left out of count; but the two Lapps, seeming to be willing, were still retained, and preparations began.

When every jot of the baggage taken has to be dragged by the travellers themselves, it is of obvious importance that nothing shall be included which is not a real necessity; yet, even working by that rule, the equipment grew up to alarming proportions.

To begin with, there was the boat, built especially of oak,



pine, and ash—the different woods being mingled to combine lightness and strength. This boat was 19 feet long, and was fitted on either side of the keel with pinewood runners to enable it to be dragged over rough ice.

The sledges, numbering five, were constructed chiefly of ash, the runners being shod with thin steel plates. These sledges were generally about 9 feet long, with a weight in themselves of say 28 lbs.

It was Peary who had tried the useful idea, when on the inland ice, of rigging his sledges with sails, so as to drive along with the wind, and Nansen quite hoped to test for himself this novel method of transport. The only extras required were bamboo masts, for he reckoned the waterproof parts of the tent and the tarpaulins would serve the purpose of sails.

Of general freight, there was the all-important ski, the cooking apparatus, the two sleeping-bags—each bag made to sleep three men—scientific instruments, a couple of double-barrelled guns, knives, tools, scales for weighing out food, Manilla rope for the crevasses, ice-axes, block-tackle for hoisting the boat, note-books, nautical almanacks, 6 gallons of methylated spirit, boat gear, medicine chest, and a score of other items.

Provisions, of course, would have to be strictly rationed; but it would never do to cut supplies below the point of safety.

Dried meat and fatty food, with dried bread or biscuit, bulked as the staple fare, with additions such as chocolate, dried fish, sugar, beans, peptonized meat, pea-soup, butter, cheese, and condensed milk, as well as the slight luxury of some whortleberry jam. All this was calculated to last two months.

A day came when everything was ready, and the measure of the task was known. Four of the sledges, when fully loaded,



weighed about 200 lbs. apiece, while the fifth was almost double that amount. It does seem a matter for wonder, considering the obstacles ahead, that any six men should have faced this task as they did.

The leader now set about to discover his sealing-vessel, and it was with owners of the *Jason*, of Sandefjord, that he at length came to terms, the agreement being that the explorers should be taken aboard at Iceland and put down if possible near the east coast of Greenland.

Leaving Christiania at the beginning of May 1888, taking all their outfit with them, the gallant six proceeded to the north of Scotland, travelling thence by the Danish steamer *Thyra*. In due time, having arrived at Iceland, they were picked up by their sealing-vessel as arranged.

It was a glorious night when the *Jason*, steaming out of the fjord, put to sea northwards, a night, somehow, of mystery, and of strange, deep promise.

Next day, 5th June, the *Jason* reached the first drifts of floe-ice, which that year had come very far south. Soon the ship was abreast of glittering white fields, a floating expanse that quivered in the sunlight, flashing tints of green and blue, the colour of the sea itself being rendered all the darker in comparison.

Now seal began to be sighted, of the bladder-nose variety, so that the skipper, a cool-headed man named Jacobsen, ordered out some of his boats; for it had been agreed that the presence of the explorers aboard should not interfere with the sealer's legitimate business.

Greenland, the jagged mountain-tops to the north of Cape Dan, was first sighted on 11th June, and for the next few days, now about 40 miles from land, the *Jason* moved north-west along the edge of the ice.



Weeks slipped by, while Nansen's party, as best they could, nursed impatience. The ship made toilsome headway, for wind and current were both against her, and the ice-floes were moving with great violence.

Nansen, inspecting the belt of ice on 16th July, reckoned it to be from 15 to 20 miles broad, but a blue tint of air farther along gave hope of a deep inlet cutting landward. He pinned his faith to this, and, on climbing to the mast-head next morning, at once decided that the landing must be undertaken from this point.

Many friendships had been made during this six weeks' voyage, and the expedition enjoyed the good-will of every man aboard. Everything possible, on this day of departure, was done to assist, and Captain Jacobsen offered them one of his smaller boats to go along with their own. Nansen was glad to accept, and he ordered both craft to be made ready.

Dispatches and home letters had to be written, after which the crew of the *Jason* insisted on a certain amount of good cheer and merry-making. It was early evening before the six pioneers, amid wishes of God-speed, actually entered the boats.

"Ready? Give way, then!"

Three ringing cheers from sixty-four throats, and two gushes of smoke as the *Jason's* guns sound a royal send-off. Good-bye! For weal or for woe the expedition was afloat and pulling upon its way.

The advance at first was smooth, for the ice was slack, but then came patches where a passage had to be forced. Also they were being borne out of their course, a fact they were able to prove by watching a huge iceberg to the west. A hidden current was against them, and soon it was plain



they could not pass east of the berg, as was intended, but would have to go under its lee. At the moment of grasping this they were borne into a veritable mill-race, where floes were driving pell-mell, jamming together and even piling one on top of the other.

Otto Sverdrup, in charge of the second boat, jumped smartly out, followed by his mates, and the craft itself was dragged bodily on to a floe. This, ever a smart performance, was one in which most of the party had learnt to be adept. Whenever a "nip" is threatened amid the floes the only way in which to save a boat is to haul it from the water at once. This, in the case of a heavily laden craft, requires sheer strength, coupled, of course, with practised skill.

The other boat, though in danger of being battered, was hurried through to a pool, where presently it was overtaken. More open lanes of water could be seen ahead, and, in any case, it was not safe to remain still. These floes luckily had a projecting base, or "foot," under water, so disaster was often avoided by keeping in over this, the boats being hurried forward again as soon as the chance was seen.

So near were they to land that the mountain side could be seen, with slopes of loose stone. Both hope and danger increased, for the floes were "packing," closing together with glassy concussion. Several close shaves led on to worse, till a jagged point of ice drilled its way clean through a boat plank.

The craft began to sink, but skilled action, cool and steady, once again saved a crisis. The crew, jumping out without loss of a second, unloaded the foundering bark and hauled her up for repairs. There was nothing to use for this purpose save a bit of spare deal, and also the poorest of tools, but Sverdrup and Trana made a sound job of it.

The clouds overhead during this task had darkly gathered,



and now the storm broke in a deluge. Added to this, the floating ice had ringed up tightly, all being shrouded in mist and shadows. Nothing more could be done before dawn, so the party erected their tent and turned in.

During that night the ice-floe on which they rested was carried first into thicker ice and then away from the shore, the current still being violent. Unable for the moment to devise any counter plan, they could only await whatever might be the issue. It was galling to reflect that, but for delay with the boat at that valuable moment, they might now have been safe on Greenland shores.

Powerless, throughout 24 hours, they were driven onward down coast, rain descending in torrents all the while and often swamping the tent. At last the deluge abated somewhat and dawn came with a ray of hope. Yet the situation was grim enough, for our adventurers found themselves a full 20 miles adrift from the spot they had chosen for landing.

Again and again during the following days the little party embarked and took up the landward struggle, or else attempted to haul in over the ice-floes. This hauling, or "portage," of their belongings involved double journeys and much retracing of steps, for boats and sledges had to be dragged separately. Always, after a while, they were baulked ; indeed there seemed to be no getting between and no getting over this treacherous barrier of ice which floated all down the coast.

Still carried southward, dangerously near breakers and the ocean waste, a night came when the floe on which they encamped turned suddenly on an inward course.

"I did not wake till it was full morning," says Nansen ; "then I started up in astonishment, for I could hear nothing of the breakers but a distant thunder. I found we were a long way off the open sea."



## CHAPTER II

### LOST AMID THE FLOES

THE six castaways for the moment were saved. Though upwards of 100 miles out of their course, and still far from land and hemmed round by ice-floes, they were delivered to peaceful water and were thus given time to think.

Luckily, there was yet no worry on the score of rations ; they were provided with fresh horse-meat—the Norwegian choice—which they had brought from the *Jason*, while wholesome drinking water was provided by the rain-pools on the floes. Nansen did not, at the same time, intend to make free with the foodstuffs, for he had not yet lost hope of the expedition being carried out.

Now and then they were appalled by the desolation of this floe-world ; not an atom of life, since quitting the ship, had been sighted. The glimpse at length of some bladder-nosed seal gave them heart, while next day, winging northwards, they beheld a flock of black duck.

This, anyhow, seemed to promise land, as did also a raven veering out in the same direction. The duck, though good for the larder, were allowed to pass ; but a further glimpse of fat seal aroused the sporting impulse, a stop being made to stalk them. It was the leader himself who, singling out a big male, put in a telling shot.



Running up to it before it was quite dead, Nansen attempted to examine the animal, for there was a good deal about this bladder-nose species then unknown to science.

The old seal, having no wish to provide such knowledge, began to waddle along the edge of the floe, being about to dive into the water when Nansen snatched up a seal-hook. The latter promptly applied was in time to check the animal, while Sverdrup, dashing along with a boat-hook, lent his aid. Then followed a terrific struggle, for the seal, in its death-agony, displayed quite a furious strength. The thing was to keep its tail and hind-quarters out of the sea, to stop it from swimming, and in doing this the pair of them were all but wrenched into the water.

"Take your rifle and shoot him!" panted Nansen. "Quick! I will try to hold him up meanwhile."

"Wait! My hold is better than yours, I think. Hadn't *you* better leave go, and—ah! Look! Mind!"

Too late, however, for now both hooks had given way, and the lusty seal, with a final swish, had gone plunging into the brine!

"We—we have lost him!" exclaimed Sverdrup. "Clean gone—and the biggest seal I have ever seen!"

"Well, there's no help for it, and some consolation in knowing that he won't suffer long. The bullet hit him in the right place, the head. We hadn't so very much use for him, so come along back to work!"

It had been a warning episode, and seemed likely to lead along to others. Wild life, anyhow, continued to crop up at intervals, and next day more birds were sighted—another raven and a flight of short-tailed skuas.

A thick, wet fog settled down that night, brought along by a north-west wind. This might open the floes, but soon



the fog had soaked every one to the skin, the wind being cruelly cold, while rolling ice-blocks set up a suction which threatened the boats with disaster.

Choosing a floe, they encamped again, all being tranquil till about 4.30, when the tent-flap was wrenched aside and the voice of Trana, who was on the watch, cried,—

“Nansen, there is a bear coming! Quick! Turn out!”

In a minute all was excitement. Men struggled from their sleeping-bags and plunged for the open. Nansen, smartly pulling on his boots, shouted an order.

“A rifle!” voiced he. “Get one out of the boat!”

Emerging as he spoke, he at once caught sight of the bear. The latter, big and white, was charging straight for the tent. For the moment matters looked ugly, yet events were to prove how very different fact is from fiction.

For that Polar bear, in the midst of its rush, displayed a hesitation. The huge creature backed upon its haunches, with hot breath streaming on the frigid air. Then it turned, and, as rapidly as it had come, so the visitor retreated.

“Here! Get in a shot!”

With the animal still within range, Nansen grabbed at his rifle, but the latter was cased; before it could be got out the beast was a fading blur, and immediately after it had vanished.

“What a chance to have missed!” exclaimed the leader. “Still it can’t be helped—and you fellows anyhow have had the pleasure of seeing a Polar bear!”

Hauling began immediately after breakfast, but could not be carried far because of the dangerous swell. Back again on a floe, as upon some giant raft, they were rapidly swept southward, being now some 200 miles down coast from the point where they had hoped to land. Still the broad chain of



ice-floes, seemingly endless, cut them off from the shores they desired, while repeated failure to get through only made the desire more strong. Embarking, another desperate attempt was made to work inward.

It was hazard all the way, with hairbreadth escapes which left the pulses throbbing. Time and again, between the rolling ice-blocks, they came within an ace of being crushed to bits; while one small floe on which they dragged their craft—in a last-moment bid for safety—was itself split to pieces by the pounding pressure. By a sort of miracle, the portion on which the party stood remained whole, and soon they were borne among ice solidly packed.

This being so, the dogged work of hauling landward began once more—the two boats, of course, separately, and then the sledges, all tracks having to be covered at least twice. The amount of vigour required to make any progress at all can well be imagined, with various other hardships to be added. For even while jammed together the floes still heaved with the swell, being liable to lurch apart at unexpected moments.

A sledge or a boat repeatedly was all but lost in this transit from one floe to another, while the party were often cut off altogether by the yawn of some watery gap, having to wait till this closed again before being able to dash back and bring on the rest of their gear. Big work this, and all were kept in a tingling glow!

“It serves to give us exercise,” said Nansen, “which is an important thing, but otherwise our toil does little good. The sea works faster than we do; there is every probability of our being harried out to the breakers again. To be ready for that we must first find a good ship to carry us.”

By “ship” in this case he meant a reliable ice-floe, and



## THE CROSSING OF GREENLAND

at length they discovered one, very thick for its width, apparently without a flaw.

This was reckoned the best floe they had yet been on, and they stuck to it for two memorable days—swept onward all the while towards an unknown fate, and now so far down coast that they began to discuss their chances of landing at Cape Farewell, the most southerly point of Greenland. Thwarted always in their attempts to cross the floe-belt, they were now dubious in the matter; although, on the night of the 28th, the packed ice all round them showed new signs of parting.

“We have so often worked inwards through the opening floes,” reflected Nansen, “and the only result of our labour has been to get driven out to sea again! This time we will see what happens if we sit idle instead of working.”

Little did he dream what *would* happen; but on waking at daybreak he beheld Ravna’s head at the tent opening. This Lapp was a quaint, undersized man, and on his small bearded face now there were signs of deep emotion.

“Well, Ravna,” sang out Nansen playfully, “can you see land?”

“Yes, yes!” was the eager answer, so wholly unexpected. “Land very near!”

That was enough for Nansen. Slipping from his reindeer bag, he rushed to the tent door, there beholding a sight so welcome that it stirred him to applause. It was true! Their floe during the night had broken clean through the ice-belt! Clear water stretched before them—and the shores of Greenland!

Imagine the thrill of that moment! The others were smartly aroused, and out they tumbled, to lend their jubilant voices and to enjoy the longed-for view.

Every one dressed, breakfast was briskly partaken, and then



Nansen hurried to the loftiest point of their floe in order to pick out the best course to take.

This decided on, the boats, already launched and loaded, were pushed off and steered landward. Vagrant masses of ice were still inclined to obstruct, but these were at length eluded, and the two boats glided through.

At last! The relief from tension felt by all could never be set down in words. The explorers now were like a party of schoolboys, full of a new-found zest. True, they had been carried some 300 miles below their intended point of landing, and would need to row back; but they were now inside the floe-belt, and there was at all events a fair hope of their plans being carried out.



## CHAPTER III

### INTO THE UNKNOWN

THE six adventurers, for the mere satisfaction of treading once more on firm earth, got ashore as soon as possible and spent some hours on a convenient island, after which they re-embarked and settled to the huge task of rowing 300 miles back along the coast.

At Cape Bille they had their first meeting with the native Eskimos. These people of the wild coast had scarcely ever seen white folk before, and as a result were lost in wondering admiration. Friendliness prevailed, and a certain amount of dealing followed which turned out profitably to the explorers. For some empty meat-tins or a few darning-needles the Eskimos were always ready to provide our little band with as much dried seal's flesh as they cared to take away.

It was a consolation, in the wearying pull northward, to find that food abounded, making it still possible to conserve land rations. But various troubles cropped up, and on the morning of 5th August, being encamped ashore, they came in for a trying ordeal.

The Greenland mosquito, curiously enough, is one of the most voracious; our friends until now had not actually suffered, but Nansen awoke this morning to find the tent swarming with these bloodthirsty insects, and they attacked



him to such an extent that he rushed for the open. Alas! the air outside appeared to be thick with them, so back he dived to the tent again.

The others of the party were now astir, and a smarting, hurried attempt was made to partake of breakfast. Every portion of food, however, before being brought to the mouth, became a mass of clinging mosquitoes! Breakfast in hand, half-blinded by the biting swarm, the company plunged forth and up to the highest point of rock they could see. Here a keen wind was blowing, but still the attack did not falter. The six men swathed their heads in handkerchiefs, leapt from rock to rock, and beat the air, yet all to no purpose. The ravenous army swooped in clouds, so the only thing was to gobble mosquitoes along with the food and then make a dash for the shore.

This our friends did, but even after they had embarked the winged legions followed, so that some had to fight them by wielding coats or tarpaulins, while others rowed to get away. Still the insects followed, and only a strong sea wind at length saved the party from being bitten to death.

"Never in my life," declares Nansen, "have I fallen among such hungry mosquitoes," and certainly it seemed a strange experience to befall Arctic explorers. Greenland, however, is one of the countries severely visited by this particular pest—a fact not generally known.

The explorers now had accomplished rather more than half their backward voyage, having still much cause for thankfulness as regards the "larder," for there were gulls and guillemots to be shot as well as eider-duck. On the other hand, passing from a peril of squalls, they encountered new danger from gigantic icebergs. The latter floated around like derelict dreadnoughts, and the party received a succession of thrills



when having to pass between them. The old hazard of being crushed between floes dwindled to nothing compared with the risk of being caught between these great bastions of ice.

Some of these bergs rose to more than 200 feet above water, and it must be remembered that the submerged portion of a berg is six or seven times thicker than the part exposed. This yields a total of some 14,000 feet—figures which give almost a shock, for they make one realize what the proportions of an Arctic berg really are. As to its weight, we are left to guess, and something of the men's anxiety can be imagined. Once they were between two of these towering bergs, held up by a blockage, when there was a thundering crash as a top portion of several tons broke off and smashed into the pack below, actually creating a gap through which the boats were able to pass!

"Had we started to force our way through a few minutes sooner," says Nansen—"which indeed we were very nearly doing—we should undoubtedly have been annihilated."

Doggedly after this they rowed out the long miles, till the goal they looked for, the high peak of Kiatak, came to view. It was from this point that their crossing of Greenland was to be attempted, and at about 8 o'clock on the evening of 10th August they landed in a dense fog at their final camping-place on the east coast.

"We retired to rest this evening," says Nansen, "in a singular state of elation;" and this may readily be understood, for, though the worst part of their journey still remained, here at least they were on the spot they had striven for, all ready for the effort.

Sverdrup and Nansen next morning, equipped with ice-axes, glacier-rope, and food, set off to make reconnaissance over an area of several miles, returning at nightfall wearied



and hungry. They had encountered difficulties and a fair amount of danger, but were able to report that the "inland ice," so much dreaded, was just possible to traverse.

Steel runners of sledge and ski next day were scraped and polished, boots thickly re-soled, baggage re-packed, and as much of it as possible left behind with the boats, which were now hauled to a final berth in a cranny of rock. The weather had become sunny ; indeed, it was so warm by day, with the snow consequently soft, that they decided to set off at night. Thus, at 9 o'clock on the evening of 15th August, the sledges were manned and the crossing began.

Progress at first was tedious, but there was stimulation in knowing that this was country on which the foot of man had never before trodden. Four of the sledges were loaded to the burden of 200 lbs., while the fifth, with two men to pull, would have scaled about twice as much. After a steep opening stage of three miles they had attained an altitude of 500 feet, and here the tent was pitched. They were dog-tired, and never had hot tea been more welcome.

On the second day the ice became smoother, but the snow was loose and crevasses began to appear. A crevasse, of course, is a sort of icy ravine, caused by dips or ridges in the glacier bed. The bottom layers become compressed, while the upper sunders apart to the strain, thus creating a rent nearly as deep as the whole depth of ice. Our travellers found this yawning gap to vary in width, the crack sometimes being so narrow that it was possible not only to stride across but to draw the sledges as well. At other times it was necessary to walk far around, either to right or left, involving more than double labour.

Now it rained in sheets, till soon they were drenched to the skin, yet with no fear of taking chill even in a bitter wind,



for big toil kept them aglow. Crevasses multiplied, and greater care was needed. The fissures in some cases had been filled across the mouth by snow—known as “snow-bridges”—and this span could actually be used for the purpose of crossing, though its reliability depended upon just how thick and how well frozen the snow happened to be.

Sverdrup and the leader, while reconnoitring, had often crawled across these frail bridges on their stomachs, one at a time, while the other gripped at the line, the latter being fastened round both men's waists. This linking together is the greatest safeguard for all such work, but could not be adopted now because it made the hauling so difficult. The party, as an alternative, attached themselves by the strong tow-ropes, fastening these to the sledges and to their leather waist-belts. Thus, if one of them sank into a “snow-bridge,” the heavy sledge acted as an anchor—and none, luckily, sank below the arm-pits.

Grimly they stuck at it till noonday, when the torrential rain made further progress impossible, especially in such conditions. So the tent was pitched between a couple of wide crevasses, and the party crept into their sleeping-bags, to remain so for three whole days while wind and storm raged without.

Most of this forced delay was occupied in slumber, beginning with a refreshing spell of 24 hours, after which some tobacco was allowed to be smoked, though food rations were prudently reduced to a minimum, being just enough to keep the band alive. On 20th August the weather, though still bad, justified another start, a good heart for which was acquired from hot lentil soup all round.

Terrible ground lay ahead, with bad crevasses in such multitude that every step was a danger; nor did these pitfalls



lie parallel, as is usually the case, but also across each other. There was nothing for it but to turn right away back and try some totally new course, but everywhere the surface encountered was of such a hazardous character that the fables told at home about this wilderness of ice were in some sort justified.

About them now was a vast white incline, with only occasional nunataks to relieve this desolation—"nunatak" being the name given to lonely peaks of rock amid the ice, changed to "nunakol" if the rock happens to be rounded by glacial action. Many of these landmarks were named after members of the expedition—such as Kristiansen's, Balto's, Dietrichson's, and Sverdrup's Nunataks.

Snow-friction at night soon became so bad, retarding the sledge-runners, that it was thought wiser to proceed by day instead, and discussion took place as to whether the loads could not be lightened. Even these stalwart Norsemen were beginning to feel the strain, and it was decided, for a start, to abandon the oilcloth covers of the sleeping-bags.

This lightened matters slightly, but the upward toil of the ensuing days was so bad and broken that often several men had to struggle with one sledge. The snow grew yet heavier, and Nansen, in order to encourage his jaded band, gave a slab of meat chocolate all round for every mile won. Also, at the next halt, more cargo was sacrificed in the shape of wooden splints and a spare theodolite stand, all these being used as fuel for the fire.

Indian snow-shoes were tried, and also "truger," their Norwegian counterpart, but the trusty ski was still mostly favoured.

As the snow became heavier, whirling in wild drifts about their bent faces, the work of haulage became nearly back-breaking, and this even when three men were at one sledge.



Kristiansen, on stumbling down from one such struggle, broke suddenly out with,—

“What fools people must be to let themselves in for work like this !”

Nansen noted the remark, all the more impressed because the speaker was a sterling man who rarely complained. Nothing more was said at the time and as a matter of fact there was never a moment when the courage and loyalty of any member was in doubt. It is not, however, surprising that an amendment of plan on the part of Nansen was received with satisfaction.

The thought in Nansen's mind had been to make the west coast of Greenland at the point of Christianshaab, but he now perceived that, what with troublesome weather and rough going, there was no hope of reaching that port by the middle of September, when the last ship would depart for Copenhagen. On the other hand, if this expedition made for the more southerly point of Godthaab, was there not a chance that some home-going vessel would call in to pick them up ? Another point much in favour of the amendment was that Nordenskiöld's two skirmishing trips to the inland ice had taken place in the vicinity of Christianshaab, whereas the ice-cap behind Godthaab was still unknown.

This last thought weighed heavily with Nansen, while his companions, as we have said, welcomed the prospect of a shorter route. As yet, being all uphill, and hill of such a fearful character, they had not done a quarter part of their journey ; but on the evening of 1st September they were rejoiced to see before them a vast plateau, and to realize that the worst of the climbing was over. Nansen, to mark the achievement, served out extra rations of oatmeal biscuits, cheese, and jam.



## CHAPTER IV

### SAILING ACROSS THE ICE

ALAS ! when tackled, the great plateau, forming the roof of Greenland, persisted in keeping an upward gradient, and for days the gallant six toiled on through the long monotony.

The last nunatak had been passed, the last snow-bunting sighted, and now it was nothing but ice and, by day, the fierce glare of the sun. To counteract the glare snow-spectacles were worn—these, in place of lenses, being fitted with thin wood having rectangular slits. Thin red veils were also worn as a sight protection, the Lapps being the only ones to suffer from the dreaded snow-blindness ; but happily, under Dr. Nansen's treatment, they soon recovered.

The stress of life, however, was leaving its mark on all, every member of the group becoming grimy and weather-worn. Now far past the region of springs, their only means of drinking during the march was to break up bits of ice and put them in metal flasks, melting the ice by carrying these against their warm bodies. Conditions grew colder, so that ice formed thickly on beards and face, hair froze to head-coverings, and it was very often hard to open the mouth at all. As for bodily strain, it became so intolerable that some ease was obtained by readjusting the cargo and leaving a sledge behind. This was a welcome relief, more especially as they



were entering the mid-region of driving snowstorms, with cold gusts that bit them to the core. The whirling snow became so thick that Nansen and Sverdrup, ahead with the first sledge, lost the others completely if they let them drop a score of paces behind. For a succession of nights it was as much as they could do to keep the tent up, while on 7th September they could not venture out at all. That day was the worst, blast upon blast of wind descending upon the little tent, so that even its interior became a haze of floating snow. Somehow, with snow-shoes, ski-poles, or anything that came to hand, they contrived to pin the canvas down, and by nightfall they were completely snowed in.

Next morning the wind had dropped, but the explorers, of course, had to dig themselves out of the overwhelmed tent, and then to dig up their sledges, of which, when they began, there was scarcely anything to be seen. Owing to this abnormal snowfall, of course, the going that day was heavy to a degree; but luckily it was now level, and all looked forward to a time when the downward gradient would come.

On 17th September—two months after they had left the *Jason*—there was a distinct falling of the ground, a fact which heartened every one. Winter conditions on the high plateau of ice—some 9,000 feet above sea-level and with the temperature at zero—had somewhat frayed their spirits; but now the air showed a mildening, and another snow-bunting came chirping across their route. This surely promised land—and the land of the western side!

Conditions next day were even better, with a strong breeze in the right direction for putting the “sailing” scheme to a thorough test. The sledges accordingly were lashed together in pairs, being rigged with masts and the canvas “floor” of the tent. Disaster marked the outset, for no sooner



was sail hoisted than a fierce shudder began, and then a wrenching of such violence that it seemed as if the whole contrivance must tear to pieces. An attempt on the part of the men to help by harnessing themselves in front only made matters worse, for the queer ship the moment it was moved simply bore down upon them and knocked them into the snow !

Finally, the problem was solved by one man standing in front and guiding the "ship" by means of a staff, the other two of each crew coming along behind on their ski or hanging to some rear part of the sledges. In this fashion soon a great speed was obtained, and the leading "ship," steered by Sverdrup, simply flew over the undulations of snow at a rate which left the voyagers breathless. The downward slant of the surface grew sharper yet, and the pace in consequence all the hotter, so that most of the time the sledge-runners did not seem to touch the snow at all.

Miles by this means were covered in incredibly short space of time, a distinct contrast to the laborious crawl of the former parts of the journey.

The very speed had its drawbacks. Nansen, hanging to the back of Sverdrup's ship, saw parts of the freightage working loose. It was hard to do anything ; the snow-dust thrown up by the whizzing runners created a cloud which clogged the eyes and left a sort of fog behind. A quick glimpse, however, showed Nansen that a useful ice-axe was in danger of being jerked from the middle of the kit, so he strove to work forward in order to make this fast. A projecting ski, coming across his legs at this moment, tripped him with violence—and there he lay sprawled upon his chest, with wind knocked out, and he could only watch the craft as it raced on down the slope. Its sail dwindled and soon it was out of view.



Nansen picked himself up ; there was no other soul within sight, and he, the leader of an expedition, experienced the curious sensation of being alone in the heart of Greenland ! Resuming his course on ski, the dropped passenger picked up first the ice-axe, then a tin of meat chocolate, and later three pemmican boxes that lay scattered around a fur jacket of his own. Having more now than he was able to carry, he sat down to await the coming of those still behind. The only hope was they would not somehow miss him.

Sverdrup, meanwhile, had sailed happily upon his way, immensely satisfied to find how well his craft was behaving. The other two, he imagined, were sitting astern, and many miles had been covered before the curious lack of talk made Sverdrup ponder. So he shouted some remark, and, obtaining no answer, shouted again, this time at the top of his voice. Still no response ; but he reflected that, owing to the headlong pace and the rush of air, the voices of those astern could not carry forward. To make sure he brought the ship round to a standstill and peered back, finding to his amazement that both passengers had vanished.

The astonished Sverdrup, as the scurry of snow-dust settled, scanned the country behind, able just to make out a dark speck in the far distance. This speck was presently joined by another, and the two began to move forward, resolving at last into the figures of Nansen and Kristiansen. The latter, preferring to move on ski, had let go long before Nansen's mishap, but he was now in time to help carry the articles spilt from the ship. A similar fate had happened to the second pair of sledges, for when at last this hove in view it was seen brought to a standstill while the crew trudged back to pick up scattered goods. At length they were all abreast, and, amid much humour, they set about to strap



their belongings quite fast to the sledges. Also they attached ropes behind, to which the "crew" were able to cling or tie themselves, and so be towed along in safety and comfort.

The "sailing" after this was altogether fine, exhilarating to a degree. The sensation of being towed along in this manner might be compared to the zest of surf-riding, and Nansen declares he never had a more glorious run on ski. Such a novel method of progress, besides the rare thrill it provided, was also a practical expedient, for the amount of trail they covered that eventful day — 19th September — exceeded several days of haulage and hard marching. True, a grave element of danger existed for the pilot in front; had he lost his balance and pitched forward the whole craft would have dashed over him, most likely with fatal result. However, taking the steersman's place by turns, they kept steady wits and fended off from the drifts. And in the afternoon, while they bowled along at their fastest, Balto electrified every one by shouting,—

"Land! Land ahead!"

Eagerly they gazed, and there, sure enough, away to the west, was a low mountainous ridge. Land! The "inland ice" was very nearly past; the goal for which they had longed and dreamed was actually ahead!

This ridge of land in the desert of ice soon fell from view, but with the certainty that it would reappear, or that more would come, spirits rose higher. This was helped by the fact that the gradient became yet more acute, so that the sledge-craft simply tore along with the wind. The peril of this in the gathering dusk was soon made plain, for Nansen, who was then steering the foremost conveyance, perceived a dark patch ahead which he supposed to be a common dip in the snow. Within a few yards of it, however, he perceived what this



actually was, and he brought up with a jolt to the wind, shouting for those behind to do likewise. It was perhaps the nearest shave on record, for they were on the very brink of a broad, deep chasm which would have meant the end of everything!

Some of the party were slightly shaken by this narrow escape, and they counselled an immediate halt; but Nansen, unwilling to curtail such progress as they were making, did not quite agree with this. The chasm into which they had nearly sailed was really the first of the west-side crevasses; so Nansen now scouted ahead on ski, directing the course of the sledges, which followed on shortened sail. Most of the fissures were newly filled, but there was another thrill when a snow-bridge sank away just as the sledges had passed over it. Soon after, the yawning gaps in their path became so numerous that activities had to cease. They pitched their tent and were soon fast asleep in their bags.

Next morning they looked out of the tent to behold hilly tracts of real country, with fine peaks and deep valleys—a sight which, to their eyes, was likened to a promised land. Best of all, they were back to the regions of drinking water, and in due time a well was found from which all drank as though they would never feel satisfied. For the moment, a little feast was made to celebrate—a feast of cheese, oat-meal biscuits, jam and butter, with unlimited amount of tea. They then set forth once more, enabled now, by reason of the long, glassy slopes, to enjoy a new sensation—that of tobogganing. This, like all their other modes of transit, was fraught with its own peculiar risk, for blue chasms still yawned, and it was necessary to keep a very keen eye on the bases to which they were rushing. The best scheme, they found, was to perch themselves on the sledge-runners, using one foot for standing and the other to skid with or to guide.



By such means they proceeded till better ice was reached, and on 24th September they hoped actually to set foot on land. In this they succeeded, coming down the last slope of ice to the shores of a mountain tarn. When they felt the good hard rocks beneath their feet they were inclined to shout, and, like schoolboys released from school, they clambered towards the green places.

"Words," declares Nansen, "cannot describe the thrill that went through us as we felt the elastic heather on which we trod, and smelt the fragrant scent of grass and moss."

Having partaken of dinner, they left their sledges at the ice-foot and set off down the river valley towards the fjord, the idea being that, when they had taken their bearings, they should construct a makeshift boat and dispatch two men by it to Godthaab. For this purpose they took what they had of canvas and bamboo. On coming to the fjord and choosing a site for camping, they set about the boat at once. For ribs they used willow-boughs, thickets of which grew near by, and over this rude frame the canvas was stretched. The finished craft, in shape, was no beauty, as may be judged by the dimensions: length, 8 feet 5 inches; breadth, 4 feet 8 inches; depth, 2 feet—but she floated well when tried in a pool, and, considering the raw material, was a work of which they felt proud.

Nansen and Sverdrup were to be the sailors, all the others being dispatched back to the sledges, with instructions to bring instruments, diaries, food, and as much else as they could carry, waiting with same at this point till they could be fetched.

This arranged, the two for the boat loaded up and launched off on 29th September, taking with them some clothes, a couple of reindeer tunics to sleep in, provisions,



camera, gun, and cartridges. The oddly made boat when under way did not prove to be a speedy craft; yet they got on with her much better than was expected, the far side of the fjord being made in excellent time. They then worked along the northern shore of Ameragdla, where there were plenty of blue gulls, six of which Nansen brought down with his gun. Four of these were skinned and cooked for the evening meal, when they put ashore for the night, and the taste of fresh meat was sweet and welcome to the wanderers' palates.

Next day, on launching forth, they found themselves against a fierce head wind, so strong that the tiny craft tossed on the waves like a thing of paper, leaking water at the seams, yet still shipping none. Patiently they baled, rowing on whenever they could, and so at last they won through and safely put in at Godthaab.

Their arrival had been watched, and a salvo of gunshots was fired to welcome this wonderful couple who had come, as the natives dubbed it, in "half a boat." The pair on landing made eager inquiries at once, their fond hopes being dashed when they learned that the last ship from Godthaab had left two months ago. Another vessel, called the *Fox*, would be at Ivigtut till the middle of October. This lay 300 miles distant, yet some attempt was promptly made to send a message.

This done, Nansen's first thought was to send a couple of kayaks—the Eskimo native craft—up to those left on the shores of the gorge. These carried food, being followed later by more seaworthy boats which brought the four to Godthaab.

So all were safely together again, but the faint hope of their getting aboard the *Fox* vanished, and they had to face the necessity of wintering where they were. Thus, it was



not till the spring of next year that the sight they longed for hove to view—the Danish ship *Hvidbjörnen*, which put in and took them aboard. Fame preceded them, so that Copenhagen gave them a royal welcome, while their own Norway justly received them as conquerors.

So runs the story of the first crossing of Greenland, and we may agree very heartily with Dr. Nansen when he says that he and his comrades worked hard, and undeniably passed through a deal of tribulation, in order to reach the goal.



## PART II

### THE MARCH ON THE NORTH POLE

“The true explorer does his work not for any hopes of reward or honour, but because the thing he has set himself to do is a part of his being, and must be accomplished for the sake of the accomplishment. And he counts lightly hardships, risks, obstacles, if only they do not bar him from his goal.”—ROBERT E. PEARY.







## CHAPTER I

### ON BOARD THE "FRAM"

THE North Pole, in these days, was a centre of dreams, the longed-for goal of every Arctic explorer, though all attempts as yet had met with premature disaster or had fallen short in some way or another. Progress to the desired end, however, had certainly been made; there was, as it were, a steady march on the Pole covering a period of many years. To show how one famous explorer would succeed in getting a little nearer the North Pole than another it will be interesting to note the three more recent records: Aldrich, in 1875, reached  $82^{\circ} 48' \text{ N.}$ ; Markham, in 1876,  $83^{\circ} 20' \text{ N.}$ ; and Lockwood, in 1882,  $83^{\circ} 24' \text{ N.}$

One drawback was that the nature of the Pole and of its surroundings was altogether in doubt, though science suggested that if it did not consist of land it must surely consist of ice. The lowness of temperature round about the Pole must, by every deduction, be utterly intense; a coldness which, during winter, might freeze the blood in man's veins, and even in summer it was doubtful whether human life could be sustained there. Anyhow, it was hard to know how best to go about the matter; the idea of support depots and a final "dash" was one which more fully developed later.

Fridtjof Nansen, ever the pioneer, was among the first



to display more original boldness. His now-famous project concerning the Pole was based on an individual theory, and one full worthy of the man. Inspiration, in this case, was derived from the strange tale of the *Jeannette*. This, an American vessel under Commander de Long, which had set out to explore beyond Bering Strait, was caught in the ice. She finally broke up on June 12, 1881, and sank, while two of her three boats were afterwards lost. The amazing sequel came three years later, when some Eskimos found floating ashore on the coast of Greenland a number of biscuit boxes and a list of stores in de Long's handwriting—undoubtedly relics of the foundered *Jeannette*. The only conclusion was that these relics, in their long drift, *must have passed right over the Pole, or very near to it.*

It really was a most important occurrence, and Nansen, with serious enthusiasm, argued that what had happened in the case of the *Jeannette* wreckage might well happen in the case of a whole ship. That a favourable current flowed over or near the Pole was now proved beyond doubt; he would therefore take a ship into that current and deliberately drift, the ship being so constructed that, when caught in the winter ice, she would slip above it, and thus always ride on a level keel.

Of course, there was the customary flood of criticism, especially among experts, about this "indestructible ship," and indeed, when coldly considered, Nansen's proposal did seem far-fetched or at any rate over-sanguine. Sir Allen Young said: "Dr. Nansen assumes the blank space round the axis of the earth to be a pool of water or ice; I think the great danger to contend with will be the land in nearly every direction near the Pole." This, of course, was a shrewd thought, for if the Pole did consist of land, the drifting ship



might, with the breaking ice, be carried upon rocks. Others dwelt on different phases of the project, while General Greeley of America, himself the famous leader of an ill-starred voyage, seemed to sum matters up when he wrote: "It strikes me as almost incredible that the plan here advanced by Dr. Nansen should receive encouragement or support."

Nansen's own Government, however, this time showed their faith in him by voting £11,000 towards the cost of the venture. Other sums came, including £300 from the British Geographical Society; and Colin Archer—a Scotsman hailing from Aberdeen and a famous builder of ships—undertook to construct according to Nansen's ideas. Several designs were submitted before a final set was approved, and the outcome was the *Fram*—a good word, meaning "forward," "through," "out of"—one of the most famous of Polar vessels.

The *Fram* was a vessel of some 400 tons burden, being built fairly short, so that she might work her way easily among ice, with smooth, sloping sides and a broad deck. The frame timbers were of fine Italian oak, of immense stoutness—bow, stern, and keel being rounded off so that, instead of being gripped, she should always rise above the pressure of the ice. She had an outer "ice-skin" of greenheart wood, then two layers of oak, and an inner lining of pitch-pine—the total thickness of her sides being from 24 to 28 inches solid. Though rigged as a three-masted fore-and-aft schooner, she was fitted with engines and screw. The engines, when working, provided her with electric light; this current at other times being generated by a windmill on deck.

It was early in 1893 that the chosen crew assembled at Christiania, all singularly confident despite the unlucky fact that they numbered thirteen. Nansen had been fortunate in getting his old friend, Otto Sverdrup, to come as skipper of



brisk trot, with the hunters running south-east to avoid being scented. Soon it was over boulders, so that Nansen had to jump from stone to stone in order to be in time. More than once he went down head first, but the spirit of the chase in him was now strongly aroused. At the turn of the valley a big bunch was just heading up and Nansen fired at once. When the smoke cleared he saw that he had broken an animal's leg, and there was another such case as the herd wheeled to retreat; Nansen plunged after them, humane instinct urging him to make sure of the couple already wounded. These, veering for the shore, charged into a small lagoon, and there it was that ball-cartridge finally brought them down.

Meanwhile, other adventure had fallen to the lot of Johansen and Peder the harpooner. Tired of their deer hunt, hungry into the bargain, they had squatted down and were having a quiet smoke, when Peder suddenly pulled the pipe from his mouth.

"Look, look!" whispered he. "There's a bear!"

A bear it was sure enough, big and fat, just lounging up from the beach. Both men, rising, fired at the same moment, and their game, though wounded in the fore-leg, turned to make for the shingle. Johansen, reloading, hurried down the slope and put a bullet through the bear's shoulder. Even now, though the creature fell, it was soon struggling up to recover, but Peder gave it a quietus at short range.

The land party, though they had done well, had not yet finished as regards useful sport, for when a large boat had been brought round to pick up the spoil, those aboard were amazed to see a second bear lying upon the shingle near the body of the first. Its fine long fur was still wet with brine, and, after a supper of whitefish, it was crouching asleep. Its awakening was rude, and the men were somehow sorry for



the poor beast. Still, with some thirty dogs to provide for, besides the needs of the crew, fresh meat was an important matter, so they hastened to add this to their bag. Their boat, of course, when both bears had been hoisted aboard, was low to the gunnels and of such a weight they could scarcely pull it along. Indeed, that row to the *Fram* in a rough sea was quite the worst labour of the day, but they made the ship at last. Later, when the ocean had calmed a little, Sverdrup went ashore with three others, and so brought off the reindeer.

The ship's boiler had now been put right, but the ice-floes were giving considerable trouble, and there was a threat of their being locked in near Taimur Island. On 7th September, by diligent navigation, they just managed to push through. When, on the 10th, they made Cape Chelyuskin, the most northerly point of Europe, there was general rejoicing on board. Early on 12th September, as a diversion from "ice-dodging," they were treated to a walrus hunt.

These were the first walrus sighted, and Nansen, awakened by the news, got up to find the deck in a stir, with the strange "guffawing" notes of the walrus sounding from the floe on which the flock was gathered, a little to landward of the ship. Guns and ammunition were promptly fetched, harpoons were sharpened, after which Nansen, Juell, and Peder embarked in a boat.

"Good gracious!" exclaimed Juell, who was the ship's cook; "what a lot of meat!"

The walrus, old and young, were lying together in a lazy group, some fanning themselves with their huge flappers. Peder was ready with his shaft, and as the boat was brought warily to the floe, he uprose and discharged the harpoon. The aim was too high; the weapon, glancing off the sleek



hide of a nearer walrus, went whipping across the backs of the others. The effect was alarming, for the whole pack of animals, bellowing loudly, turned and came waddling towards the boat.

That they meant to attack was plain, and Nansen, lifting the rifle to his shoulder, fired without loss of a moment. The ball drilled some part of a big head, so that its grisly owner collapsed into the sea. Bang!—another was hit, but now the whole flock took angrily to the water with such commotion that the air was full of a driving spray. The agile creatures surged round with a glare in their eyes and with tusks gleaming. They roared in unison, beating the sea to a foam, and then over they turned to dive nearer. The boat rocked, every moment it seemed as though one or more of those sharp tusks must impale it. The wounded ones even were still in the affray, but a couple of shots settled these and they rolled over in the water. Peder's harpoons secured both animals and they were towed along to an ice-floe, the other walrus still following. Their aggressive spirit, however, had somewhat died, and they held off as the *Fram* was brought round to take the vanquished aboard.

Whatever else might be said of these cold, forbidding waters, so far from the haunts of men, they certainly did seem to be yielding stocks of food; for, besides bigger game, there were fish, duck, and seal to be had in plenty. As a result, the main provisions brought had not yet been broached, though the vessel was now as far as the mouth of the Chatanga, bearing southward along the coast. The thickening ice compelled them to keep to the channel which followed along the shores of the Taimur Peninsula.

The critical time was approaching, and on 24th September they found the ship more closely threatened by floes, which



were separated from each other only by slush-ice, and this must soon be one frozen mass. A deadness, too, the hush of winter ; a brooding silence and scarcely any signs of life. Next day, the *Fram* was frozen in, but she had been worked well along to the region of the hoped-for current,  $78^{\circ} 50' \text{ N.}$  lat., so all was ready for the great drift theory to be tested.



## CHAPTER II

### NANSEN'S FAMOUS EFFORT

THE *Fram*, which, owing to her special design, had given them all a bad tossing at sea, now proved to be very comfortable quarters indeed. The crew, however, were given steady employment, some first attention being given to the welfare of the dogs.

There had been trouble with the latter all along. These Siberian sledge-dogs, though splendid workers when in harness, are most savage of temper, especially when they have to be kept tied up on deck. Often wet from the spray, they would howl incessantly and engage in furious dog-fights. When set free, however, and allowed to go down on the ice, they were nearly wild with delight. They scampered merrily in all directions, and one named Billettoren (ticket-collector) set off as hard as he could gallop for the North Pole—hoping, as was quaintly remarked, to get there in time to collect the explorer's tickets!

In the evenings now the Northern Lights were seen at their best, gleaming across the sky in spirals and darts of fire. A wonderful calm would prevail, alternated with ominous sounds in the ice, till some anxiety began as to the *Fram's* position. A big floe on the port side—more like a small berg—threatened to topple and crush her; so the crew, breaking up



the frozen slush-ice behind, actually managed, by aid of ice-anchors, ropes, and capstan, to force her backwards to a safer billet. It was a gigantic task to attempt, but those sturdy Norsemen managed it, and the ship was now considered ready to meet any pressure that came.

Daily observations were carefully taken, and when the deep sea beneath the ice was dredged it was found to contain numerous forms of life such as sea-slugs, coral insects, shell-fish, and also sponges. With the broadening of the ice-field on which they floated there began to be fresh signs of animal visitants. A white fox was shot, and then came a warm episode that might have caused poor Peder his life.

Every one was below deck when a great commotion was heard, all the dogs barking madly. Peder was the first to rush up, and he was joined by Ivar Mogstad, one of the general hands. It was too dark for them to see what all the noise was about, so Peder made haste to bring a lantern. He then noticed blood by the gangway, while Mogstad exclaimed that a lot of the dogs were missing. Tumbling outside, the two men set out upon the ice, following what appeared to be tracks on the snow. Of a sudden a great shape loomed out of the darkness. It was a bear, with a pack of dogs yelping around it.

Mogstad and Peder, neither being armed, turned to bolt for the ship. The first-named was the nimbler of the two, and was also wearing moccasins; Peder, more heavily shod, stumbled, lost his way, and blundered into an ice-hummock to the west of the anchorage. As he rounded this he heard a growl and the bear came at him, biting him severely in the hip.

Having neither gun nor knife, Peder swung the light and administered such a blow to the animal's head that the lantern was dashed to pieces. Peder, crying for help, scrambled up and on to the ship, where most of the crew were now running



from the cabin with rifles. The latter, however, had been so well greased with vaseline to prevent rust that the hammers only clicked.

The bear meanwhile had turned on the dogs again, but these, with united courage, sprang at the beast and showed fight. The din of barks and growls was almost deafening, for every time the bear got a dog down the others came pouncing on his back. This hot combat swayed towards the ship, till the bear, rolling out from the affray, made a fair mark for Johansen's rifle. The latter was now working, and so the bear was shot dead. It was found afterwards that two of the dogs were missing, these having fallen early victims to the four-footed raider.

Now the ice in which the *Fram* rode frozen was found to be more than 30 feet in thickness, and was always drifting. This movement made it subject to varying pressures from without, and every day the creaking became worse, with splintering reports as the ice gave way at the weaker places and heaved up.

Ice-pressure of this kind is believed to be due to wind, ebb, and tide. The northern seas, when the Arctic night of winter sets in, become frozen over to the shores, with an average thickness of perhaps 40 or 50 feet. So begins a grim warfare between this immense sheet of ice and the restless ocean beneath. The ebb, of course, lets the ice down, so that its edges, straining on the shores, severs into pieces and also forms cracks running far out over its surface.

Then comes the swelling tide, heaving the whole ice-sheet so that the fissures gape open, while entire masses are flung up by the imprisoned flood and hurled in confusion upon the surface adjoining. This, perhaps, breaks in turn, and in the seething jumble tries to force back, so that ice-blocks weighing





#### AN ENCOUNTER WITH WALRUSES

"They roared in unison, beating the sea to foam."



pounds, hundredweights, and tons all smash or grind together in an awesome duel with the sea.

The solid coast-lines, of course, form a bulwark against all this turmoil, and the sundered ice, being hurled ashore, has to stay there, heaping higher and higher with every tide. But out in the wide Polar Sea there is no land to offer such resistance, either to wind or tide, and a ship frozen in there must needs be prepared to battle for her life. This was the fate of the *Fram*, and every day the waves of pressure crept nearer. The time had come, according to all authorities at home, for the good ship to be crushed to pieces. Nansen still believed in the *Fram*, yet he was not blind to the fact that his critics might just possibly be right. Anyhow, he had all the boats put out on the ice and stocked with provisions; the dogs also, should the break-up come, were stationed so that they could easily get away.

The pent anxiety of that period can perhaps be imagined. All round about the ice-field groaned and trembled, the ominous sounds moving up to them like thunder beneath the pack. The shudder of it came to the vessel; her timbers creaked to the strain. As by one impulse, every man hurried up on deck and out upon the safest-looking ice. The noise of upheaval grew deafening; vast blocks of ice, with the sound of cannon, were being split and thrown towards the port side of the ship, piling to a great restless barrier. The awesome, tumbling mass rose till it was higher than the *Fram's* deck; then, like a clumsy wave, it came rolling towards her, and in that dread moment it seemed as though she must be crushed to match-wood.

There was something like an explosion; a grinding impact. The ice-wall was upon the *Fram* now and slithering over a deck-house. The whole vessel shook, her spars quivered; and then,



with proud strength, she pulled from the gripping ice-blocks, slipping up and up. The enormous pressure, like some hungry monster, heaved again and strove to batter, but the *Fram* only slipped the higher, and, unhurt in the least degree, remained on an even keel.

Nansen, and indeed every one of his band, stood thrilled by the outcome of this; the *Fram* had proved herself nobly and had justified their hopes! After this, so far as ice-pressure was concerned, they felt altogether secure; no test more severe could possibly come, for the ship had been so solidly frozen in that a complete mould of her shape, with every dent and joint, could be detected in the ice from which she had arisen.

To good-fellowship now aboard the *Fram* was added complete faith, and the rest of that winter passed in various pursuits. There was the ship to be kept in order; records to be taken of atmosphere, position, ice phenomena, and astronomy; dogs to be cared for; stores to be examined, and a host of other common tasks. There were books to read in plenty, various games in the cabin, while some one presently started a newspaper which he called the *Framsjaa*—meaning, roughly, “The *Fram*’s Outlook.” It was a live journal, with plenty of humour in it and a number of funny sketches.

The long Arctic night was over at last, and, with the return of the sun, they were able to make calculations as to the direction of their drift during the spell of darkness. To the great satisfaction of all it was seen that the ship had made a substantial advance to the north. If this continued there was every hope of their eventually drifting over the Pole.

Alas! with the passing of summer the current began to veer westward, and soon it was realized that the vessel, at this rate, was bound to miss her objective. Nansen, therefore, decided



to fit up sledges and make a dash for the Pole directly the sun was established. For his companion in the venture he selected Lieutenant Johansen, a choice which proved very wise.

The enterprise was carefully thought out, and experiments showed that twenty-eight dogs could pull sufficient food to keep two men alive say 100 days, besides arms and other items, including a couple of kayaks. The latter, being native boats, had been shipped in parts. Now they were carried to the ice, put together and properly covered with skins, being afterwards mounted on two light sledges. A third sledge accommodated everything else, including additional food to keep the dogs 30 days. It was hoped, of course, to shoot some sort of meat on the journey.

One cheering fact was that, on January 6, 1895, the *Fram* itself beat the world's record by drifting into  $83^{\circ} 34' 2''$  N. lat., and  $102^{\circ} 2'$  E. long., which was the farthest north yet. Nansen longed to be off with the sledges at once, but this wish had to be controlled, and it was on 28th February that weather conditions allowed a start to be made. Some of their comrades came out to see the leaders well on their way; but good-bye was spoken at last, there were hearty hand-shakes, and the intrepid pair were heading due north with their train of sledges. It was a case of risking all on one throw, with small hope of their seeing the *Fram* again. They had merely been able to arrange that, when the hour came for turning back, they would endeavour to shape their course for the Spitzbergen Islands, where it was supposed the vessel might drift.

Travelling at the outset was very hard indeed, with obstacles occurring over which it was impossible for the dogs to pull. The two men at such times had to turn in themselves and drag the sledges over the rugged barriers of ice. The latter, as around the ship, continued to move beneath their



feet with a big swaying action, and with the ceaseless noise of portions grinding together.

Every day the coldness became more intense, the temperature dropping to  $40^{\circ}$  below zero. Work in the day-time kept them both warm, but the nights—it was now, of course, light all the time—were a frigid ordeal.

In order to grasp the fact of continuous daylight following upon continuous night, we must remind ourselves that when the North Pole is inclined towards the sun, during the summer solstice, sunlight falls  $23\frac{1}{2}^{\circ}$  beyond the Pole, so that, as the earth revolves, the entire region within the Arctic Circle receives daylight throughout the 24 hours. During this while, of course, the South Pole is turned away from the sun, receiving the opposite condition of continual darkness. The “seasons” at the Poles, therefore, are totally unlike those experienced in other parts of the world—the Polar summer being one long spell of daylight, and the Polar winter one long spell of darkness, with intervening periods of twilight that merge one season into another.

The two pioneers had to be vigilant against frost-bite; one of Johansen’s fingers was in danger, but Nansen got it to life again by rubbing it with snow. It was terrible going by day, with constant mishap owing to large tracts of ice being like a hummocky ploughed field, with spear points and razor edges. At night they got little sleep owing to body-damp affected by utter cold; yet they struggled along, as it were to the breaking-point, till on 7th April they perceived there was nothing for it but to turn back.

This was in  $86^{\circ} 13' \text{ N. lat.}$ , the “farthest north” ever yet reached by man, and just 200 miles short of the Pole. The temperature here was  $49^{\circ}$  below zero—the sleeping-bags and clothing of the two explorers being frozen quite stiff,



while their bodily condition seemed but a few degrees better. To-morrow, they decided, they would head round for home ; at the moment they celebrated their achievement by indulging in a little feast of lobsouse, chocolate, stewed whortleberries, and whey-drink.

Nansen's plan was to strike a course south-west, towards Franz Josef Land. They would have to spend a winter there, taking up their journey to Spitzbergen in the early summer. Even if they missed the *Fram*, there should be no trouble about getting aboard some whaling-ship bound for home.

So on the morrow, having hoisted a couple of flags to mark this spot, they took up their new course, over hummocky ice which again severely taxed both the dogs and themselves. The dog-rations were now all but done, and there was anxiety on the part of both to press on as far as possible before this food gave right out. As a result, on winning at last to more level ice, they made a forced march of 36 hours on the stretch. The dogs by then were almost dropping with fatigue, and a halt had to be called. Each man, as from long custom, had made it a habit to wind his watch before lying down in his fur bag, but now, on account of the long spell without sleep, both watches had been forgotten. Of course, they had stopped ; the best Nansen could do was to take a time observation and set them going again by that.

All this while they had been moving through a region devoid of sound and quite devoid of life. The dog food was exhausted, with no present hope of shooting more, and so came the desperate moment when they must needs kill one of the animals in order to keep the rest alive. This was one of the most unpleasant tasks they were called upon to face, but grim circumstance compelled it. Their own lives were in the balance, with prospects far from being good.



Accident dogged their steps ; Johansen, in the rough going, broke both his ski, and Nansen one of his, till now there was left only one in reserve. Their hopes of making land by the close of April were quite dashed ; by the end of May they were still trudging on through a desert of ice and snow. As the load of the sledges diminished they were able to leave one behind ; indeed, this was called for, the number of dogs having dwindled to two. Now each man, with a dog to help, pulled a sledge bearing his half of the burden, including one kayak. Neither man, owing to the terrible cold, had ventured to wash since quitting the ship, so that their faces were blackened with perspiration, frost, and grime, to say nothing of their unshaven chins.

The desperate outlook changed at last, with fewer ridges to overcome, till the going was almost flat. Channels of water then began to occur, stretching across their route, and here bold feats were accomplished. Broken ice like rafts floated thickly in these channels, and, when there was no other course, the dogged pair jumped upon these ice-rafts, moved from piece to piece and actually hauled the sledges after them. There were, of course, the most narrow shaves and sudden duckings, but "travellers' luck" held good ; and so they fought back to the regions of life. This first was represented by a seal, which they successfully shot. So important was the event that they gave the dogs and their jaded bodies a long rest on account of it. Other game was secured, providing sufficient food even if they failed to sight land for a matter of weeks.

A couple of days later, however, they had a good surprise. Away ahead they spied what they first thought to be a bank of white cloud, but soon they saw it was ice—the icy cap, they believed, on one of the Franz Josef Islands. Courage ! Land in sight !



## CHAPTER III

### WELCOME AT CAPE FLORA

NANSEN and his comrade, with land in sight, had a definite something to aim for, and on arriving at open water they realized the time had come for their kayaks to be launched.

The two craft, of course, had suffered so much jolting and hard usage that they looked by no means sound ; indeed a great deal of time was expended in patching them up. Having no waterproof coating for these patches, the resourceful pair had invented a paint-mixture of oil and soot, which they relied upon to prevent the stitch-holes from leaking. The plan now was to put the kayaks afloat in the water side by side, with ski and staves lashed across to convert them into one. Nansen had just removed the sledge to put his boat in the water, when something happened as startling as it was unexpected.

Johansen, going to fetch his load, which stood some little way back, was stooping to pick up the drag-rope when he noticed a drab shape crouching behind the kayak. At first he thought it was his dog, but then the form sprang up and revealed itself as a female bear. Johansen had no time to shift before the great creature was upon him, rolling him savagely with her two fore-legs down the dip to a pool, where she dealt a blow to the cheek with her paw. The luckless man,



almost stunned, was just able to shout to Nansen, "Get the gun!"

Johansen could see his own loaded rifle protruding from the pack at his side, but he could not touch it; at the moment of collapsing he had seized the brute's throat and was holding her off with all his strength. His life depended on his keeping that grip, and as help did not come he burst forth with, "Look sharp, or you'll be too late."

Nansen was alive to what was happening, but delay had arisen from the awkwardness of the moment. Noting his comrade's plight, he had darted to seize a rifle which was packed in its case on the fore-deck, but the kayak slid off the ice beneath him and sped well out on the water. Nansen's first impulse was to plunge in and aim from over the kayak, but a second thought showed what a risk this would be. So he first dragged the craft, with its weighty cargo, back on the high edge of ice, and tugged the gun out as Johansen shouted again.

The bear meanwhile had turned to face one of the dogs, who was springing at her with wild yelps. A blow from the bear's paw sent this dog reeling, while the other, boldly attacking in turn, was served the same way. Johansen, however, had just time to scramble up, and then a report rang out. Nansen in his eager haste had cocked the shot-barrel, this being nearest to his finger, so to make sure he emptied the other as well. Both charges found their mark and the bear dropped dead.

This, from an ice-bear, had been a most determined attack, the species, except when worried, being as a rule shy of human beings. No doubt hunger and concern for her cubs had caused this one to act so fiercely, and Johansen, who had merely had some grime clawed from his cheek, felt fortunate





#### ATTACKED BY A BEAR

"Look sharp, or you'll be too late"



48.

#### NANSEN'S FIGHT FOR LIFE

"The fierce brute, blowing with wrath, tilted again?"

(By permission of Messrs. Constable & Co.)







to have escaped so well. One of the dogs also had been scratched on the muzzle; but all were consoled by a hearty meal off the choice parts of their vanquished foe.

The kayaks having been reladen they crossed the obstructing lake, but land was still a weary way off, with miles of the most dangerous drift-ice and equally bad lanes of water stretched in between. Weeks of arduous patience elapsed, with toil out of all proportion to the stages advanced, before they came with their troublesome belongings to an open sea in which appeared three ice-capped islands.

Electing to winter on one of these islands, the two men launched their kayaks, lashed them together, and carefully piled on all that they would find of use. They could tell, however, that a voyage across this expanse would prove more risky and require a great deal more care than merely ferrying across channels. Their slight boats were already burdened to the utmost, and to take in the dogs as well looked like sure disaster. They had to steel themselves to the moment; there was no help for it now, the faithful pair must be shot.

Only stern necessity made them do it, and it was agreed that each man should shoot the dog which had become the other one's comrade. In view of their own future there was no ammunition to spare, but they could not bear to think of just leaving the dogs behind on that desolation of ice.

This sad matter over, they sailed across to the island, coasting along till they came to a beach where they were able to put ashore and pitch their camp. The place was of a rugged nature, stony and barren, with basalt cliffs and few signs of vegetation. It was no ideal spot in which to spend an Arctic winter, with its long night and piercing cold, yet somehow it must needs do.

In a way, these Arctic Crusoes enjoyed it; there was



romance in having to exist somehow, far from the haunts of men, with only a few scant belongings. Their first concern was to build a house in which to live, and the way in which they contrived it is eloquent of their resource.

For tools they had a hatchet and two knives ; for material there were plenty of boulders lying about, as well as one solitary piece of drifted pinewood. This wood with much labour they managed to pare into a ridge-pole for the middle of their roof, and the latter they decided might consist of hide. Leaving their property in a rough *cache* of stones, they set out with the guns along the shore, soon having the fortune to sight a couple of walrus.

Stalking carefully, they succeeded in shooting both, but the slain animals, owing to their immense bulk, slid off from the ice and into the water. There they floated, but all the united strength of our two friends failed to drag even one carcase back on the ice again. The determined pair as usual invented a way out by skinning their prey, and securing the blubber as well, right there in the water. In order to accomplish this they actually stretched themselves on the floating bodies and skinned at the same time—a very singular feat in itself. What with fat and oil and water, their clothes, in a sorry condition before, were reduced to a ghastly state. Still, they had the satisfaction of bearing both hide and blubber back to their camping ground.

This spot was well sheltered, and, exploring the high ground behind, they discovered some moss. This they gathered, mixing it with shingle to fill in all the crevices between the stones of their abode. The walrus hides were then stretched over the ridge-pole, pinned down by stones, and heaped over with ice and snow. Weapons, tools, ski, and all stores were stowed within, the kayaks remaining



outside. Across the door they hung skins, erecting a separate wall in front of the exit in order to screen off the wind.

Again, luckily, they were in a land of plenty as regards edible game—bear, walrus, and seal being of chief importance, besides flocks of gulls, kittiwakes, auks, and other Arctic birds. A full winter store was soon procured, being piled on top the hut, where it became a frozen mass. A queer place for a larder, one would say ; and often, indeed, during that winter, white foxes would skulk up and be heard gnawing at the hard meat. The inmates did not bother about shooting these marauders ; for one thing they must not waste a single cartridge now, for another they had more than enough food to carry them through.

For about twenty-two hours in each twenty-four the exiles kept to their sleeping-bags, rising only for meals of bear's meat, boiled in the morning and fried at night. Nothing disturbed them except the stealthy gnawing of the foxes aloft, and the smoke from their blubber-stove. A chimney for the hut had not been overlooked, but it did not relieve matters much.

The smoke, however, was perhaps warming in its way, and any amount of heat was needed, for the cold was so intense that thick ice formed even upon the inside of the walrus skin-roof.

By May 19, 1896, the weather was sufficiently good for them to quit their winter shanty and set out once more in what they believed to be the direction of Spitzbergen, for even now they were very hazy as to what the islands were on which they had been camping. However, with trustful spirits, they loaded up the kayaks and launched away, sometimes sailing and sometimes paddling. Fields of pack-ice frequently occurred over which they were obliged to drag, and at length they sailed along to a bigger mass than usual, towering well above the water. This provided opportunity



for a wide survey, and so, mooring their craft, both got out to stretch their legs and climb to the summit. They stood there, viewing the ice-scape, when Johansen burst out with,—

“I say, the kayaks are adrift!”

Nansen swung round, and the twin craft, sure enough, having slipped their painter, were seen to be gliding away. The effect of such a mishap was clear to both; those kayaks represented their all—to be marooned in this desolate ice-world without arms and ammunition spelt certain death. Small wonder they turned as one man and rushed down as hard as they could. Nansen saw that a plunge must be made, so he thrust his watch into the other’s hand and began to pull off some clothes. Then he dived into the icy water.

A westerly wind was blowing, so that the kayaks, fastened together as usual, were moving out with considerable speed, their lofty rig affording the wind a grip. Nansen still had on clothes enough to weight him down, and in those first struggling moments he feared he had attempted too much. But the recovery of those kayaks meant everything; he grimly reflected it was as well to fail and sink like a stone as it was to turn back without the boats.

With this thought to urge him, he battled along, swimming on his back a bit in hope of recovering strength, then rolling over and doubling his exertions. Soon he was going numb all over; his limbs were becoming stiff. The rest was a dull, icy daze, with just the consciousness of putting up a feeble hand at last and gripping at something solid. It was a snow-shoe lying across the sterns; Nansen gripped it—next moment, with a measureless sense of relief, he was hanging at the boats themselves.

So utterly exhausted was he that, for a while, he could merely droop there; the horrible cold was freezing him to



the core, yet he had not the strength to drag himself aboard. The fate of both hung in the balance ; in a half-conscious way he lifted one leg and swung it in over a sledge. Slowly a little higher and then he had tumbled on board. When he could he took a paddle and began to work. This, though the wind cut like knives through his sodden shirt, brought a tremor of sense to his body. Somehow he got back to the ice at a much more distant point, but his companion had run along to receive him.

“Those were the worst minutes I’ve ever lived through !” exclaimed Johansen, and indeed his rôle as onlooker had been far from enviable, for he had not known whether to jump in himself or to hold in reserve till he saw what happened. As well now he was fit and dry, for Nansen was in a bad way. He was only just able to crawl from the boat, and he shuddered so that he was helpless to help himself. Johansen peeled off his wet things, put on the few spare dry ones they had, and then got the patient into a sleeping-bag, piling the sail on top and everything else he could find. Warmth gradually returned, then came slumber, from which Nansen awoke to smell savoury supper cooking over a fire. This food completed the cure, and next day, thanks again to a vigorous constitution, Nansen was none the worse.

In all their exploits, perhaps, the element of fatality had never been quite so close, and it led to the separating of the kayaks, a measure which stood them in good stead for their last adventurous ordeal.

Once more they were cruising along near the coasts of glacial islands, and a more definite opinion was forming in Nansen’s mind as to what part of the world this was. Walrus abounded in plenty ; some, lowing like cattle, lying off on the rocks, others surging round the boats, grunting and blow-



ing as they watched the voyagers with glowering eyes. Johansen said he feared they meant mischief, but Nansen, who was getting used to the clumsy gambols of this species, said he didn't suppose they would actually attack.

A little later, however, when the water seemed free of the monsters, and the two oarsmen felt safe in consequence, a single head bobbed up in front. Johansen this time so little liked the look of the creature that he steered rapidly into an ice-foot. Nansen, though amused at his comrade's caution, was about to do likewise when this buccancering walrus emerged beside him, hurled itself on the kayak, planted a huge fore-flipper inboard and struggled to capsize the whole craft, at the same time aiming blows with its sharp tusks.

Nansen hung on to the rocking boat as best he could, seizing a paddle with his other hand and smiting upon the great dripping head. The fierce brute, blowing with wrath, tilted again till the kayak's deck was nearly submerged. Nansen seized his gun, but was cheated of a shot, for the savage creature now vanished as sleekly as it had come. The tusks, however, had done their work; the water was pouring into the kayak. Nansen hurried her in to the ledge of ice, and just reached it, but the craft sank before he could pull her up. Somehow, though the ice was shelving and loose, he scrambled out himself, while Johansen, arriving in the nick of time, tilted the damaged bark so that her rent was above water. He then coaxed the kayak along till a lower level of ice allowed him to drag her up. But all the cargo was soaked through, including food, photographic apparatus, and sleeping-bag. The latter they wrung as much as possible, turned the material inside out, and there on the ice Nansen slept in it, afterwards placing the fact on record that he spent "a capital night."



The damage was tinkered up somehow, but they were still encamped on this ice, planning as to their next move, when Nansen set out on ski to make a little survey. Climbing a hummock of ice, he could see distant cliffs, glaciers, and more open sea. He could also hear the notes of birds, and then—the bark of a dog! No wonder he started. Could he possibly have been mistaken? No, there it was again—the bark of a dog beyond all possible doubt!

Hurrying back he told Johansen, swallowed breakfast as quickly as possible, and then set out in the direction whence that barking had come, with the idea in his mind that he might presently sight a whaling-vessel. What he actually did see was a dark speck in the distance which seemed to move along, and presently another of a different size. As he pressed nearer these specks resolved into the forms of a man and a dog. Now the men waved their hats to each other, and now, meeting, shook hands. They presented a strange contrast, standing there against the white purity of ice; the one well washed, well shaved, well equipped—the other a beggar for appearance, garbed in rags plastered with dirt and oil and soot, his hands and face grimed, with tangled hair and grizzly beard. Yet these two men had much in common, for the neat stranger was no other than Frederick Jackson, the well-known British expert, then in charge of the Jackson-Harmsworth Expedition.

“I’m immensely glad to see you,” said Jackson cordially. “Have you a ship?”

“My ship is not here,” answered Nansen, who had recognized the other, and supposed that he himself was also identified.

“How many are there of you?” was Jackson’s next query.



"I have one companion on the ice-edge," replied Nansen.

While speaking, they moved onward, but had walked several paces before the truth flashed across Jackson's mind. He abruptly stopped, peering into the exile's murky face.

"Aren't you Nansen?" he exclaimed.

"Yes, I am."

"By Jove!" The tone was more than cordial now. "I *am* glad to see you!"

He seized Nansen's hand, wringing it with vigour, and one can well understand how good such a welcome must have been to one who had come through so much. Nansen related the main facts.

"I congratulate you most heartily," declared Jackson. "You have made a good trip of it, and I am awfully glad to be the first person to congratulate you on your return."

The Jackson Expedition, it seemed, was working from Cape Flora, and on arriving at the settlement Nansen was introduced to the rest of the party. As soon as they heard he had reached 86° 13' N. there was a great demonstration.

"From seven powerful lungs," wrote Nansen afterwards, "I was given a triple British cheer that echoed among the hummocks."

Then Johansen was fetched, and given a like ovation, after which photographs of the roving couple were taken separately, in their rags and grime, just outside the hut. Then came the transformation—a wash, shave, bath, good clothes, and everything they could possibly need, followed by unaccustomed luxuries of well-cooked food. Afterwards, perhaps, the happiest surprise of all—a sealed tin of letters, sent to this lonely port by hopeful friends at home.

In a matter of three short weeks they were homeward-bound for Norway on the *Windward*, and they arrived at





FIGGING OUT THE 'FRAM'

She was afterwards fully liberated by the help of explosives

(By permission of Messrs. Constable & Co.)



Vardo on August 13, 1896. Just a week afterwards the *Fram* also arrived, with her crew under Sverdrup alive and well. After Nansen and Johansen had left her, the ship had drifted onward in the ice, at one time touching as high north as  $85^{\circ} 57'$  N.—that is, only 16 miles shorter of the Pole than the two who had gone on foot. Somehow, after the leading pair had set out, a feeling had formed on board the *Fram* that the sledge effort was all too rash. They were for this reason the more overjoyed to find that the two principals had arrived home a week before themselves. One and all, it need scarcely be added, were accorded a strong reception. They had fared forth on a venture which the world had viewed with doubt; they had returned as men whom the world delighted to honour.



## CHAPTER IV

### A MYSTERY OF THE AIR

THE most romantic attempt to reach the North Pole ever made was that of Herr Andree, whose hope it was to travel there by balloon.

The balloon, of course, since its earliest beginnings, was over a wayward vehicle, moving at the mercy of any air that blew, totally unable to control its own course and destiny. There is, however, something to be said for attempting the Poles by air, and many historians have been distinctly unfair to a brave man when they have treated Herr Andree's effort as if it were hardly worth putting on record. It was at least based on a theory of "drift" not unlike the one so ably justified by Nansen, the one being concerned with a current of water, the other with a current of air.

Herr Andree was an expert aeronaut; he knew that a very strong current of air, just after midsummer every year, blew northward over Dane's Island, and he believed that a balloon, once caught in that stream of air, would be carried over the North Pole in the course of a few days.

Such an air voyage, if successful, would render an important service, for it would settle the point remaining so much in doubt—that point as to whether land, ice, or water formed the northern axis of the earth. Indeed, the car of a balloon



would be the best place of all from which to make such a survey.

Two friends, Herr Fraenkel and Dr. Strindberg, supported Andree, and these three endeavoured to get away in the summer of 1896, but without success. Twelve months later, however, on July 11, 1897, they arose into the desired air-current, floating steadily away to the north until they dwindled out of sight. So far as we know they were never seen again.

The air, like the sea, can apparently hold its secrets, and the fate of Andree's venture forms a mystery of space. The chief difficulty about Polar exploration does not arise so much from mileage as from the terrible character of the ice encountered. This, at all events, applied to all the ice-routes yet attempted; so one feature of the air-route, as foreseen by Andree, would be its surprising quickness. The start supported the theory, for when his balloon passed from view it was moving at a speed which should easily have carried it over the Pole in the course of three or four days.

Andree had prepared for accident; he did not ignore the fact that something untoward might force him to descend. Car space was naturally limited, yet he carried as great a stock of provisions as was feasible, together with material to erect a hut on the ice, supplemented with guns and ammunition. Besides these he had an aluminium boat, as a means of sea-escape, as well as a number of carrier pigeons which he proposed setting free at intervals in order to bear tidings.

The whole world waited for such tidings, being rendered the more eager by reports of a favourable start. In the course of about a week the balloon should have passed over the Pole and made its descent somewhere in Siberia. But the week became a fortnight, with no sign; then a month passed, then



a year. A pigeon was said to have been shot well up in the north, but there is no certain record of a message, and it is extremely doubtful whether this was one of Andree's birds at all. It was, however, urged that a search party should be sent out to do what was possible, and the Swedish Geographical Society formed one to scour through that part of Russia.

No result was obtained; but soon the world was again stirred by a report that some half-civilized tribes, hunters of the wilds, had chanced upon a flabby mass of material and cordage lying heaped up over human remains. Sweden, immediately upon hearing this, and now assisted by other Governments, sent out additional search units; but only to find that a Russian traveller—with a species of wit one can hardly applaud—had invented the whole tale and had passed it on to a telegraph agent.

It is strange how ill-starred this balloon venture was in every respect. Besides pigeons, Andree took buoys, also designed to convey news. Another wave of hope was occasioned when, in 1899, a sloop called the *Martha* put in at Hammerfest with the statement that a buoy had been picked up north-east of King Charles Islands, the name of "Andree" being stamped upon it. The buoy, unluckily, had lost the screw-cap, and had also suffered damage, so that nothing could be made of its inner cylinder.

Many a mystery of the sea has baffled the minds of men for years, only to be cleared up when all hope of knowing was dead. Such a thought might be made applicable to this mystery of the air. Being furnished with the means, it is almost certain that Andree, no matter what his dilemma, would have made some effort to write down the facts and commit them to the ice or sea by means of the buoys. One or more of these buoys may yet be found; it is not, of course,



probable, but it is certainly possible. We may yet live to learn that the gallant Andree and his two companions were the first airmen to pass over the North Pole, thereby setting up an air record which has not since been equalled.

Experts, of course, shake their heads over this surmise ; yet, whatever the truth may be, Andree and his comrades must rank with the pioneers. We may question the wisdom of their act, but we cannot do less than honour its courage.



## CHAPTER V

### ITALY TAKES A SHARE

THE Andree problem was still a common topic when the Italian Expedition, organized by the Duke of the Abruzzi, fared forth to try its fortune. It seems strange at first that any Polar expedition should originate in such a sunny land, a country so full of warmth and colour ; but we presently remind ourselves of the Italian Alps. Indeed, the Italian guides are second to none in their extraordinary feats of climbing on the glacial peaks, and in a general knowledge of snow and ice. It was so far recognized that Alpine and Arctic conditions were really not the same, but four guides were included as an experiment.

In the fitting-out of this expedition we again rub shoulders with romance, renewing our acquaintance with an old ship under a new title.

The Duke of the Abruzzi, wintering in Christiania, sought advice from Nansen on the subject of whaling-vessels, and learnt how well the *Jason* had acquitted herself in that voyage to the ice-floes of Greenland. So impressed was the Duke by what he heard that he bought the *Jason* outright, having her refitted by Colin Archer, the builder of the *Fram*. As most of us are aware, there is an age-old superstition among sailors about the re-naming of a ship ; no matter how good she may



have been in the past, no matter how trustworthy, to sail her under some new name is to ensure disaster. So says the book of ill omens. In face of such warning, however, and probably amused by it, the *Jason's* new owner re-christened her the *Stella Polare*—the “ Pole Star.”

Her crew was changed also ; in place now of the rugged Captain Jacobsen, a skilled Italian, Captain Cagni, was in command. The two officers under him were Lieutenant Querini and Dr. Cavalli, the total complement of the ship being twenty men, half of whom were Italian, the other half Norwegian. The latter included Captain Eversen, a noted navigator of the Arctic seas.

The stores taken on this expedition were large, everything being boxed in a manner as novel as it was practical. Food mainly consisted of salt meat, biscuits, rice, and bottled vegetables, besides a thousand bottles of wine. Altogether there were 1,500 boxes, of uniform, handy size, each class of box being distinguished from another by coloured stripes. Boxes containing clothes had a green stripe, those containing food had a black stripe, for scientific instruments a red stripe, and miscellaneous articles a yellow stripe.

The Duke of the Abruzzi from the first was very modest about his intentions, but those who met him soon realized he would make a determined bid. All was ready at last, the port was gay with bunting, and with a big crowd assembled to give the ship God-speed. Those of the *Jason's* old hands who were present could scarcely recognize their former craft in the spruce *Stella Polare*. She was now painted a tasteful grey, with the Savoia Cross upon her stem, her flag aloft being a black star on a white ground. Upon her deck were a hundred and twenty sledge-dogs.

One of the last visitors to leave the ship, on that morning



of June 12, 1899, was Fridtjof Nansen, now a firm friend of the Duke's, and one who was full of optimism. He and other distinguished people, by 11.30, had withdrawn to the quay, and so, to a salute of cannon from the fort, and to the cheers of a multitude, the *Stella Polare* moved out on her greatest voyage.

In attacking the North Pole the present leader had conceived his own plans, and we know for certain now that the principle of these was right. Simply expressed, his idea was to get up as high as he possibly could with his ship before the ice packed, and then to make a dash for the Pole which would really be a succession of dashes, or, more correctly, stages. At the end of each stage a certain amount of stores and provisions would be left behind to form a support depot, so that the amount to be dragged, after each halt, would be that much the lighter, and the ensuing stage, in consequence, would be longer and quicker. By this means, on the last rapid stage—the actual “dash”—they would need to take only just enough food to carry them to their goal, for the chain of depots now lying behind would support them on the backward journey.

Added to this, it was to be a *direct* assault, wherein again the principle was right—the law of directness applying as much to the voyage as to the sledging afterwards. The Duke in this was fortunately able to profit by the researches of the British explorer, Frederick Jackson—whose presence at Cape Flora, as we have seen, proved such a blessing to Nansen some time before. Jackson, in the course of his researches, made some brilliant discoveries as concerning open water; and here it may be remarked that explorers have done more real service to their fellows by diligent work in the nearer regions than by any dashes for the Pole. That by the way—the desire for the great achievement was implanted



in the hearts of all, whether circumstances permitted them to try or not, and was entirely natural. Every mother's son among Polar explorers desired above all things to win the Poles for his country. It is only fair, however, to men like Jackson to place on record how very valuable their work was though carried out so much nearer home.

Jackson, then, had made two open-water discoveries ; one was that of a great free tract, named afterwards the British Channel, extending from the Franz Josef Islands into an open sea. The latter was named Queen Victoria Sea, in honour of the then reigning sovereign. Jackson's book, *A Thousand Days in the Arctic*, was published just a few weeks before the *Stella Polare* sailed, so that her commander had the advantage of working by the new chart.

On attempting to enter the British tract by way of Nightingale Channel, the ship was first held up by a fresh layer of ice, about 30 inches thick. This at length she contrived to break through, entering the newly discovered sea on 6th August. Little by little, in the days that followed, the party gained confidence in their vessel, for, despite her new name, the old *Jason* smashed a way through here as bravely as she ever broke up the floe-ice round Greenland. She even set up a record, for the Italians, with Captain Eversen's help, actually got her as far as  $82^{\circ} 5' \text{ N}$ . She was the first ship in the world to get as high north as that by water. The *Fram* had drifted higher, but upon the ice.

Now it was that the chapter of accidents began to occur, marring the fair promise of those opening months. Failing to find a good position in which to winter her, they turned the ship back to Table Bay. This bay seemed to afford better shelter, yet encroaching ice grew up round the vessel to alarming proportions. Soon, to unlooked-for pressure, this had



uprisen on one side to a miniature mountain. More pressure took place, and on 8th September the whole mass came down like an avalanche, so smashing one side of the vessel that the sea began to pour in.

It was a moment of terrible fears, the ship being trapped and her crew likewise helpless. Had the fracturing ice let her down she must have sunk at once, but instead of this the frozen turmoil next heaved up with a screwing movement and left the vessel lying on a great flat shelf. For the time being she was saved, yet no longer desirable for living in. The sailors, without loss of time, set to and erected a commodious shelter on the sounder part of the ice, with stoves for heating and cooking.

A boarding was fixed round this shelter, sailcloth being added overhead, while the occupants had bedcovers of wolf-skin stuffed with goose feathers; yet the cold of that first night under canvas was so fearful that even the men's boots were frozen. Nature, however, having reduced them to this sorrow, now came to their aid, and a heavy snowfall so covered up everything that the interior of the retreat became quite warm.

Settling down, Captain Cagni and his officers devoted time to scientific observations, while the others, among varied duties, constructed a roomy kennel for the dogs. The health bill remained good until in December the Duke went out on the ice with Captain Cagni to practise for the sledge-trip. Their hands of a sudden became white, and then black, being bitten by the frost, and this in the case of the Duke proved so bad that Dr. Cavalli was obliged to remove the tips of two fingers.

The Duke's health after this was much affected, yet he bravely refused to lie up, continuing to prepare for the sledge effort, which was to set out as soon as possible. Almost he



was too eager, for a first start made as early as February was thwarted by the temperature, this being so low that some of the dogs died and the party were forced to return.

A re-start was made on 11th March, consisting of thirteen men and thirteen sledges. It really did seem by now as if the chief of this expedition were determined to deal in ill omens and unlucky numbers! True, the number of dogs, 108, was reassuring, but even with all this hauling power only meagre advance was made. The state of the ice was described as terrible, great broken ridges extending across their course so that often they were obliged to cut a passage with axes. Abnormal labour was involved, and from the first day there were misgivings about food. The latter was disappearing at such a rate that it was presently determined to reduce the size of the band.

Here came the note of tragedy. Three men were sent back on 21st March, being Lieutenant Querini and two others, but, although supplied with ten days' food, this trio never arrived at the ship—indeed they were never seen again. Half a dozen others who were sent back some days later duly arrived at the vessel, being amazed to hear that the first three had not turned up. Search was of no avail; it can only be assumed that poor Querini and his companions perished in one of those treacherous canals, perhaps one just thinly coated over with ice.

The Polar party meanwhile, unaware of this tragic episode, were pushing upon their way—reduced now to four men. They were Captain Cagni, Fenouillet, and Petigas (both these latter being Alpine guides), and a seamen named Canapa—all Italians. They were heading straight for that line in which the *Fram* had once drifted, and at last, having overcome many adverse conditions, they succeeded in getting beyond it.



After passing the 85th degree, they found the ice lying before them in level fields. Here the sledges ran smoothly, affording a relief which compensated somewhat for the increasing rigours of cold.

They had come to a grievous pass, however, as regards food, and were existing almost solely on dog-flesh. The spirits of the party well survived the test, and occasionally they made a twenty-four hours' march with not a murmur to be heard. Nansen's mark was approached and passed; they now held the world's record, and hoped their powers would last them to the 87th degree. But Captain Cagni could not accept the responsibility of this; and on 24th April, when the pioneers had touched 86° 33' N., he elected they must turn back.

Next day they faced homeward, to receive a rude shock when they found that much of the ice-plain over which they came had broken up into drifting islands. This gave rise to yet another remarkable method of Arctic progress, for, embarking upon one of these ice-rafts, they actually rigged sails and endeavoured to direct its course. In this they did well, but were caught in the famous drift-current used by Nansen, which bore them seriously westward.

To cope with this at all they were continually obliged to adjust their course, till at last a day dawned when they were driven in towards Harley Island.

Some 44 degrees south of their true direction, they veered northward again, through Alexander Land—actually crossing channels on icebergs—till they came at length to Cape Brorock. Twelve hours later, travel-worn and spent, they arrived at Teplitz Bay, where happily the Duke and Cavalli were faithfully on the watch. All the sledges by this time were lost, and but seven dogs remained. The lives of the gallant four were thus saved at about the last moment. The



sledge journey towards the Pole had taken forty-five days, while about sixty days were occupied in coming back, the total distance covered being some 750 miles.

The expedition, beyond doubt, was brave to achieve what it did in face of disaster. It went out provisioned for a stay of at least three years, but the damage done to the ship called upon the members to compress all their efforts into one season. This, and the perils of the way, made a programme so excellent in theory fall short in practice, especially as regards sledge rations and support depots. Always, throughout their sledge advance on the Pole, there was the memory of a ship, battered and helpless, lying shelved on the pack-ice behind—a ship that might never sail again.

The vessel's carpenters, however, during the Polar party's absence, had been labouring to make the *Stella Polare* in some part seaworthy. On 8th August she was afloat, and clear of the ice, but she was no fit vessel to face again the pitiless attacks of winter in these ice-ridden seas. A depot was formed in the bay, with stores sufficient for two years, in case any of their missing comrades still survived and were able to reach it, after which they steamed for the British Channel.

Hazards were not yet past, for the mouth of the Channel was found to be blocked, and after a terrible fortnight amid icebergs, often so closely threatened that they quitted the ship for small boats, the expedition drew through at last to open water.

On 31st August they reached Jackson's old quarters at Cape Flora, and were spared without further mishap to make Christiania in due course. Here they received a most hospitable welcome, being warmly admired for the manner in which they had tried to rise above misfortune.

"They have surpassed every expectation," was Nansen's



generous tribute. "They have gone through a region where man had never been ; they have succeeded in determining the most northern boundaries of Europe." On meeting the expedition he greeted its members with enthusiasm. "You are continuing the great traditions of Polo and Columbus," declared he. "You, the sons of the Land of the Sun, have gone farther north than any northerner as yet."



## CHAPTER VI

### PEARY'S OPENING ADVENTURES

MANY years elapsed after the return of the Italian Expedition before any further march was made upon the North Pole. During most of that period, however, a very active man was at work in the person of Robert E. Peary. It will benefit our object if we get to know exactly the kind of man he was, and how he attained his high rank among Arctic explorers.

Peary, a civil engineer in the U.S.A. Navy, was a wiry, alert man with determined eyes and shrewd features, the firm set of his mouth being partly hidden behind a full moustache. Peary, as recorded earlier, had spent a brief summer holiday in Greenland; indeed, it was his gratifying results from "sailing" on the inland ice that determined Nansen to adopt that idea for himself. Greenland was then so little known that explorers remained in doubt as to whether it were an island at all, or really the lower projection of a vast northern continent, extending perhaps, as many imagined, right up to the Pole.

So Peary, in 1891, sailed for Greenland with the firm intention of settling this point, meeting with an accident on board ship which will afford a first glimpse of the man's character. While his ship, the *Kite*, was ploughing a path



through the floes, a fragment of ice, by jamming her rudder, threw the helm suddenly backward. One of the spokes, before Peary could jump aside, had gripped his leg against the case-ment, the enormous pressure being such that the limb was broken before it could be got out.

His friends, of course, urged him to give up and return to America, but he was one who abhorred being baulked of his set plan. The people at home, he averred, had put so much of their capital into this trip that he must keep faith with them somehow. He ordered his men to land him as arranged at M'Cormick Bay, and here, thanks to the nursing of his wife, and to his own constitution allied to a strong will, he made a full recovery. Indeed, when Christmas came and there were festive sports, he outstripped all the Eskimos, and his own men into the bargain, by racing them on snow-shoes !

Adhering to his plan, Peary set out in May with one companion, a young Norwegian named Astrup, and these two scaled the crest of the inland ice, pressing northward through temperatures varying from  $10^{\circ}$  to  $50^{\circ}$  below zero. It was a journey of 500 miles, turning up to a beautiful coast-line ; and here, to their amazement, a fertile valley opened beneath their feet, full of homely wild flowers, yellow poppies and dandelion, with bees buzzing among the blooms and musk-oxen grazing beyond.

Here, on July 4, 1892, Independence Bay was discovered and named ; but the entire work Peary had in mind was not completed till three years later. He then exceeded Nansen's feat by crossing the inland ice at its very broadest part, thereby completing the map and proving Greenland to be an island. Incidentally, his own grit and stamina as an explorer was established by the same act.

In 1898 Peary began to think of tackling the North Pole,





COMMANDER PEARY

A photograph taken during his visit to the British Isles  
*(Photo, E. H. Mills, London)*







and here his Greenland experience proved to be of great value. He had conceived quite a new idea as to Polar attack, being convinced that the right way was to adopt the food, clothing, snow-houses, and general methods of the Eskimos. After all, they were the natives of the Arctic Circle, and a knack of withstanding Arctic cold was bred in them. Clearly they were a people who, had they the knowledge and instinct, might have conquered the North Pole years ago.

So Peary, to all intents and purposes, became an Eskimo, learning of these simple folk how best to rise above the torturing trials of cold and darkness; and we shall presently see what a harsh taste he had of these conditions. He wished to take up what was now known as the American route to the Pole, following in the footsteps of Greely. This approach to the North had been less developed of late, so that, beyond Lockwood's  $83^{\circ} 24'$ , the new explorer would be breaking a virgin trail. A certain element of rivalry was introduced by the fact that Otto Sverdrup, making a second voyage in the *Fram*, was to operate in this same locality.

Peary, undeterred, set himself to explore the neighbourhood of the Kane Basin, having previously accepted use of the *Windward*, Jackson's steamship, which had been generously re-engined by her British owner, Mr. Harmsworth.

Encamped at Cape Fraser, Peary decided to continue a chain of igloos—the hive-shaped snow-hut of the Eskimos—all the way to Fort Conger, and move up stores there. The Fort had been Greely's old base for assailing the North Pole, and was now favoured by Peary. Leaving Cape Lawrence with men, dogs, and light sledges, on 29th December, he hoped to do the reconnaissance journey to Fort Conger in five days, little guessing what actually lay in store. His idea was to travel over the ice-foot, a name given to the banks of ice that



skirt the Arctic shores, and more exactly applying to the fringe-ice formed by the spray.

This ice-foot, moderately good at first, grew tortuous and uneven, till even the light sledges would scarcely run over it. Serious delays occurred, and this, remember, was still the period of the Arctic winter, so the men were travelling by moonlight. In this faint glow it was thought too risky for them to venture out upon the sea-ice, which was sown with death-traps of one sort and another. Rations rapidly diminished; all their biscuit was gone, and, just north of Cape Defosse, they ate the last of their beans.

To render matters more desperate, a blinding snowstorm, blowing down-channel during their next march, so numbed one of the men that Peary was obliged to halt near Cape Cracroft and dig a snow-cave in the drift. There the man was left behind, with another for company, and nine dogs, while Peary, directly the storm abated, led the rest of his sledge-train doggedly onward. The moon waned; they were left in almost total darkness, and the ice-foot became impassable. They were, in fact, completely stopped.

Imagine the plight of that moment, there in the freezing night, with only a pace dimly visible ahead, and all food save dog-flesh exhausted. Whatever direction they took, they were in for the grimmest struggle, so they stumbled on to the broken sea-ice and pushed along to Cape Baird. Here the hungry band snatched a few hours' sleep in a snow-burrow before heading on northward across Lady Franklin Bay. "In complete darkness," says the leader, "and over a chaos of broken and heaved-up ice, we stumbled and fell and groped for eighteen hours, till we climbed upon the ice-foot of the north side."

By this time, as can be understood, those men were alto-



gether famished, and a dog had to be killed for food—there was not a crumb of anything else. They were, however, able to brew some tea of sorts, though there was no snow of the kind to build an igloo, so they sought shelter under a shelf of ice. The group soon grew so deadly cold that they forced their jaded limbs to carry on, leaving behind them several exhausted dogs as well as a damaged sledge. East of them a gigantic floe had been thrown ashore so as to block the ice-foot completely, and they were able to make a passage only by squeezing through one of the cracks. Rounding the point, they arrived at Discovery Harbour, but hours of painful stumbling went on before they located themselves exactly. On 6th January, at midnight, the heroic party gained Fort Conger, being then at the point of collapse.

They managed, by light of their sledge-cooker, to discover a stove in the officers' room, and here their failing powers were just sufficient to set a fire going. Some hard biscuit was found in the men's quarters as well as coffee, these having lain here since Greely's occupation—for over fifteen years. Never had frugal fare proved more welcome. Another fumbling hunt went unrewarded as regards lamps, oil, or candles, nor did matches turn up, so the newcomers were obliged to act promptly, before their present light expired. Some olive oil in a saucer, with a bit of towel for wick, formed a makeshift lamp; this, kept going with lard and pork fat, served till oil was discovered among the old stores several days later.

The temperature during their awesome march had fallen as low as  $-63^{\circ}$  F., and Peary, on struggling into the Fort, had experienced what he called a "wooden feeling" in his toes. On having his kamicks off, he perceived that both feet had been bitten by the frost. This did not prevent him from sleeping off his exhaustion; but when next he awoke he knew



he was in for the serious trouble which follows a bad case of frost-bite.

It was typical of the man that, though scarcely able to move, he continued to direct operations. The Eskimos worked finely; plenty of stores were eventually routed out, while old barrels and cases were split up for the fire. Essays were also made to bring in the two men left at Cape Cracroft, but these sortics were foiled by the dreadful winds now raging, and by the impenetrable darkness. When at length the seekers did succeed in reaching the snow-burrow, it was only to find that the couple left there had started back for the ship.

Peary's feet, meanwhile, remained unhealed, so that he was barely able to stand. It must have tried all his courage, thus ill and besieged by the Arctic winter, to have borne up as he did. He was sensible of the pitiless wastes by which he was surrounded; hereabouts Franklin had adventured, with one hundred and thirty-eight followers, all of whom had perished, while twenty-five men under Greely, wandering from this very base, had been so punished by want and cold that only six had lived to see the sun come back. The racking cold of the long black Arctic night always took its toll; in view of which we cannot help remarking that those expeditions were the wisest whose members, being provided for, were content to remain within doors till the winter was past. It must be added that in most cases of misadventure there had been reasons compelling the victims to go out.

The moon on 18th February afforded light enough for an attempt to be made to quit Fort Conger and get back to the ship. The dozen dogs now remaining were in such a woefully starved condition that they could not pull a heavy load. Peary himself was, of course, bound to ride, and he was lashed



down to a sledge, his lower limbs swathed in the skin of a musk-ox. The distance, some 250 miles, was accomplished in eleven days. They encountered fierce winds and driving snow, but made the *Windward* on the 28th, where the invalid received full attention.

Meanwhile, Peary's other Eskimos had struck up an acquaintance with the men of the *Fram*, so the two expeditions were brought somewhat in touch. It should be remarked that Sverdrup's voyage, fitted out by private Norwegian enterprise, was designed to work north up the western coast of Smith Sound, but to make no attempt on the Pole. The latter was a clear condition; beyond that, Sverdrup was given free scope to do what was best in the geographical cause by scientific survey, and by the mapping of new land. It may be said at once that this veteran pioneer, while endeavouring not to clash with Peary, did some very solid work.

Sverdrup's long experience stood him in good stead, and every precaution was taken against cold, though the frigid bite that had laid Peary low was evidenced here as well. Sverdrup's men at the time had been out on the moonlit ice, and the sudden cold was so intense that they wriggled into their sleeping-bags without doffing their outdoor furs. One man was in agonies from the weather, and, on looking for the reason, they found that the moisture from his body had formed a white frost beneath wool jersey and thick furs. He found relief only when his mates put a hot stove close up to the skin.

A minute's exposure now was often enough to prove fatal, yet even extreme cold has its vagaries, as may be shown by another incident. Several attempts were made by Sverdrup's people to determine the site of Greely's camp on Pim Island; and during February a couple of men set out upon this quest



—taking no rations, for they did not propose to be long away. Success rewarded their effort ; at all events, they espied some dragged parts of sailcloth and various cordage on the northern side of the island, and were led to believe they had found the spot they sought. Perhaps the glow of the hunt had so far counteracted the cold, inducing them also to go beyond their strength ; at any rate, one of them suddenly collapsed and became half-insensible.

His companion lifted him, trying to make him stand, but the other remained a dead weight, and was too heavy a bulk for one to carry. His friend was in a grave dilemma, uncertain whether to remain in the hope of rousing him presently, or whether to rush back to the ship for help. Choosing the latter plan, he raced to the *Fram* as fast as he possibly could.

Food and wraps were immediately packed on a sledge, and the latter, drawn by dogs, was got speedily off to the rescue. So much concern was felt that every one turned out, though with small hope of saving the man. Indeed, the dread in their minds was that he would be found lying frozen, already far past their aid. Such, however, was not the case ; the unlucky fellow, though incapable of movement, was found to be still alive. Having got him into a sleeping-bag, they whipped up the dogs and drove back in record time, despite the bumpy surface of the ice. Tucking the patient into his berth, they gave him warming cordials, with most gratifying result. The patient sank into a natural sleep and awoke thoroughly refreshed. Almost it ranked as a miracle, for the man survived without even a hint of frost-bite.

Peary—to return now to the *Windward*—was far less fortunate. His misgivings proved only too accurate, and seven of the toes bitten by the frost had to be removed. This virile man was reduced to the most irksome fate of all, having



to lie still—after which came a long spell of walking on crutches. Still, that summer of 1899 was in no sense wasted ; considerable work of surveying was accomplished, while a chain of *caches* were set up from Cape Sabine to Fort Conger, the whole being stocked with 14 tons of supplies. Plenty of Polar game was obtainable—musk-ox, bear, walrus, and oogsook, the latter being a species of bearded seal. Caribou were taken later, and one of these, being a variety of the animal quite new to science, was named the *Rangifer Pearyi*, after its discoverer.

In the summer of 1900, having lived down misfortune—his feet now trained to serve under their new conditions—Peary conducted a fine march eastward to Wyckoff Island ; but it was not until the spring of 1902 that he made a definite bid for the North. After heavy going and deep snow, being sometimes held up by furious weather, they made Cape Hecla on 6th April. Here the sledges were turned due northward, driving across the ice-foot and dizzily down on to the rough pack-ice, their fore-parts half-buried, the dog-teams slithering in drifts of snow.

The ice-hummocks encountered soon after were of such a formidable character that it was found better to go even a mile round than to attempt a crossing ; and this was succeeded by floe-ice so blanketed by snow that the dogs were always floundering. Now a sledge would disappear entirely down a hole, round which the snow had to be stamped underfoot in order to make a hard surface over which to drag it out. Sometimes the members were obliged to hoist their sledges bodily, or double back, or else create a trail with ice-axe and snow-shoe. The dogs at the end of that day were almost dead with fatigue ; they dropped limp the moment the whips stopped cracking.



The ensuing days were as bad, and sometimes worse, while on the 12th our friends were held storm-bound by a westerly gale, dogs and sledges being clouded out by the whirling snow. For shelter, an igloo had been rapidly built, and as the party lay huddled within they could hear the old floe-ice beneath them go off with sullen reports, rumbling like thunder as it gave to the unseen forces.

No sooner were the explorers again under way before a lead—that is, a lengthwise, water-filled gap in the ice—blocked their course. The film of young ice upon it was too fragile even for a dog to cross, so the sledge-train was deflected eastward, till hummocky ice-walls checked matters there. The only thing was to pitch camp and wait for some of the long channel to freeze solidly over. At length, however, on the 14th, the lead was seen closing up, so sledges were hurriedly packed and driven across.

From this point, however, the hazards were unremitting. The alternate openings and closings of the Big Lead—as it was now called—had created a field of rubble-ice which uprose in wavelike ridges, with deep snow spreading over all. Somehow the explorers struggled through, only to find old floes beyond just sluggishly adrift. For days, through storm and fog, they worried on over such ice as this, with frequent waits in the searching cold till some floating blocks should wedge up for them to scramble over.

Soon they hoped to escape this zone, and faith buoyed them along, yet ever were they disappointed, for progress brought no relief. Peary at length was forced to surrender; ahead, northward, he could still hear the vast ice-blocks crashing together, and indeed there was evidence of the whole pack being slowly adrift. To move now, as often as not, meant sinking waist-deep into the snow and crumbled fragments.



“The game is off,” wrote Peary in his journal. “My dream of sixteen years is ended. I have made the best fight I knew ; I believe it has been a good one. But I cannot accomplish the impossible.”

Thus concluded Peary’s first bid for the laurels of the grim North ; on the morrow he and his comrades turned their faces towards home.



## CHAPTER VII

### BEYOND THE BIG LEAD

PEARY had fallen very short of the North Pole, yet it must be remembered that during his sojourn up there in the ice-world he had explored and charted hundreds of miles, both of coast-line and islands, besides giving new evidence of his personal worth in adversity. His supporters at home, during his absence, had formed themselves into the Peary Arctic Club, an organization which proved a valuable driving power. Being assured of his wish to make a further attack on the Pole, their concern was to furnish him with a brand-new ship—for Peary, in face of all denial, believed that a well-found vessel could be forced through channel-ice to the north shore of Grant Land almost any year.

The various features of earlier Polar vessels were borne carefully in mind, with special regard for the famous *Fram*. It was remarked, however, that the *Fram*, while triumphant in her powers of rising above ice, had not been especially strong as regards smashing her way through it. She had, in short, been purposely designed as a "drift vessel," but Charles B. Dix, the present builder, was to aim at all-round qualities.

The result was the *Roosevelt*, a vessel of oak and yellow pine, with the customary "ice-sheathing" of greenheart wood, having a length of 184 feet over all, by a 35 feet beam. For



ramming ice, she had a sharply raking prow, steel-sheathed; the stern was iron-plated, with a rudder-post specially strong, and the rudder itself capable of being hoisted out of danger when big ice threatened to smash it. As a further provision against ice pressure the sides of the vessel were reinforced by massive deck-beams fitted close together, with a lower tier below the water-line, forming, with steel rods, a strong truss along the entire length of the vessel. The *Roosevelt's* engines, which were able to develop 1,000 horse-power, drove a single 11-foot propeller. She was also rigged for sailing as a three-masted schooner. Her draught was light, for, in order to evade the big ice, she would need to use shallow waters along the coast-line.

Everything within the ship was designed for utility, with such abundant space that the usual deck litter associated with Polar departures was quite avoided. Every soul aboard slept in cabins above deck, the furnishing being very simple. Peary's own cabin, by the gift of friends, could boast of just two or three luxuries—a pianola, a warm brown rug from his wife, and an easy wicker chair sent in by Morris K. Jesup, the chief founder of the venture. There were, of course, some shelves of Arctic books and other works of reference.

The skipper of the *Roosevelt*, Captain Robert A. Bartlett, was British, a fine type of man, springing from a family of Newfoundland settlers all of whom had been ice navigators. The mate was also a Bartlett, another of the blood; Dr. Louie Wolf being surgeon to the expedition, with Ross G. Marvin as secretary and Matthew Henson as Peary's personal attendant. Henson, a coloured native from Columbia, had been a trusty henchman on all Peary's trips, and was destined to share in great future triumphs.

Sailing from New York on July 16, 1905, the *Roosevelt*



touched in at Bar Harbour to receive Morris Jesup's farewell ; she then coaled up at North Sydney, carrying now 500 tons—and so away. Early in August she was entering the chill region of drifting bergs, and visits were paid to now familiar settlements. Some of his natives Peary took aboard, warning others to be on the move, being glad to find the Eskimos in a prosperous state, with plenty of skins for clothing, droves of dogs, and large stores of meat. As a result they were good-tempered and willing to obey.

This augured well, and the ship, on leaving Etah soon after midnight on 16th August, had over fifty natives—men, women, children, with all their possessions—on board ; two hundred sledge-dogs, her own crew of twenty, 450 tons of coal, several tons of walrus meat, besides general equipment and stores. So weighted was she that her plank sheer was almost to the water. And in this condition she entered the first heavy pack-ice of Smith Sound !

Captain Bartlett had his misgivings, for it is the quality of caution combined with grit which make these sealing-masters the sure sailors they are. Peary, however, anxious to prove the ship, accepted all responsibility, and she was put to it. Suffice that the *Roosevelt* exceeded all hopes, for, despite heavy lading, she charged at the ice with scarcely a tremor, either splitting it through, or hurling it strongly aside. She was nimble, too, and likened to a whaleboat for the ready way in which she curved and nosed her course through the erratic channels.

Bartlett was altogether delighted, while to Peary was added that thrall which drew closer round him with every northward mile. He felt this most strongly when they made the Bache Peninsula, having chosen a bight south of Victoria Head for his sub-base.



“Up to this time,” wrote Peary, referring to his interval ashore, “the rush of getting on board my Eskimos and dogs, restowing the ship and fighting the ice, had left me no thought beyond the demands of each hour. Now, as I trod the moss-patches beside the murmuring stream, whose quieter reaches were clustered with ice ; saw the fresh tracks of big game, and a little later the shaggy black bulks of the musk-oxen—with heads lowered and hoofs stamping in the way I knew so well—my pulses bounded rapidly and I felt that I had come into my own again ! ”

Work of landing this depot occupied ten hours, during which Peary took his gun and went to a valley he knew with some of his natives, securing three musk-oxen—a cow, a bull, and a yearling. Thus, with nearly 800 lbs. of fresh beef added, the *Roosevelt* steamed on. Soon, before a fierce northerly wind, the great ice masses were seen rolling and crashing in fury against the bulwark bluff of Cape John Sparrow—a very terrible sight to behold, for no ship conceivable by man could have survived that thundering chaos once she became enclosed.

As it was, while breaking her way through ice beyond Cape Lupton, the *Roosevelt* fell victim to a madly rushing current peculiar to this channel, and a jumble of big ice, spinning on her stern with enormous force, heaved the vessel aslant and crushed her against the vertical ice-foot. She scraped along the latter with a grating noise, as though her sheathing would be stripped off, but luckily ere this could happen she found a hollow in the ice-wall and there lodged. Lines were seized with all haste and the vessel was made secure.

Examination showed that the rudder had suffered ; the iron head-bands were damaged, and the tiller-rods of steel had given way. Patched up for the moment, she was got round Cape Sumner to a surer anchorage in Newman Bay, and there



she remained for five days while her capable hands repaired the trouble. During this halt the bay filled up heavily with ice, so it was now a question of how to escape. The skipper and Marvin made several ascents of Cape Sumner to peer for some passage out, but they always returned with a shake of the head. On the 28th, however, just as matters looked really grave, a turn of the tide suddenly set the ship free.

There was no hesitation now, not even on the part of the steady Bartlett; those five days of unlooked-for idleness had irked them all—had become hardly endurable. Out beyond was the channel pack through which they must needs smash if they still hoped to win north, so the ship, whether weakened or not, was steered head on to the work.

*Thud!*—a momentary nip between two great floes set the ship quivering in all her length, but she nobly arose from the pressure and plunged upon her way. The scheme was to drive her across to the west side, and soon she was in the thick of it, with ice piling so high that her deck-house davits had to be swung inboard to save the boats from destruction.

It was an epic encounter. “*The Roosevelt*,” declared Peary, “fought like a gladiator, turning, twisting, straining with all her force, smashing her full weight against the heavy floes whenever we could get room for a rush, and rearing upon them like a steeplechaser taking a fence. Ah! the thrill and the tension of it, the lust of battle, which crowded days of ordinary life into one. The forward rush, the gathering speed and momentum, the crash, the upward heave, the grating snarl of the ice as the steel-shod stem split it as a mason’s hammer splits granite, or trod it under, or sent it right and left in whirling fragments, followed by the violent roll, the backward rebound, and then the gathering for another rush, were glorious!”



How vividly these words depict the tensivity of it all, the vibrant motion, the strong, responsive thrill in the hearts of those who went through it.

"At other times," added Peary, "the blue face of a big floe as high as the plank sheer would be grinding against either side, and the ship inching her way through, her frames creaking with the pressure, the big engines down aft running like sewing-machines, and the 12-inch steel shaft whirling the wide-bladed propeller till its impulse was no more to be denied than the force of gravity. At such times every one on deck hung with breathless interest on our movement, and as Bartlett and I clung in the rigging I heard him whisper through teeth clenched: 'Give it to 'em, Teddy; give it to 'em!'"

And "Teddy"—meaning, of course, the *Roosevelt*—gave it to such purpose that every peril and hindrance was finally overcome. It was a combat into the spirit of which every one on board entered with zest. A fireman, emerging from the stokehole for a breath of air, would glance at the floe-ice and growl to himself, "By gosh, she's got to go through!" Then down he would dive to his job, while anon the funnel would cough new smoke and the screw would acquire new vigour.

To the very last, however, the fight had to be maintained with ready vigilance, and once they were driven back a stage in order to elude looser floes that were cruising southward at irresistible speed. In Wrangel Bay came another mishap which required a whole night of work to repair, and after that they were forging along through alternate fog and biting snow-storm. But Cape Sheridan was made at last, and Peary tasted triumph. The ship was berthed up to the ice-foot, the floes packing jealously around her even before the cables were fastened. But she had travelled farther north under her own



power than any other vessel, beating even the old *Jason*, that redoubtable sealing-boat.

Autumn was a busy time for all, hunting-parties being sent out to increase the store of meat. Reindeer and musk-ox were secured in great number, while salmon-trout were obtained by fishing through holes made in the frozen face of Lake Hazen. The cases of stores, being landed, were built up by the crew into three novel box-houses, one of these being roofed with sail to provide an immediate shelter should accident befall the ship. Boats also were turned keel up, and casks lined along to provide kennels for the dogs. Everything, of course, was soon banked over by snow—and so fell the long winter darkness.

Even through the Great Night the settlement was kept busy; harnesses, traces, tents, and fur garments were made, the Eskimo women being most diligent with their needles. More sledges were built; pemmican was done up into handy packages under direction of the mate, and each packet numbered. The plan in Peary's mind this time was to take men, dogs, and material enough to form seven parties. Six of these would march in support of the main team, and the latter would not make its "dash" for the Pole till supplies had been advanced up to about the 86th degree.

Cape Sheridan was quitted in the middle of February, Cape Hecla being reached in a series of marches. The encampment here was comprised of the leader, Captain Bartlett, Dr. Wolf, Henson, Marvin, two seamen, Clarke and Ryan, twenty-one Eskimos, and one hundred and twenty dogs. In the teeth of piercing winds and in separate parties they all pushed on to Point Moss, from which the start due north was actually made.

Peary under the present scheme, instead of being quite



at the forefront, was actually the last to leave, for at this stage he had to form a rearguard in order to be sure that all were ever on the move. Having established his first *cache*, he reasoned, and seen it stocked with provisions, he would have that much the less to think of; and so on from stage to stage, till at length he would be free to make his dash.

The going, moderate at first, became increasingly arduous, especially in view of the enormous loads. The ice was in constant motion, often faulting the trail of those in front; but on the 9th, in a savage north-west wind, Peary met Bartlett returning from the first *cache*. At this depot, on the 11th, Peary overtook Dr. Wolf and Clarke, then Marvin and Henson. Henson being the vanguard, his sledges were re-provisioned to their utmost and he was sent on, while others were turned back to Hecla to haul up more supplies.

All this, as may be imagined, taxed Peary's powers to the utmost, both brain and body being absorbed in a greater effort than he had ever made before. "It is aggravating," he wrote in his journal, "not to be travelling faster, and it is not pleasant to be at the rear attending to loose ends; but I have the consolation of knowing that my advance parties are, or ought to be, a good way in front, and that before long I shall be in my proper place at the very head of the line, breasting the air that comes direct from the Pole."

So the struggle went on, some teams going, others coming, the whole character of the attempt being unlike the last. Peary was on tenterhooks all the while, his forceful nature rebelling against these bit-by-bit methods of which common sense, however, seemed to approve. He was also harassed by open leads of water, in avoiding which the sledge-trains had to zig-zag all the way, till at length they came to that Big Lead which had caused their undoing four years ago.



Delays in fording here were a severe drain on strength and patience; but at last the leading teams were going again in some sort of order, with the trusty Henson still breaking trail. Snow squalls arose from north and west, with intermittent calms, and then head-winds from the north carrying thick drift to their bent forms as they butted stubbornly along. The strain to the eyes was even worse for the teams behind, for the leading trail was so rapidly covered. At last Henson was found encamped by a newly made igloo. "Too thick to travel," was his report; besides which the natives with him were in a very uneasy state—upset, in fact, by the daunting weather and by the wild solitudes into which they were now marching.

Peary had another igloo built here, hoping the sun might come to his rescue; but instead of clearing the air grew denser, with snow that bit and hissed on the wind. The ice-pack, with a noise of artillery, was fracturing all round; great leads opening up for some hours, then closing together with glassy snaps at the turning heave of the deep-down tide. Henson's igloo was split clearly in half, luckily without injuring any one.

On the 7th the sun broke through, but the gale did not lessen, so that the blinding snow-drift continued unabated. The whole ice-pack showed a movement eastward, a motion, Peary believed, which would tend to open wider the Big Lead behind. If so, were Ross Marvin and Clarke, who should be coming in support, safely across?—or were they baulked by a vast channel of brine? Almost everything now depended on their arrival, for one way and another nearly a fortnight had been lost in delays.

Six days now had the storm raged, and Peary, to relieve his own fretting mind, went out and battled, pushing and



bending against the wind, nearly creeping at whiles on hands and knees. He returned to Storm Camp convinced. "To face that gale," he admitted, "would quickly wear out the strongest man living, even if it were possible to expose the face directly for more than an instant to the cutting drift."

Just after midnight the howl of the weather lulled, and Henson was immediately set onward with a couple of Eskimos, while two others were ordered back to gather tidings of Marvin and to hurry up supplies. Twenty-four hours later these two returned to report being stopped by open water. They had seen no sign of Marvin's party, and Peary realized the time had come for him to clench his teeth. He was now cut off from all rear support; whatever was done would have to be accomplished by the stores already forward. Everything was abandoned that was not quite needed, and early next morning Peary settled for speed. The floes, luckily, had been swept of snow by the wind; over these he led a march of ten hours that covered between 30 and 40 miles, finishing dead tired and with badly blistered feet.

Next day he was off betimes, overtaking the Henson party, which promptly tailed on behind. Though half a gale developed from due east, with murky weather ahead, no slackening was permitted. Another 30 miles were accounted for, but at the next camp the storm was howling with renewed violence. Worse even than this, the dogs were breaking down, half a dozen being quite worn out. There was no help for it; these six had to be killed and fed to the others, for dog-pemmican was all but exhausted. Such desperate measures had a panic effect on the Eskimos. The dogs remaining, they argued, might fail at any moment, and so leave every one stranded on this bare desert of storm-swept ice. They clamoured to return at once.



Peary, however, asserted his will, and said there should be no thought of surrender till at least five more marches had been made to the North. Thereupon he forged ahead, cutting out the virgin trail and developing a rate that was almost breathless. Rations dwindled, while the dogs, unable to stay the pace, dropped dead one by one. It is eloquent of Peary's power over his men that they followed him out to the last grinding sprint, past Nansen's record, past Cagni's, and so up to 87° 6' N.—the farthest north yet. Every one and everything had now been tried to the utmost; even Peary knew he must demand no more. This, by comparison, was a moment of victory, yet Peary was galled to the soul.

"I felt," he afterwards declared, "that the mere beating of the record was but an empty bauble compared with the splendid jewel on which I had set my heart for years, and for which, on this expedition, I had almost literally been straining my life out."

His was an eagerness hard to quell, but the killing sense of exhaustion, the grey, haggard looks of his men, the starved thinness of the few dogs, and the almost empty sledges—all this forced a surrender. Also, he must not forget the dread problems of the ice behind.

Having run up flags on the highest hummock, with a bottle containing a record *cached* near by, Peary turned his depleted team about and set back for their last igloo. A full sleep of several hours was permitted here, after which came the memorable struggle back—a struggle as heroic and even more exhausting than the march out. They reached Storm Camp more dead than alive, after which came pressure ridges and such broken lumber of piled ice that even Peary had never seen anything quite so bad.

The crawling stumble over this, by all physical laws



should have proved the last straw, but man's endurance is immeasurable. Beyond, shaken and bruised, they came upon the frozen scar of the Big Lead, but its closing together here only meant another half-mile gap at a distance farther south. A bridge of half-congealed rubble-ice was located, treacherous withal, a ticklish crossing being made at length on snow-shoes.

Peary was now leading a bee-line for Greenland, having decided that the game existing there in abundance was a surer and quicker means of food than the igloos at the base. At long last—it was literally a race with famine—the snow-clad peaks of Greenland were sighted, and our beaten party crept up the ice-foot at Cape Neumeyer. Within the hour, by some kind fate, four hares were shot, and devoured just as they were. Reduced as this band had been to an appalling state of hunger, others fared even worse, for sledge-tracks presently led to the discovery of Clarke and three Eskimos. These, divided from Marvin, had lost all sense of direction, and had wandered thither by mistaking it for the coast of Grant Land. For several days these poor fellows had kept themselves alive by gnawing a pair of sealskin boots.

Lucky for them and for all that Peary was now at the head, and he led them by stages around the Greenland coast, shooting musk-oxen enough to keep them in food until they had crossed to Cape Union. Here it was that an Eskimo exclaimed, "*Tigerahshua keesha koyonni!*" which literally meant, "We have arrived at last, thank God!" The sun was shining beautifully, on a midnight in May, when the frayed and grimy band climbed on board the *Roosevelt*.

Captain Bartlett and the doctor, Peary learned, were still faithfully at work north of Hecla sledging out stores to the igloos, while Marvin and Ryan, with some Eskimos, had de-



parted towards the Greenland shores in hope of locating Clarke. Peary at once wrote a note to the captain, sending another messenger post-haste to recall Marvin. A bath followed, with a sweet and blessed change of clothes.

“After that,” records Peary, “my dinner, a real dinner, with real food such as civilized men eat; and then to my blankets and to sleep, unmindful of the morrow.”



## CHAPTER VIII

### GOOD HUNTING IN GRANT LAND

PEARY has been called the most persistent of all Arctic explorers, and never has a title been more thoroughly earned. Certainly, with him, no element of chance ever entered in; all that he ever won throughout his long career was gained by stringent toil and by iron sacrifice. Always he persisted; no matter how heavy the odds, no matter what the previous toll, there was that in the man's fibre which compelled him to strive again.

On July 6, 1908, Peary sailed once more from New York in the *Roosevelt* to make his third assail on the North Pole. Robert A. Bartlett—or "Captain Bob," as he was known to comrades—was once more the skipper, and, in view of the premier part he was now to play, it will be of interest to quote Peary's own description of this man. "Blue-eyed, brown-haired, stocky, and steel-muscled, Bartlett, whether at the wheel of the *Roosevelt* hammering a passage through the floes, or tramping and stumbling over the ice-pack with the sledges, or smoothing away the troubles of the crew, was always the same—tireless, faithful, enthusiastic, true as a compass."

All the other principals signed on, with the exception of Dr. Wolf. He during the interval had been called to other duties, his place being taken by Dr. J. W. Goodsell. Besides Ross Marvin, Peary now had two other personal assistants ;



a young Scotsman, Donald MacMillan, and a young railway engineer, George Borup; while that indispensable negro, Matt Henson, was there as a matter of course.

Following her old route, via Sydney, C.B., Strait of Belle Isle, Davis Strait, Baffin Bay, and Smith Sound, the *Roosevelt* bored or battered her way up the channel ice till once again Captain Bartlett had conquered and his ship was berthed at Cape Sheridan, the gateway to the Pole.

Winter quarters were briskly established, all this coming the easier now from old experience; but one cause for anxiety was the scarceness of all game and of musk-oxen in particular. Char—a fine mottled fish, very sweet to the palate—was being caught in quantity from Lake Hazen, not by the rod-and-line method, for these fish refused to bite, but by a novel means of the Eskimos' own. Pieces of ivory, carved to the resemblance of tiny fish, would be dropped into the water-holes, and the char, rising greedily to this lure, would be promptly speared by the skilful native.

Peary, however, who ascribed his last failure more to food trouble than to anything else, was making that his foremost line of thought. He meant this time to ensure plenty of rations, all calculated to the last pound in relation to distance and hauling-power. Experience taught him that the simple essentials for a long sledge-trip were pemmican, biscuits, tea, and condensed milk. Till the supreme moment, therefore—months ahead as yet—such stores as these must not be even touched, so fresh meat must somehow be got to keep them going until the spring.

Accordingly, on 1st October, he left the vessel with three of his Eskimos—Egingwah, Koolatoonah, and Ooblooyah, to give them their picturesque names. With three sledges carrying bare supplies, each drawn by a team of ten dogs, this



small party took trail towards Porter Bay, 35 miles distant, and slept there under canvas.

Up early next morning, they veered landward across the five-mile isthmus to the head of James Ross Bay. As yet not a stir of game had been sighted, though this was the hunting region, and Peary feared that too many visits from mankind had frightened all bigger creatures to more distant haunts. It was a galling reflection; for a well-stocked "larder" for the winter was the keystone of all his plans. Never, perhaps, had he led a foray with greater keenness, while the dogs, working in good weather and on wholesome food, were the last word in alertness—straining at their traces and live for anything. It was Egingwah's sharp eyesight that first detected a moving spot on the hillside.

"*Tooktoo!*" cried he, bringing every one to a standstill. The animal sighted was a buck reindeer; Egingwah and Ooblooyah, both young and swift, only awaited the word "Go!"—on receiving which they snatched a couple of 40-82 Winchesters and were off like deer themselves, uttering as they approached their game a peculiar sibilant hiss, cat-like but more drawn-out—a magic call taught to every Eskimo as part of his education. Magical was its effect, for the buck abruptly stopped and swung round, standing a sure mark for the rifles, which brought him down with the first double crack. That report also started the sledge-teams, for these dogs, owing to their wolf-blood, are fiercely imbued with the spirit of the chase. Next moment they were dashing off across the snow and crags, whirring the sledges behind them as though they had no weight at all. Quietly, however, they waited beside the "kill" till the splendid buck, with its snowy coat and spreading antlers, was skinned and dressed—the meat being *cached*, and the pelt put on a sledge.



That night, encamping near the Parry Peninsula, the hunters partook of deer-steak for supper; a goodly meal—though maybe marred a little for Peary by the fact that no spoor had yet been found to suggest the presence of musk-oxen. He was naturally anxious, for always before there had been abundance—a fact upon which he had built with confidence. Allowing a few hours' sleep, he pushed along to Clements Markham Inlet, the heart of the musk-ox country. Still no sign, though a few more tracks of deer, and then,—

“*Nanooksoah!*”

That word of Egingwah's thrilled them all; it was the last word they had dreamed of hearing, for even Peary hadn't aspired to bear, the most valued game of all. Yet there he was, a full-grown beast, turned upon his haunches at the sound of men's voices, and now bounding away towards the opposite side of the inlet.

As the string of an instrument starts at a touch, so the nerves of all vibrated at the sight of this bear, the natives going almost crazy. A Polar bear, for some odd reason, always has this rousing effect on the true Eskimo. Without loss of a moment all three had fallen upon the sledges and were flinging things off pell-mell. The dogs were not less eager, and Peary had to wield a couple of whips to hold them from rushing too soon. Directly the sledges were emptied, however, off drove Ooblooyah's team at such speed that Peary had no time to embark, and he managed to board Egingwah's sledge only by flinging himself on as it swept past. “The man who coined the phrase ‘greased lightning’,” declares Peary, “must have ridden on an empty sledge behind a team of Eskimo dogs on the scent of a Polar bear.”

Wild now with excitement, they tore across the inlet to the deeper snow, which fanned up in crystal clouds and showered



back on Koolatoonah, whose team was bringing up the rear. Ooblooyah, however, may be said to have won the lap, for, shooting strongly ahead, his sledge made the opposite shore almost as soon as the bear. Tumbling off, Ooblooyah loosed his dogs. They were well away like wild things, and when next the quarry was sighted, bounding along a slope, the dogs were also visible as they panted after him.

The bear, unlike his kind, did not stop when the dogs got at him, but went blundering on at increased pace, a fact which caused the Eskimos to cry that Tornarsuk—the “evil spirit” of the Arctic—must have taken possession of the beast. They really believed this, and were roused thereby to even wilder emotions. The spot was an island, so Ooblooyah signalled for the rear teams to steer round the other side. This they did, to discover both bear and dog tracks descending off the island across the bay ice to the western shore of the fjord. More sledge-dogs were now loosed, Peary and his Eskimos swarming the snowy bluffs at such a pace that the first-named gave the stumps of his toes, ever sensitive, some dreadful blows against the rocks. Excitement, however, made him unmindful, and the trio came swarming up just as the bear had plunged into a cañon.

“He’s climbing the other side!” shouted Egingwah. “Shoot—now!”

Peary, throwing up his rifle, fired two shots, but was too winded to take fair aim, and the harried beast, clambering over the brink, again plunged from view, with the dogs yelping at its flanks. In the effort to follow, down went Peary once more, the shock to his injured feet being so painful that he tossed his rifle to Egingwah, telling him to be brisk in following up. Peary then slithered back to the bay ice, having only just reached it when gunshots and a great shouting burst



forth—a commotion of triumph. Peary judged the chase was finished, and presently, through the mouth of a defile, the dogs appeared harnessed on to the bear's huge bulk, which they drew along like a sledge.

“It was an interesting scene,” records Peary; “the steep and rocky ravine in its torn mantle of snow, the excited dogs straining ahead with their unusual burden, the inert, cream-coloured, blood-streaked form of the great bear, and the shouting, gesticulating Eskimos.”

When the bear was skinned and cut, its meat as before was *cached*, and the valuable fur laid carefully upon a sledge. Returning then across the bay, they gathered up the belongings so hastily cast off the sledges, and, being pretty tired out, camped right there. The tent being erected, they ignited their cooking-stoves, and supped royally of bear-steak—a very tasty meal.

Immediate need was being well supplied; it was only the thought of approaching winter and the number of his dependents at the base which still left Peary most anxious to get on the scent of oxen. These beasts of the icy North had so often saved his expeditions in the past, by providing food when everything else had failed, that the very presence of them helped his self-reliance. Imagine, then, his strong satisfaction when Ooblooyah, on the very next march, burst suddenly forth with,—

“*Oomingmuksue!*”

Musk-oxen at last! Yes, there they surely were, a number of dark blots on the white scarp. The hunters, moving with all celerity, approached within a mile and then loosed a couple of dogs. The latter once more were as mad with excitement as any trained hounds, and they pelted straight for the oxen, wheeling and rounding them up. Indeed, the oxen themselves,



on sighting danger, had swung together as was their wont, forming a fighting group, the calves sheltered inside, the older ones closing together with lowered horns.

The big bull of the herd, snorting and bellowing, now stood to the fore, charging at the dogs and making ugly swings of the head that might soon have impaled his snapping foes had they ventured a bit too near. But now Peary had run up and was crouching to shoot, all his old coolness being required in face of those black monsters, the bull all set to charge again, his eyes savagely agleam. Next breath, however, his shaggy bulk went reeling as a ball drilled clean through his heart, and out rushed a cow to take his place.

Once again, even in their need to kill, our hunters were forced to admire the courage of these creatures, and also to respect their tactics. For, even had the herd been bigger—say, fifteen or twenty—the same thing would have happened; as each animal had fallen, out would have charged the others in regular order, till the enemy had been dismissed or till all had fallen to man's attack.

The latter, thanks to modern rifles, invariably happened, and it was now but a matter of moments for Peary, making a vital hit each time, to drop the two cows and the two yearlings behind. He then set off as fast as he could after a single bull, which had been chevied by the dogs over a near-by rise—the imprint of hoofs being slurred all the way by the long, tangled hair that hung from the bull's body and brushed the snow. Peary, drawn by furious notes of dogs, clambered downhill amid rough boulders, to find the old ox at bay in a stream-bed, his pointed horns aiming viciously at the leaping pack. A single shot sufficed, and Egingwah, who had eagerly followed, was left to do this skinning while his master returned to supervise the rest.



In the next three days of hunting eight more musk-oxen were secured, the hides taken and the flesh *cached* to be fetched later. This hunting trip of Peary's covered over 200 miles, and he had good cause to be satisfied, for, besides securing several thousand pounds of prime beef for winter food, he had explored and mapped Clements Markham Inlet. Borup, the doctor, and Captain Bob were the first to greet him when he returned towards the base; and, at sight of the sledges, piled high with ox-hide and horned heads—the deer-antlers and creamy bearskin crowning the first load—they stood in staring amazement.

“ Oh, gee ! ” gasped Borup, who, quite new to the Arctic, had never seen such trophies before. He realized, as did the others, that this was very good hunting.

The rest of that autumn was a deal occupied in teaching the new members how to manage a team of dogs; in the course of which, incidentally, they grew accustomed to frosted noses, cheeks, ears, and toes. Igloos of a large size were built along the line of the coming coast march, being usually constructed by groups of four workers. Saw-knives were used; and these blocks of snow were neatly cut, big ones for the bottom courses, becoming gradually smaller for use towards the top, all being curved on the inner side, forming a circle when arranged together. The regular method of building was for one Eskimo to stand in the middle; then, as the others built him in, he would fit up and fill the joints with his snow-knife.

The igloo when completed was like a monster beehive, a hole being cut at the bottom just large enough for a man to creep through—and for the builder, in the first place, to creep out. But at night, before seeking repose, it was necessary for igloo-dwellers to fill up even this entry in order, by aid of cooking-stoves, to get the den moderately warm. A



peep-hole admitted a little air. Ill-ventilation is more than balanced by the rigours of Arctic cold ; it is hard for dwellers in gentler climes to realize what 60° below zero really means. During that same winter, on board the *Roosevelt*, the frozen moisture formed so thickly on cabin walls that it had to be chopped off ; in fact, just as housewives clear their rooms of dust, so the *Roosevelt's* crew, at regular periods, had to chop out the ice from under their bunks and bear it away in buckets. The books in Peary's stateroom had to be drawn forward on their shelves ; if put back they would soon freeze tightly against the inside wall of the vessel.

The long night slowly passed, its pall of gloom relieved only by moonlight, and by less usual lunar displays, for the *aurora borealis* is not the only wonder in those regions. The northern sky, as by some magic arrangement of mirrors, is able to multiply all effects, the result being called a parascene, due really to the presence of frost crystals in the air. On one occasion no less than eight false moons were visible ; an inner halo ringed round by four moons, with an outer halo surrounded by four more—a most remarkable sight, and also quite rare. The snow crystals of this region, seen under a microscope, exhibited astonishing forms of beauty, each tiny speck having a perfect regularity of design.



## CHAPTER IX

### THE TOP OF THE WORLD

NIGHT was scarcely ended before movements towards the great march began in earnest. There was to be nothing haphazard this time and nothing left to chance—except, of course, those eternal chances of roughened ice, and violent gales, and opening leads, over all of which mere man had but very limited control.

Bartlett, the redoubtable Captain Bob, now the picked man of the expedition, left ship early in February 1909, with men, sledges, and dogs, the season still being so dim that he was obliged to have a lantern to light his path along the ice-foot. Others followed, and when Peary himself left the *Roosevelt*, a week after Bartlett, there were seven shipmates on the move ahead of him, nineteen Eskimos, one hundred and forty dogs, and twenty-eight sledges. All these met again at Cape Columbia, where, on the last day of the month, Bartlett and Borup headed due north with their teams. The direct attack had begun.

Peary thus early had to set his jaw pretty hard, for misfortune crowded upon the start. A number of the dogs died of throat distemper, and two of the natives fell ill, so that Marvin and MacMillan, who were to have pioneered for the main party with ice-axes, had to turn sledge-drivers instead.



Added to this, when Peary awoke on 1st March, the date of his own start, he found a gale howling up from the east and blotting out the ice-fields in a dense, snowy haze.

Luckily all were accoutred with new, thick furs, so Peary determined this storm should not be permitted to hinder. The sledge divisions, according to order, drew out singly and took up Bartlett's trail, vanishing like ghosts in the fog of driving snow. Peary and his main party brought up the rear, and within an hour (though the leg he had broken in Greenland was hurting him terribly) Peary reached the glacial fringe—the extreme edge, that is, of the ice-foot. Here came the tidal crack, the point where the fixed shore-ice waged eternal warfare with the sea-borne floes, having the effect, as before described, of heaving up the ice into a vast broken field.

It was for just such a zone as this that Peary had designed his ice-axe brigade, in the absence of which the main party as early as this had to perform their own pioneering—though, of course, the actual brunt had been taken by the divisions now leading. Sledges had to be lifted bodily, which, in their present loaded condition, was a task that nearly dragged men's arms from their sockets. It was just beyond this zone that natives from various divisions were met hurrying back to Cape Columbia for reserve sledges. There had been several smash-ups, and later others were passed who had stopped for repairs. Bidding all to be certain to follow, Peary made Bartlett's first camp, 10 miles out. Captain Bob was again forging ahead, but here were assembled the Marvin, Goodsell, Henson, and MacMillan parties, with igloos being constructed.

Betimes next day the first grave difficulties occurred, those of open water, and Peary knew of old what was coming when



he first sighted a black cloud ahead. The evaporation from water in these latitudes at once condenses in the deadly cold air—it was now 50° below zero—creating a vapour as dark as the smoke from a peat fire. Within fifteen minutes they were held up by opening leads, and remained so till morning, when a turmoil of grinding announced that the gaps were again closing up. They rushed a passage somehow, while the floes still rocked and jammed, Peary pressing to regain lost time. The old fracture in his leg was now aching horribly, but of this he said nothing, though it required all his will-power to command these busy and vital stages while racked by a pain which, if it developed, might be sufficient in itself to baulk everything. So silently he “stuck it,” ordering this division on and that one back, till a veritable bank of fog indicated that now familiar terror—the Big Lead.

Though nearer south than in 1906, it was still the same breach, and caused, as Peary was now assured, by a sudden deepening of the ocean bed. The sea, out so far as this, had rested upon the northern continental shelf of Grant Land, but now this abruptly descended to the often fathomless deeps of the North Polar Sea. It was like the tidal crack, but of huge dimensions; since Captain Bartlett had got across it had widened out and was still doing so. There was no solution but to wait.

It is a little strange that Commander Peary, thwarted so repeatedly by the presence of this broad channel, did not on the present occasion take a leaf from Nansen’s book and provide himself with the material for building kayaks. The idea must inevitably have occurred to him, yet he never mentions it, and one cannot help wondering what his reason was for failing to have such comparatively light material sledged out so far as the Big Lead.



Five days were they held there idle—five days, as Peary himself avers, of “gnawing torment.” All that while, as irony would have it, the weather was most favourable for marching, besides which, having time to fret, the Eskimos began to lose their nerve. A couple of them pretended sickness, and Peary, because of the ill effect on others, was ready enough to send them back. On the evening of the 10th, before disaffection could spread further, the lead closed and a crossing was effected.

So far so good, but Marvin and Borup, earlier on, had *cached* their first loads and teamed back to the coast for more. In particular, they were bringing oil and alcohol, for the first supplies had leaked. Liquid fuel would be of first importance to the main party; Peary had now learnt to rely on hot tea more than anything else. But would history repeat itself? Would that channel again cut the expedition in half, leaving those already ahead to struggle as best they could? Peary, having completed a back-breaking march with the temperature  $60^{\circ}$  below zero, was preparing his mind for the worst when a native exclaimed,—

“*Kling-mik-sue!*”

This meant “Dogs are coming,” and Peary, scrambling up to the man’s peak of vantage, beheld a billow of silvery dust arising along the backward trail. Yes, a team of dogs and a light sledge bearing a native messenger! The note he brought announced that both Marvin and Borup were across the Big Lead and pressing up with heaped loads, including both alcohol and oil.

This was excellent tidings, and soon the full sledges came along in great style, their dogs steaming with the pace they had made. Loads, reapportioned, were sent forward, and all went well until, on the 15th, a terrible thunder ahead spelt a



smashing movement amid the floes, and the fog of open water. A rush was made for the narrowest point, great slabs of loose ice being used as a floating bridge. Dogs and sledges were worked from one slab to another, often a hazardous proceeding, and one member at least came within an ace of death.

Borup was the man concerned; he was just urging his dogs from one raft of ice to the next when the two masses parted and the whole team went bodily into the water. The sledge of course was just following, when Borup, with a forward plunge, grabbed hold and somehow stopped it. The others, cut off and unable to assist, watched with pent breath as this young athlete not only checked the sledge, but gradually hauled it back, supporting its weight and also that of the dangling dogs. Sliding out a hand, he grasped the traces and hauled the whole team back, starting them off and winning safely to the solid ice beyond.

Borup's feat amazed even Peary, for the sledge was laden with 500 lbs. of stores—"worth more to us," declared Peary, "out in that icy wilderness, than their weight in diamonds. A man less quick and muscular might have lost the whole."

Despite vexation in delays, matters were so far working out as Peary had designed. MacMillan and Dr. Goodsell had now returned, the latter to take command of the ship; and shortly after, having splendidly done his appointed share, Borup also departed with two Eskimos, sixteen dogs, and two sledges. At  $86^{\circ} 38'$ —that is, past the Italian record—Marvin also set back with two Eskimos, one sledge, and seventeen dogs. That morning, by some strange fate, the weather was ideal for so northerly a latitude; the air exhilarating, the virgin expanse on every hand bathed in a pleasant sunlight—nothing, indeed, to foreshadow calamity. Ross Marvin was also a man who, in the course of ungrudging service, had come



to understand the treachery of the ice; so it was really by chance that Peary, in bidding farewell, added,—

“Be careful of the leads, my boy!”

They heartily shook hands, and Peary, little dreaming he would never see this young lieutenant again, turned to the momentous work beyond. Henson, with two Eskimos, three sledges, and twenty-five dogs, was now about a march ahead, with Bartlett the same distance in front of him. In fact, Captain Bob was rapidly approaching  $87^{\circ} 6' \text{ N.}$ —Peary's own “farthest north,” the standing record—and in due time he had the satisfaction of passing it, being pulled up then by an open lead. Thus, for one brief while, Captain Bartlett enjoyed the honour of holding the world's record, and by sheer merit he deserved it. This Newfoundland sailing-master, son of an old British stock, had, save for a few of the middle marches, pioneered all the way and had never once made a blunder, not even at the Big Lead. Despite his comparatively short experience, he had come strongly to every obstacle, including some of the worst ice in the Polar pack, had broken through every time, and had stoutly carried on. One cannot help writing it as a pity that a man like Bartlett, possessed of such qualities as a pioneer, had not been discovered sooner and used by his own nation.

Behind him at this moment the intrepid Peary was steadily drawing up, having also reached the zone of perpetual daylight. His leg, happily, becoming inured to the work, was growing much easier. The sky was a brilliant blue, the ice-fields a dazzling white, so much sunlight being reflected that only the use of smoked goggles saved the men from snow-blindness. Having crossed the 87th parallel, Peary's mind naturally went back to his last racking experience in this region. Would some such ordeal yet be repeated? Here he was



now, possessing liberal supplies, with men and dogs in sound condition, and yet—who could foretell anything when the North Pole was still 180 miles away, with nothing but treacherous ice-fields in between ?

Peary thrust such reflections aside, striving, after all he had known and suffered, to keep just an open mind ; but mis-giving gnawed once more when the weather, a few marches farther on, changed to a cutting north-easter, the latter bringing along clouds of vapour. More water ? Yes, and there was Henson's party, drawn up with Bartlett's, both encamped beside open leads.

Deciding not to disturb them, Peary had additional igloos built 100 yards distant. This done, the new arrivals also turned in, and Peary was just becoming drowsy when ominous roars and shuddering cracks from the ice made him listen. These noises grew worse, till suddenly there was a shattering tumult and yelling voices outside.

Springing up, Peary put his eye to the peep-hole and saw that a wide gap of ocean now separated his two igloos from the others, and a native was yelling like one demented. Anything, of course, will excite an Eskimo ; but it must be a little disquieting to awake and find one's camp drifting rapidly towards a certain and violent concussion. The dogs were in dire predicament ; one team had narrowly escaped being swallowed in the gulf, another from being buried alive in a pressure-ridge, the latter having crumbled over their tether-post.

The order was given to turn out, pack, and hitch up immediately, during which the entire enterprise hung literally on the brink of being swamped. A great floe to the west just saved the situation for Peary's party ; he himself, with a pickaxe, was able to level a cutting down to it, and the sledges



were rushed across. Bartlett's ice-raft came thither of its own impetus; his train, and also Henson's, being hurried to safety almost before the shock had subsided. After the fearful strain of it they paused for a long breath; then sought along for another pitch.

All the floes were pretty similar, and liable to suffer a like fate, so the tired band built new igloos close by, turning in with the knowledge that the quivering ice might fail at any moment, and let everything down into icy brine. After all it was no new risk; with their own eyes they had seen igloos split completely in half by a leading crack. Sleep, however, was an aching need, and somehow they must have it. One precaution they adopted; instead of using the sleeping-bags they just reclined in their furs and kept their mittens on.

The next march took them to  $87^{\circ} 47' N.$ , and then Bartlett was required to turn back. He was deeply disappointed at this; he had exhibited grit and staying-power right from the coast, taking all the brunt of the front work off the chief's shoulders, yet on this last day he revealed his finest form and had never been fresher—setting such a pace that even Peary was sometimes left a-rear. Very keenly Bartlett, tingling with such energy, wanted to keep on, but Peary had appointed his final party and felt unable to add another. He did, however, express his satisfaction that, “in view of the noble work of Great Britain in Arctic exploration, a British subject should, next to an American, be able to say that he had stood nearest the North Pole.”

So Captain Bartlett set back, and Peary rapidly mapped out his work ahead.

He was now 133 miles from the Pole, the party consisting of himself, Matt Henson, and four picked Eskimos—Egingwah, Ootah, Seegloo, and Ooqueah. There were five loaded sledges



and forty dogs, all in the fittest condition. Peary's hope was to make five marches of rather better than 25 miles each.

Now began a dash indeed, the rate of advance being due to fair going, comparatively fine weather, and a growing interest on the part of the Eskimos. All of course were buoyed up by full rations; thanks to the unselfish labour of the supporting parties there was no prospect of shortage. The full share per day of 1 lb. pemmican, 1 lb. ship's biscuits, 4 ozs. condensed milk,  $\frac{1}{2}$  oz. compressed tea, and 6 ozs. of liquid fuel was being served to every man. The dogs per day were getting 1 lb. of pemmican each; it is amazing how little food these creatures, descendants of the wolves, can live and keep going on. They were pulling well; the whole, in fact, was working like a machine, seeming too good to be true, but now the 88th° had been overhauled and they were working up well for 89°.

There were still the tense moments—as, for instance, when they crossed leads filmed over with such young ice that it dipped and creaked to their weight. Peary confesses that at such times he watched with his heart in his mouth; but by some knack they survived, and on 5th April he took a latitude sight which revealed the position to be 89° 25' N.—that is, 35 miles from the Pole.

“I had not dared to hope for such progress,” chronicles Peary; “still, the biting cold would have been impossible to face by any one not fortified by an inflexible purpose.”

The temperature then had been to 40° below zero, but this improved so much on the next march and the surface was so level that the dogs became almost frisky. They shook their fur, barking gleefully as they sped along. Treachery and faithfulness mingles most strangely in these dogs of the wild; in their pack-relations they are mere curs, snarling



together or boycotting one of their number—biting him to death and devouring him like actual wolves. Or, as now, they can work together with courage, rejoicing to serve their masters well.

Conditions being thus, it is not surprising that, after a pause for lunch, the entire group settled for pace, working same up to the point of being breathless. This last march was really a fine frenzy, impelled by age-old longings, by the pent ambition of years. Just as the Marathon runner forgets the effort in the achievement, so these men forgot the output they made till limbs were actually tottering. Then they stopped, and at the approximate local noon Peary took his observation.

The position indicated was  $89^{\circ} 57' N$ . The North Pole was actually in sight !

"The accumulated weariness," records Peary, "of all those days and nights of forced marches and insufficient sleep, constant peril and anxiety, seemed to roll across me at once. I was actually too exhausted to realize my life's purpose. As soon as our igloos had been completed, and we had eaten our dinner and double-rationed the dogs, I turned in for a few hours of absolutely necessary sleep."

He could not, however, sleep long, and on awakening he had a light sledge laden with just a few skins, instruments, and a box of pemmican. Dogs were harnessed and calculated progress made till the sky, clearing, enabled Peary to take an observation. One can imagine the immense thrill of the moment when his instrument indicated  $90^{\circ}$ .

*The North Pole was conquered !*

Can we who scan this page imagine even slightly the sensations of Robert Peary in that unique moment ? The wearing battle was won ; the treasures expended in lives and money,



the superhuman efforts, the brave memory of those turned back in defeat—all these were vindicated now. The grim redoubt was taken and man held the mastery over Nature.

“ Mine at last ! ” wrote Peary in his journal. “ The prize of three centuries. My dream and goal for twenty years. Mine at last ! ”

Thirty hours were spent at the North Pole, there being little to do except leave records and verify observations. Nothing in the nature of land anywhere, but desolate ice-fields on every hand—such was the description of this coveted goal. A sounding taken through a crack near by showed fathomless sea beneath the ice—that is, the lead of the plumb-line indicated 1,500 fathoms and did not touch bottom.

Six men, for the first time in the story of the universe, stood on the roof of the world, so that two points of the compass, broadly speaking, ceased to exist for them—the two points east and west. It is an astonishing fact, yet perfectly simple to follow, that when one of these men stood on the point of the North Pole, and then moved away from it, they were always walking south no matter what direction they took ! Again, if they walked five paces to the Pole and then five paces beyond, the first five paces would be due north and the second five due south—though all ten paces would be in a perfectly straight line !

Peary observed a few simple ceremonies. Having raised a mound, he had planted thereon his national flags, including one he had carried on all his expeditions for the past fifteen years. He then called for three cheers, which his followers, who were in great spirits, very heartily gave, and he then shook hands with each member of the party in turn. At 4 o'clock in the afternoon of 7th April the victorious company



turned their backs on the North Pole and launched out for home.

The journey north had occupied thirty-seven days; the return took only sixteen—a difference due to the fact that our friends now had a clear trail to follow, with igloos awaiting at the end of every march. Also, weather was favourable, and they had no serious trouble with open water, not even at the Big Lead. The latter, however, always a spectre of fear, had taken its grim toll in the person of poor Ross Marvin. This was the sad news Bartlett had to tell directly Peary arrived at the ship. Marvin, leading the two Eskimos on his backward march, had ventured on ice too thin and had broken through. All his efforts to clamber out were vain; before the natives could reach him he was gone.

Such news for Peary brought a dark cloud across the new and fair horizon, for Ross Marvin had been a fine young fellow and a most earnest server of the cause. A cairn of stones was raised at Cape Sheridan to Marvin's memory; a rough expression of feeling, yet sincere, on the part of those who had faced many rough times in company with a vanished comrade.

In due course the *Roosevelt* reached home—honours, of course, being heaped on the conqueror, including the great gold medals of nearly every Geographical Society in the world. Never, perhaps, in the whole history of pioneering, had there been a more noteworthy example of bold and practical persistence; it was the quality of try, try again which formed the whole secret of Robert E. Peary's triumph—allied, of course, to the unselfish service of others. Peary summed his grand achievement up by saying:—

“The victory was due to experience; to the courage, endurance, and devotion of the members of the expedition, who put all there was in them to the work.”







## PART III

### THE RACE FOR THE SOUTH POLE

' The Silence was deep with a breath like sleep  
As our sledge-runners slid on the snow ;  
But the fate-full fall of our fur-clad feet  
Struck mute like a silent blow  
On a questioning ' Hush ! ' as the settling crust  
Shrank shivering over the floe.  
And a voice that was thick from a soul that seemed sick  
Came back from the Barrier—' Go ! '  
For the secrets hidden are all forbidden  
Till God means man to know.  
And this was the thought that the Silence wrought,  
As it scorched and froze us through,  
That we were the men God meant should know  
The heart of the Barrier snow."

DR. E. A. WILSON.







## CHAPTER I

### BRITAIN FIRST IN THE ANTARCTIC

THE South Pole presents another sort of romance ; the Antarctic regions in earlier times were perhaps feared all the more because they were less spoken of. Certainly there was a good deal of awe ; to think of the South Pole at all was to conjure up deserts of solitude even more formidable and more storm-stressed than those lying in the North. It is an established fact that ocean tide-marks throughout the world show a tendency to sink, especially along the coasts of Australia, and scientists attribute this to the massing of the South Polar ice. Seven hundred feet more of ice, spread over the Antarctic continent, would imprison enough water to lower the world's tide-mark by twenty feet. On the other hand, if some future change of temperature should cause the ice to melt, the original sea-line would first be restored—then several countries would be swamped and perhaps destroyed.

Such considerations imposed upon thoughtful men a certain awe and respect for the magnitude of the Antarctic ; as this vast region, little by little, was brought into the atlas, so interest in it quickened, continuing to gain life till the final race for the South Pole moved the whole world as no story of human endurance and sacrifice had ever moved it before.

Ours being a story of modern adventure, we shall not



dwell overmuch on ground which has been covered already, and the Antarctic voyages of grand old characters like James Cook, William Smith, James Weddell, John Biscoe, and Sir James Clark Ross—all British seamen—are familiar to most; the British Empire has reason to be proud of the major part her sons have played right through the piece in the cause of Antarctic discovery. Of the others, special tribute should be paid to Admiral D'Urville, Captain Larsen, and Commander de Gerlache.

Explorers, so far, had been chiefly occupied in the groping approach through ice-ridden seas; but now came the pioneer, Carstens Borchgrevink, whose ambition it was actually to set foot on the middle continent. Here our narrative rightly begins.

The explorer was a Norwegian, though his expedition was fitted out by private British enterprise, that of Sir George Newnes. Borchgrevink's chief hope was to scale the Ross Barrier, that enormous tract of ice extending from south of Ross Island to west of Victoria Land, being over 400 miles wide and of great depth. This Barrier, in Ross's day, had been regarded as inaccessible.

Borchgrevink's vessel, the *Southern Cross*—again the design of that Scottish veteran, Colin Archer, builder of the *Fram* and re-fitter of the *Jason*—left Hobart Town for Cape Adair on December 19, 1898, her principal members being Captain Jensen, Sub-Lieutenant Colbeck, R.N.R., Hugh Evans, Anton Fougner, Nikolai Hanson, and an Australian, Louis Bernacchi. The Polar pack was encountered sooner than authorities had anticipated, and the terrible character of it surpassed belief. The bergs were titanic, while many of the floes were miles in diameter with only the narrowest channels between. The ship, off the Balleny Islands, was struggling in ice-pressures;



*(One of the conquerors and his team arrive at the goal  
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#### AT THE SOUTH POLE





not only was she lifted bodily some four feet above water, but the rugged ice-blocks, rising to her bowsprit, tumbled inboard and half buried her.

A vessel less staunch must have crumpled like a paper box ; as it was, she was badly "strangled," and over forty days were lived in ceaseless anxiety, after which the screwing pack loosened. Now the sea was heaving with a ponderous swell, ice-blocks being hurled at the vessel's sides, her stoutest mast shivering as from ague. At Cape Adair, to complicate matters, a furious gale arose, and the ship, brought-to under a couple of top-gallant sails, weathered out the night in teeth of blinding sleet, her decks, spars, and rigging weighted heavily with ice. By morning the gale lessened, and so they crawled into Robertson Bay, where, for the first time in history, a ship's anchor was let fall.

The whole staff was soon exploring the beach of pebbled basalt, where basked big seals of an unknown species (forming the expedition's first discovery) and where sea-fowl flocked on every hand—gulls, penguins, stone-petrels, and giant-petrels.

The ensuing days were occupied in landing stores, a most hazardous task. The ship rode at anchor some 200 yards from the shore, the cargo being brought off in small boats. Difficulties of landing, however, obliged the workers to hoist boxes on their shoulders and, waist-deep, wade with them through the icily cold water. Somehow or other they survived it, all the stores, sledges, and scientific instruments being beached in good order, as well as the seventy-five sledge-dogs.

The dour spirits that guard all Polar wastes, however, did not mean to suffer invasion without inflicting a harsh penalty ; and, on 23rd February, a blizzard of altogether vicious character descended suddenly upon their heads. The storm raged with



cyclonic force, hurling snow upon the beach in thousands of tons. The temperature at the time was considerably below zero, so that the rushing wind served to cut one to the core.

Four of the members ashore could not battle back to the ship, and they had to make use of a tent. This they were obliged to load round with stones and bind down with extra ropes to keep it from being wrenched away. Even then they were not permitted to rest, for much of the cargo was in danger of being washed off, so those four men were employed the whole night long in a desperate tussle to save it.

No pen could depict the actual stress of that work, carried out as it was in the teeth of a full blizzard. The men's hair as they toiled froze into lumps, their beards became hard, while the garments of all so stiffened with ice that they were likened to suits of mail. Most remarkable of all, the waves as they rolled upon the shore were caught by the sudden cold and frozen solid—while the same thing happened to water in barrels that lay by a big fire within the tent. Bernacchi's ears were so badly frost-bitten that they turned quite black.

Matters on board the ship were not less terrible. When the blizzard arose to its height the risk of running aground was so imminent that the rigging was ordered to be cut. Not only masses of snow, but pebbles and large stones were hailing down on the vessel, so that every attempt to manage her was foiled. The best and boldest among the crew found it absolutely impossible to ascend the rigging, for sheathings of ice made the ropes smooth as glass. To the strain of the wind the cable parted, so that only the vessel's engines, kept pounding at full pressure, could save her now from being cast in amid the bergs and rocks. There was some fear that the boilers would burst, so great was the pressure of steam; but things hung together till morning, when four sailors launching out



pluckily in a whaleboat, managed to fix some wire hawsers to a pillar of rock.

A tempest continued for days ; the mountain above showered stones and particles of rock upon the ship's deck, while a moment came when the steel hawsers snapped like cotton. Following this, she rode out the weather, sometimes grazing the rocks, yet somehow holding afloat till the dropping wind enabled them to warp her up to the edge of a glacier on the opposite side of the bay. Perhaps no Polar ship passed through such a stress and yet came out intact.

Having a good mountain guide among the crew to advise, members then tackled the ascent of the towering bluff, and after a drastic struggle over glacier and crag, they succeeded in attaining to a height of over 3,000 feet. In due time a flag was hoisted on Cape Adair, and the leader, addressing his staff and crew, said :—

“ Hereby I have the honour of hoisting the first flag on the great Antarctic continent—the Union Jack of Great Britain.”

The wintering of the *Southern Cross* in Robertson Bay seemed fraught with too much risk, so she steamed away that evening with orders to proceed to New Zealand and to return as early as possible in the New Year. The little company of pioneers, now entirely cut off from the world, were left to face the menace of an unknown land ; sensible that, even if they survived themselves, the vessel itself in the going or coming might yet fall a prey to sudden gale, or to those leagues of grinding ice-floes. The leader, however, next day felt glad the ship had departed, for tidal currents were surging, the bay being closed with pack-ice.

Busy days followed the ship's dismissal, for all landed cargo—provisions, clothing, coal, and timber—had to be carried



300 yards higher up-beach to a safer level, where huts were built and the settlement christened Camp Ridley. After this a quantity of Weddell seal, the species most common to the Antarctic, were secured, the skins for camp use and the flesh to provide food. The chief and Bernacchi, as soon as possible, made a more serious ascent of Cape Adair, to determine more exactly the nature of this new land. Quartz had already been discovered, which looked as if it might yield gold—milk-white, slaty matter, with blue streaks and substantial in weight—while different mosses existed, one being identified with the reindeer moss of the North. The vegetation mark hereabout did not rise so high, while the snow-cap began at 3,000 feet above sea-level. At the very top were found mounds of pebbles, rising to great size, stretched east and west—explaining that rain of missiles which the blizzard had brought on their heads.

All branches of the expedition were now at work. Unknown fish in great numbers were caught, while later on a monster jelly-fish, weighing 90 lbs., was discovered. To the birds already mentioned were added the albatross, Cape pigeon, skua, puffin, mutton-bird and Cape hen. Petrels and penguins, however, were still the most common. Whales and porpoises were seen disporting themselves in the water, but observers were terribly harassed by freezing winds which sometimes rose to a velocity of 87 miles an hour. The leader once came near to losing his life by being blown over the high cliff, while Camp Ridley was blotted out in a driving haze of snow, the dogs being quite buried.

On 22nd April, despite these conditions, Borchgrevink attempted his first penetration of the bay ice, taking with him provisions for twenty days and a team of dogs for the sledge. His companions were Fougner, Bernacchi, and Savio. The latter was a Finn, of whom there were two in the expedition.



The ice between the floes was thinner than had been expected, and the party, after a ticklish crossing, turned into a tiny beach beneath the perpendicular cliffs of Victoria Land. A fierce wind arose, so they were obliged to pitch tent at once; but at 7 o'clock the leader was awakened by a roar of fracturing ice. To his amazement he saw that the tract over which they had passed, and their one means back to camp, was rapidly breaking up. He aroused the others, and, by exerting prompt effort, belongings were saved as they were about to sink from view. Above was just a gravelly shelf, and, with fingers dead from the cold, they desperately clung on till able to wedge their feet and hoist all gear to this cramped ledge.

It was a nasty dilemma. Fountains of sea-spray showered upon them, freezing so rapidly that their clothes became stiff casings of ice. The bay calmed at last, but had now changed to almost open water. With this in front, and a wall of rock behind, they were marooned and helpless. They had, as it happened, brought with them a collapsible boat, but this would not safely hold more than two. Fougner and Savio were sent off in this, while the other pair remained like limpets, sticking to their perch in hope of assistance being brought.

For two days and two biting nights the castaways remained, wondering what could have happened, until, on the 25th, Fougner and Savio reappeared crawling along the ice-foot. They were in a state of pitiful exhaustion, but revived on being given hot food. Soon after putting off, they explained, they had been met and almost wrecked by drifting ice. For this reason they had turned their canvas boat back; and now believed they had espied a point where the precipice might be climbed.

Like flies clinging to an icy wall, the four men followed



along, all roped together and Savio leading, till the point mentioned was reached. Four of the sledge-dogs, unwilling to be abandoned, followed, three of them going to their death by losing paw-hold on the glassy scarp. What Savio pointed out was a sort of upright gully in the cliff, clogged with ice and snow, and Borchgrevink saw a faint chance of the ascent being accomplished. It was better, anyhow, than feebly staying here to starve; so, after a good meal of seal-flesh, the hard attempt began.

The height to which they must attain in order to save their lives was not less than 5,000 feet, but it was the first 500 which involved the worst risk. Barely had they started on this before there was a piercing yelp below; the last of the poor dogs, gamely trying to follow, had gone dizzily into the abyss. The men dared not glimpse downward, nor would it have been of any use; setting their teeth they persevered, every second being in jeopardy.

They conquered the first stretch, and all through the night that gruelling climb went on, the cold more numbing and intense as they inched towards the top. Over this they straddled at last, tired in every limb, yet deeming it wise to push right on across the fringe of the continent, till they were able to make their descent upon Camp Ridley—where, of course, their appearance brought great relief.

The Antarctic winter—just the opposite, of course, as regards time of year, to its Arctic counterpart—was now rapidly approaching, but the pioneers, before darkness fell, were to undergo yet one more shock. They were eating a light supper on 5th May, when the noise as of a million drums, accompanied by deep thunder, broke on their ears, and they rushed out to behold a sight as fearful as it was grand. A great screwing pressure in the ice-fields had thrown up a



moving wall 30 feet high, and this rose higher yet as with deafening tumult it rolled towards them.

We remember how Arctic voyagers watched a like phenomenon from the deck of their vessel, wondering whether the latter must be crushed to matchwood. The present party at first had reason to feel glad they stood on firm ground instead of on deck-planks; but as the booming ice-wall came on, towering to 40 feet and then up to 50, a fear assailed them that the whole peninsula, including their own hut, would be buried beneath tons of ice. Happily the screwing ceased, and the gnashing turmoil subsided, just short of the upper beach.

The *aurora australis* was now frequently observed, like lacy curtains of light of singular beauty, waving about in the sky. On 15th May, the sun was seen for the last time, and the period of more than two months' darkness fell upon Camp Ridley. The abnormal coldness afflicted every living thing, with intermittent tempests that sprang up in that long night and banked the land in snow. The hut was deeply interred, the sole means of getting out of doors being up a snow-tunnel which was kept clear only by incessant watch and toil.

The raging howl of these blizzards fell weirdly in the explorers' ears, a peculiar feature being that the tearing wind overhead would abruptly lull to dead silence, when nothing could be heard save the tick, tick, of the barograph that registered the air-pressure; then the gale, as suddenly as it had stopped, would occur again with a roar and go raging on as before. Evans, whose duty it was to read the outdoor thermometer, went through some fearful moments. The space between the hut and the instrument screen was only 200 yards, but to travel that distance in an Antarctic blizzard is no ordinary task. He had to crawl on all fours; often he crept back exhausted, and once he was nearly lost.



With the return of the sun, however, on 27th July, spirits rose again ; it was a blessed thing to see a warm glow lighting up the old blue bergs, the crystal peaks, and the deep crevasses. Of the latter there were many, constituting a danger which Savio had cause to rue.

Borchgrevink, carrying on with his surveys, had given orders that workers near the crevasses should go provided with life-lines. In an off-moment, however, the careless Finn wandered away alone, when suddenly the new snow sank beneath his weight and he dropped bodily into a crevasse, turning several times in the air before, 60 feet down, he lodged with violence, head first, into a sort of niche.

Savio, his pulses throbbing from the shock, contrived somehow to twist himself head upward, but no more. Fearful so much as to move, the poor fellow huddled there for hours, shouting for the assistance that never came. A little to the right was a cold and fathomless chasm ; no hope, he reflected, had he fallen there—indeed, was there any hope at all ?

The Finn was calm by temperament, and the very fact of his plight at length braced up his courage. He had a pocket-knife, and with this he carefully scooped out some footholds. Planting his toes in these, he thrust with his back against the opposite wall and so slightly forced himself up. Continuing thus, despite the varying widths of the crevasse, he at length crawled over the top in a state of limp fatigue ; not till the ordeal was over did he gauge what a strain it had been. When he met the others his nerves were so weakened that for some while he was quite unable to speak.

The general health of the camp kept good, except for that of Hanson, the naturalist. Internal trouble for some while, aggravated by the icy cold, had kept him low, till it was seen that Dr. Klovstad's most earnest efforts were failing



to save him. He passed away like so many heroes of the ice-world had passed before him, bravely resigned, bidding each comrade a quiet good-bye. In accordance with his own wish, they laid him to rest at the foot of a rugged landmark some thousand feet up the slope of Cape Adair.

With the shadows of this event upon them, following the shadows of the long black night, we can understand how a longing to move away formed in the hearts of all. These exiles, though they did not grumble, were yearning for a glimpse of some new face; and one of them, going out for a bag of coal, was thrilled to behold a stranger trudging towards him up the beach. The "stranger," however, turned out to be Captain Jensen, while riding in the bay was a ship. The splendid truth dawned in a flash—the *Southern Cross* had come back!

It was a rare hour for every one. On the skipper's back was a bag; this he thumped on the table and said "Post"—then stood aside laughing, to enjoy the boyish eagerness with which they fell on those letters from home. Life throbbed with a new interest, and preparations were made at once to get aboard. Borchgrevink, to complete his programme, wished to examine the Ross Barrier by steaming all along it before heading north.

Accordingly, on the evening of 2nd February, they bade farewell to Camp Ridley, cruising southward and naming various points on the way. A few contributions to geography made by this expedition were the Newnes, Warning, Sir John Murray, Dugdale, and other Glaciers; Duke of York, Markham, and Oscar Islands; Newnes and Gickie Land; Lady Newnes and Colbeck Bays; Protection Cove, and several capes. The South Magnetic Pole was now located—that is, simply, the point where magnetism appeared to be at its maximum—though the actual spot was not reached.



The volcanic peaks, Mounts Terror and Erebus—named after Ross's famous ships—came into full view, the latter being in slight eruption. A landing was effected at the base of Mount Terror, where the British flag was planted and given three cheers. Sending others back for a camera, the chief and Captain Jensen started along the narrow shingle to gather marine and other specimens. Never had they felt more secure from catastrophe ; but a sudden noise, deep and deafening, made them start upright.

They first thought of a landslide, but then the truth burst upon both. Polar icebergs are formed by "calving"—that is, they sunder away from the parent glacier and so launch out on the sea. This was happening now ; a berg was tearing off from the glacier just west of their bit of shore, and with that prodigious plunge the air was full of ice and water and clouds of snow, blotting every object from view. This was by no means the end of it. A berg of some millions of tons in bulk, pounding into the sea, displaces so much water that something worse than a tidal wave is sent dashing upon the ice-foot.

The two men next moment saw the mountain of water coming, and turning they darted for the highest point of the shingle, standing at bay against the upright face of rock. They were caught in a trap from which there was no escape, and as they watched the oncoming wave, now rising to 20 feet in height, they gave themselves up for lost.

"We must struggle for it !" shouted the chief to Jensen, and then the volume of water, laden with lumps of ice, smote against their backs, beating out breath and submerging them completely. Harder yet to withstand was the backward suction as the torrent receded, and blood started from the men's fingers with their efforts to keep grip of the rock. Scarce had they time to recover breath before the sea came



thundering up again, now only to their armpits, each successive wave being less till the violent displacement was over. Colbeck and the two sailors, who had seen all from the boat, were pulling strongly inshore. They were surprised to see the drenched pair come slithering down towards them, shaken, yet still alive. The fact was that the mountain of water, in its opening rush, had broken somewhat against the ice-foot, otherwise the two men must have been crushed by its moving force. They refused to let the accident interfere. Specimens were re-gathered, and notes taken, before they hastened back to the *Southern Cross* and stripped off their icy-wet clothing.

Proceeding southwards along the Great Ice Barrier, they came at length to a break in it, with open water so far, and then a gentle southward slope to the ice-sheet above. This was what had been hoped for. Borchgrevink, by the very fact of landing on adjacent shores, had achieved the general purpose of his venture; yet he rejoiced to be given opportunity for proving the Barrier accessible—besides which it would mean his pushing a little farther south. Landing, therefore, he managed, with Colbeck and Savio, to get well up beyond the 78th degree—the farthest south yet.

The *Southern Cross*, on February 19, 1900, turned homeward, and directly she touched civilization the following cablegram was dispatched to the founder of the enterprise:—

“Object of expedition carried out. South Magnetic Pole located. Farthest south with sledge record 78° 50'. Zoologist Hanson dead. All well on board.—BORCHGREVINK.”



## CHAPTER II

### SCOTT AND THE "DISCOVERY"

ROBERT F. SCOTT is a name that will endure ; his Antarctic triumphs and his faithfulness of purpose form a story that is bound up with the annals of Empire. Captain Scott was born in Devonshire, that far-famed county which has given the world such names as Drake, Raleigh, Hawkins, Monk, Marlborough, Kempthorne, Thornbrough, Bowen, and Buller. It is the shire of the sea-kings and heroes.

This new explorer, in appearance, was a clear-eyed son of the sea, with just that hint of stolidity about the countenance which, though a seeming contradiction, is associated with most men of action nurtured in these isles. He was at once a firm leader and a genial comrade. When he heard that a new British expedition to the Antarctic was being talked of he at once applied for the command, and his readiness was rewarded.

Scott's vision was broad ; the more he considered the prospect the keener he grew. He wanted to develop operations from the point where Borchgrevink left off. The last-named had touched land, skimmed the Barrier, and found a gateway ; Scott now longed to enter in and possess what lay beyond. He wanted a new ship, a numerous staff of experts, and victualing to last several years. All of which involved a huge sum of money.

Sir Clements Markham, President of the Royal Geo-



graphical Society, was the pivot on which matters turned—indeed, he is cited by Scott as being “the father of the expedition and its most constant friend.” Sir Clements, himself a distinguished explorer, occupied a position in Great Britain very similar to that of Nansen in Norway; whenever an attempt was mooted of which he could approve he became at once its earnest supporter, bringing all his influence to bear till the scheme was an accomplished fact. A committee of his society considered the undertaking, and its report ended as follows :—

“ Apart from the valuable scientific results of an Antarctic expedition, great importance must be attached to the excellent effect that all such undertakings, in which our country has been prominent, have invariably had on the Navy by maintaining the spirit of enterprise.”

That put the case in a nutshell, and the nation at length evinced its approval by putting a sum approaching £100,000 at Captain Scott's disposal. Half of this was voted by Parliament, but special mention should be made of Mr. Llewellyn Longstaff's splendid gift of £25,000. The ship, eventually christened the *Discovery*, was now put into commission. It is interesting to note that five exploring vessels before this had been given the name of *Discovery*; all of them had won fame and none had suffered disaster.

The designer chosen was W. E. Smith, Chief Naval Constructor, and the ship's keel was laid in March 1900 by the Dundee Shipbuilding Company. This plan embraced new departures in Polar shipcraft, the outcome being in some respects a finer vessel than Peary's *Roosevelt*. Once again there were the twin needs of withstanding ice-pressure and of smashing a passage through floes, but added to this was the fact that Antarctic seas were the worst known as regards



violent storms. It was almost by a miracle, as we have seen, that the *Southern Cross* escaped being dashed to splinters in the first hours of her arrival. After weighing all this, it was determined to trust our ancient record as a seagoing nation and to build a ship on "good and well-tried English lines."

The *Discovery* was 172 feet in length, by a breadth of 34 feet, and some half-dozen carefully chosen woods went to her construction. Curiously enough, the steel or iron ship—which in commerce and warfare has superseded the other entirely—is of no use for Polar exploration. Such metal is so rigid that, in its arguments with the giant ice, it is for ever sustaining damage, whereas timber, properly massed together, possesses an elasticity that saves it by the rebound.

The ice-skin of the *Discovery* was of greenheart in some parts and of elm in others; the second skin of oak, Honduras mahogany, or pitch pine; the inside being of Riga fir, and the frames of British oak. Beams in three tiers, and transverse bulkheads brought the whole up to colossal strength, while the bows were enormously staunch—held in places by 8-foot bolts, and having the super-support of struts and girders.

The stem, as in other Polar ships, was fortified by a section of steel plating, while the rudder-post was of extraordinary bulk. The rudder, as we have already seen, is ever the most vulnerable part of a Polar vessel. The *Discovery's* rudder, as in other such craft, was being made to lift clear, while a new protective device was being tried, that of an overhanging stern. The *Discovery's* triple-expansion engines were capable of giving over 500 horse-power, and she was also rigged for sailing. Interior accommodation went well by comparison, the wardroom, cabins, and crew's quarters being of very ample size.

A seafarer himself, Captain Scott reposed special trust in



sailors, and many naval men were among his officers for this expedition, these having, like himself, obtained leave of absence from the Admiralty. Those of Lieutenant rank were A. B. Armitage, C. W. R. Royds, Michael Barne, and the chief engineer, R. W. Skelton, with Sub-Lieutenant Ernest H. Shackleton. There were two doctors appointed, Edward A. Wilson and Reginald Koettlitz. The latter, despite his name, was a pure-bred Briton, and, with Armitage, had done work in the Arctic. These two, in fact, serving under Jackson at Cape Flora, had been among the group to greet Nansen on his return from the icy wilds. Besides his surgical duties, Wilson also went as zoologist and artist, while Koettlitz undertook the botany. Other departments were filled by T. V. Hodgson (biologist), Hartley Ferrar (geologist), and Louis C. Bernacchi (physicist). The last-named was the young Australian who had served with the *Southern Cross* venture; his magnetic observations on that trip impressed Scott as being very efficiently made. The full ship's company numbered up towards forty.

A standard form of clothing for Polar work had now gradually come into being, and the men of the *Discovery* in this respect were to be very fitly equipped. Thick woollen underclothes were laid in for the coldest work, with warm flannel shirts topped by jersey or cardigan. Over this came a wind-covering for out of doors, and a waterproof suit for sledging. Trousers were of good pilot-cloth, with fur boots (finnesko) of reindeer pelt sewn with gut. Explorers fill these fur boots with sennegrass—a dried Norwegian grass of long fibre. This grass has the quality of absorbing moisture, and so the boots are prevented from freezing on to the wearer's feet.

Defence of head and hands from frost-bite is ever the hard problem to beset men facing the ice-worlds, for some exposure



of these parts is necessary to sight and breath and movement. Long knitted mitts were provided for permanent wear, these leaving the fingers free, with another pair of wolf-skin mitts slung from the shoulders so that hands could be plunged therein at any moment the cold should nip. As for headgear, helmets were devised of woven camel's-hair, completely wrapping in all save eyes, nose, and mouth.

We are so familiar with the provisioning of Polar ships that there is scarce need to enumerate stores in detail; the cargo laid in was much on the customary lines, though of larger variety. The array of scientific instruments was perhaps the most imposing on record, and a balloon equipment was included. Another feature was the liberality of certain British firms, flour being presented by the ton and custard-powder by the hundredweight, besides huge cases of cocoa, chocolate, and lime-juice. However quietly the idea of the Scott expedition was taken at first, there can be no doubt that it gathered in favour later, and was sent off on the last day of July 1901 with the warmest good-will behind it.

At the end of the year the *Discovery* was on the rim of the Antarctic Circle and in perpetual daylight; while on January 2, 1902, she nosed out of a fog to bring her crew within sight of their first iceberg. Seventeen of these floating perils a little later surrounded the ship, but her sailor crew was vigilant, and even on entering the pack-ice she did not suffer such rough moments as her predecessor, the *Southern Cross*. Every open lead was made use of, and she deftly answered her helm. The peaks of Victoria Land were sighted on the 8th, while next day the *Discovery* smashed her passage into Robertson Bay and dropped anchor.

On the basalt beach, the site of Camp Ridley, broken floe-ice lay heaped along the foreshore. Scott, landing with a





CAPTAIN ROBERT FALCON SCOTT

Equipped for the great attempt. Mount Erebus can be seen in the background

*(Photo, H. G. Ponting)*







party over this, came upon the hut left by Borchgrevink, most of the old chests of provisions remaining intact. Bernacchi, of course, was specially impressed; he pointed to the wooden cross up the cape-side where he had helped to lay Hanson to rest. The scene, however, was not entirely one of desertion, for colonies of penguin thrived on every hand; these prolific birds, with their queer jaunty waddle, were on the march in their thousands, their chattering notes mingling with those of the brown skua gulls—a piratic species that actually preys upon the penguin young. Specimens of moss, rock, eggs, and birds were collected, including the giant petrel, another rapacious rogue; and later a metal case containing a chronicle of the voyage was left in the *Southern Cross* hut.

Running in the cable on 10th January they rounded Cape Adair and held a course southward, but were soon in real difficulties with the floe-ice, as well as with brisk winds. Hodgson during delays was keenly occupied with his trawl-net, making hauls of sponges, shell-fish, polyzoa, and other items of the Antarctic deep. Between cold squalls the perpetual day kept fair and sunny. A small party, out on a big floe towards midnight, found they had pipes but no matches, whereupon Dr. Wilson, with a pocket lens, actually lit their tobacco from the rays of the midnight sun.

Working from Cape Washington southward, some good mapping work was accomplished, while at Cape Crozier a landing was made by whaleboat to place another record of doings in a metal cylinder mounted upon a post. After this Scott, Wilson, and Royds ascended the cape, a gruelling climb of 1,350 feet, turned leftward upon the ice-sheet, and so were the first men in the world to view the Great Ice Barrier from well above. It was a stirring moment. To peer over this beetling cliff of solid ice was impressive, with the churning



sea below and its dots of glittering flocs ; but the vast white field behind them, a stupendous plain that merged to the glimmering south—this last was the sight that made their nerves tingle. There lay the earth's chief mystery—the South Pole itself !

The moment, however, was not one for dreams of the future ; they descended smartly and made to launch the whaleboat. The gallop of the surf made this a task almost beyond their powers, though all were skilled sailors. Picking an outgoing wave, the wild waters swirling to their knees, they strove to float the craft and to leap aboard as they did so. It was touch and go ; before oars could be seized the boat had been hurled over on her beam and was on the point of being swamped or dashed to pieces.

Barne was the man to act first ; tumbling overside into the icy brine he got hold of her stern and gripped fast till others tumbled to join him. All in that same instant were submerged in a deluge of sea, but they had swung the boat, so the force of water came on her stern. Robust arms thrust with the oars, and she was strained out of danger as the dripping ones clambered back. The last-named were cold to the core, but hot cordial aboard ship restored them to life and feeling.

A survey of the Great Barrier was a main part of the enterprise, so they steamed along that 400-mile bastion of ice, cruising close enough to be overawed by its unique grandeur. In height it changed a great deal, varying from less than 10 to over 270 feet.

Wishing to learn more about the nature of the Barrier and the ice-desert behind it, Scott had the ship warped into Borchgrevink's Inlet, securing her by means of ice-anchors so that her decks were exactly on a level with a low part of



the ice beyond. At the time of entering this recess the adjacent sea had been free of ice, but now icebergs loomed, and one began to drift near. Fires had been let low, so there was no question of moving to escape; the most those on deck could do was to watch with anxious eyes.

Would the berg clear them or not? They began by feeling sure that it would, but a hidden current flowing into the creek brought the huge mass, thousands of tons of ice, veering upon them, and then came a thud which creaked every bolt and timber—a wrenching that startled all hands in a rush towards deck. The hull shuddered yet, as though it were being squeezed in, but the sullen berg glided on, having, as it were, only rubbed the vessel in passing. A portion of the *Discovery's* toughest oak, by that monstrous “rub,” had been torn out; what would have happened had the berg actually collided they could only guess. Thanking Providence for the escape, Scott took warning of the episode by ordering engines to be kept ready.

One of the two balloons, brought for the purpose of surveying the Barrier, was now got out and charged with hydrogen gas. Scott himself took the opening ascent—being probably the first man to ride a balloon in the Antarctic—and his binoculars discovered what might be land in the dim distance, banked up behind furrows of shadow. Shackleton, who was the expedition's photographer, then went aloft with a camera. Warned by rising winds they soon after stowed their balloon away, and cruised back for winter quarters.

These were taken up in a small cove at Ross Island in McMurdo Sound, huts being built ashore, as well as kennels for the dogs; and this locality soon acquired names—Hut Point, Arrival Bay, the Gap and Crater Hill. An abrupt rise above their station was Observation Hill, while the most



prominent feature of all, a craggy eminence three miles distant, was christened the Castle Rock. Sledge-parties got into training, with general practice on ski, and Scott, in the latter part of the month, met with a vexing accident.

The rampant winds of the Antarctic toss or carve the snow into overlapping waves, and the effect of this, when frozen, is altogether grotesque, being given the name of *sas-trugi*. Scott, rashly, when out with Barne, attempted to "fly" one of these wrinkled slopes, with the result that his ski turned in a groove and down he went with a jolt. The hamstring of the right leg was so badly sprained that he could barely hobble back, and the hope he had in mind of leading a sledge-trip to Cape Crozier was perforce given up.

Sledge-practice was sorely needed, however, for admittedly they were still a band of novices; so the command was handed over to Royds. He, with Skelton, Barne, and Dr. Koettlitz, set off on 4th March with eight men, two sledges, and four dogs. So inexpert were they as yet—they became adroit enough later—that the lumpy loading of the sledges did not do high credit to sailor hands. But Polar knowledge must ever be dearly bought, a truth they lived to acknowledge.

All went well with the sledge-party until, some 10 miles beyond the hills, they encountered snow so soft that they sank deeply with every pace they took. Snow-shoes were the sole solution, but only three pairs of ski had been brought, so Royds, after three days of futile wallowing, determined to keep on with the doctor and Skelton, sending all the others back under Barne. The latter, with his group of eight, faced about on the 9th, returning strongly to the steep of Castle Rock. Most of the men were shod with *finnesko* (fur foot-gear), which had little grip on an ice slope, so Barne ordered leather ski-boots to be worn instead.



The ski-boots were frozen so solidly that two of the band, Vince and Hare, failed to get theirs on at all. They shuffled along in their finnesko till the top of the hill was gained, but now a gale arose from the south-east so that the air became dense with snow. Barne was barely able to take the position of Crater Hill before all landmarks were blotted out in the heavy drift. Sledges were being capsized by the wind, and many of the party were frost-bitten, so the order was given for them to shelter amid some boulders and erect the tents.

Misfortunes crowded each other's heels, for now the Primus stove refused to answer, and what each freezing man most sorely needed—a mug of hot tea—could not be got. The rising blasts, as they nibbled their cold food, tore at the tents with frenzy; it seemed but a matter of moments for every stitch of canvas to be carried clean away. Limbs bitten by the frost were growing numb, so Barne, acting as he deemed for the best, decided to abandon everything and make a blind bid for the ship.



## CHAPTER III

### LOST IN A BLIZZARD

BARNE'S was a brave but tragic move to make. We have seen how icefarers in the north were best advised to keep within shelter during the hours of dense storm and freezing darkness, and far more does this apply to the southern region, with its cyclonic snowstorms; indeed, to breast the gale as these were doing was to gamble with fate. On the other hand, even had he known, it is quite possible that Barne would have favoured this groping march as the lesser of two evils; as matters were, to remain in those bleak tents might spell death for all by freezing.

The dogs were freed, and, charging every one to walk in a close group, Barne led into the swirling tempest. Because of the driving snow it was impossible to see a dozen yards ahead, while the pace was not more than a crawl owing to Vince and Hare, whose unsuitable footwear slid on the glassy surface. The last-named, somehow, lagged behind; anyhow, they realized he was missing, though the hissing drift was so thick they could but vaguely see each other. Whistles were blown, and every one shouted, but without response; so Barne told his men to spread in line, hoping, by this manœuvre, to "catch" the missing youth—he was only eighteen—as he bore along.



Alas ! in carrying out this project, another sailor, Edgar Evans, a petty-officer, trod on the brink of an icy scarp and instantly vanished. He did not reappear, so Barne, believing this to be merely one of the shallow dips in the hillside, told his men to wait just as they were. This spoken, he approached the supposed dip where Evans had disappeared and began to let himself slide. To his amaze, he was not soon brought to a halt ; instead, he gained in impetus till his body was being rushed down a seemingly endless gully.

The wind whined past his ears, whirling fragments of snow and ice, while his hands found nothing to grip. His knife was handy and he drove this into the hillside, only to feel it broken off as he shot on at yet greater speed. Now more snow was whizzing about his ears until, with a shaking thud, he landed upon a bank of it. A bulky shadow, moving near by, turned out to be Evans ; but, before they had time to consider, another rush sounded above and yet a third man—Quartley, one of the ship's stokers—came pelting down to share their plight.

Those huddled in the storm aloft waited long, shouting themselves hoarse, and stamping to relieve their numbed limbs from the intolerable cold. When Quartley, who had volunteered to inspect, also failed to come up they all felt it was madly useless to remain here in this galling weather or to attempt any more blind descents. Led by one called Frank Wild they battled along towards where they guessed Hut Point must lie. It was all a downhill course and slippery smooth, till soon they could scarcely win foothold at all. Wild, after a dizzy passage, found a sheer drop at his feet with the churn of the sea far below.

“Back ! back !” voiced he, and his comrades strained every muscle to check themselves. Vince, however, with his



fur boots, never had a chance ; they saw him stagger onward fall past Wild, and so go reeling from view.

After that, for the surviving four, it was frankly a horrified stumble—which may well be understood when we remember the fact of the blizzard and the successive loss of their comrades. Only instinct urged them to clamber up again, away from the brink of dread, and this they somehow did. Wild alone was shod with naily boots, which meant that only he was in any degree footsure. Like a gallant fellow, he zig-zagged from one to another when he found them in fear of slipping, and by such means they at last topped the ridge.

Wild, in the far future, was fated to participate in great events, while here and now, as a leader, he distinctly proved his worth. Remembering where the sea lay, and calculating by the wind, he at last brought his fellows to where a shape loomed in the snowy haze—the shape of the ship itself.

Scott, as soon as he could piece together their story—blurted forth as it was by men on the edge of collapse—deputed Armitage to lead off a questing party, equipped with medicine, furs, and other items, all hurried on to a sledge. Scott, directly these had vanished into the squally murk, turned again to the limp quartette and elicited something clearer with regard to Vince. There was a hope, though slender, that he might have dropped upon a floe instead of into the sea. Every one, this being suggested, was eager to make some effort by boat. Shackleton was the officer chosen ; he, with half a dozen others, launched off in a whaleboat, the latter being well provisioned. Another device adopted was to raise steam and sound the *Discovery's* siren—a most excellent ruse, as matters worked out.

Three galling hours passed for Scott ; if the inaction due to his injury had made him chafe before, it was now nearly



unbearable. He maintained an outward steadiness, but those waiting hours were about the worst he had ever known. At last, from the blustering darkness, a shout was heard, then four figures came butting through the gale. They were Ferrar, one of the search-party, while behind him stumbled Barne, Evans, and Quartley.

Barne's tale was told by degrees. He and the other two, creeping off from the snow-shelf on which they originally dropped, found themselves peering over a precipice, the peril of which was proved in a startling manner. A sudden new scurry behind them was followed by the sight of a dog, which, clawing pitifully, but failing to find a hold, went shooting into the abyss at their feet. A howl, a swirl—and then no more.

The three men crouched on their insecure cranny, scarce daring to shift an inch, yet ultimately forced to move because of the cramped deadness of their limbs. At length they brushed upon what felt to be an outcrop of stone, and here, crowded together for warmth, they remained in the bitter wind till a piping of the ship's siren aroused them from their state of coma. Though weak and dazed, they again urged their limbs into motion, and shortly after that, by some kinder fate, they collided with the relief party. It was seen, when they were brought to the ship, that faces, ears, hands, and noses were all in a dreadful state from frost-bite.

An hour later, when these ailments had been tended, the other land-searchers under Armitage returned. They had done their utmost, but without success; and the same applied to Shackleton's crew in the whaleboat. The latter, caught by the icy squalls, had been carried off the land—had come, in fact, within an ace of being lost. Neither search-party had seen or heard anything of the couple still missing, Vince and Hare. Both were quite given up for lost; a fear only too



well justified in the case of poor Vince—a cheery, willing soul whom the expedition could ill afford to lose. There was a thrill, however, when, two days later, a dishevelled youth was seen stumbling down the rear slope.

It was Hare! Hut-builders hastened up to meet him, and in five minutes they had hoisted the wanderer aboard. Owing to his low condition he was given only milk at first, after which he sank into a deep sleep; it was not till much later that they heard his remarkable story. He had stopped behind in the first place because of his finneskos; unable to make pace in these he had decided to return and get his leather boots from the sledges. Having shouted to inform the others (though, unluckily, they never heard) he headed back to where he supposed the tents had been pitched.

Of course, he never found them, nor yet the sledges; after a hopeless trudging to and fro he blundered into a rocky corner and sank in despair. That he should have lain there for two nights and nearly two days without food, and yet be alive, is another amazing instance of the Polar cold's uncertainty. He could scarce credit the miracle himself, yet clearly it was true. He lay in woollen clothes and with no flesh exposed—his camel's-hair helmet was over his face—beyond which the snow helped to shield him. He stirred at last to discover himself in a deep white drift and near to the Castle Rock. For a time, after rolling out of the drift, he found his joints so coldly stiff that they had the effect of cracking. A crab's gait, on hands and knees, improved to a painful hobble, and so at last he had come to view on the hillside.

Hare's temperature that night went up to 100°, but he was normal a day or so later, without sign of the mildest frost-bite. On the other hand, Barne, Evans, and Quartley were



hard to recognize—with their features bitten, discoloured, and swollen to all shapes. A full week elapsed before Barne's fingers warmed back to life.

In view of these untoward events the reappearance of Royds, Skelton, and Dr. Koettlitz was awaited with some anxiety. This trio also had been involved in a tough struggle, but in due time they arrived back.

Preparations for the long night kept every one busy at this period, serving also to cheer matters up. Seal-flesh, in the absence of any bigger game, was relied on for winter storage, a sufficient quantity being secured by degrees. A couple of crab-eater seals, among the last to be stalked, caused a great diversion. They were espied at dusk close to the ship, but it seemed of little use to slay them at once, because daylight was needed for the operation of skinning. Nor would it do to put off the skinning till morning, for the bodies would then be frozen hard.

"Catch and tie them up," suggested someone; and the order to attempt this was issued—resulting in an altogether humorous scene. To round up these waddling creatures was not so difficult, but it was a very different matter to obtain a hold. Ropes were employed, lasso fashion, but the seals' battling instinct, the moment they were noosed, caused them to twist upon their captors with bared fangs—the snaps they made being ugly enough to send men dodging for safety. As more of the sailors rushed to help it became a floundering scrimmage, with the agile seals in the midst and their laughing hunters asprawl.

Seagoing folk are not very often beaten; double cords, at length, were tied behind the seals' flippers, and the fractious creatures were tethered to the ship's hawser, but even that did not settle them. The eel of the proverb is slippery, but seals



run a close second ; in a brief course of minutes those two were free of their shackles and flopping off over the ice !

Naturally our friends were put pretty much on their mettle ; not theirs to visit the southern wilds in order to be worsted by a brace of seals. The latter, as a result, got less consideration in the final bout. Being overtaken, and brought back squirming, they were now lashed mummy-like, entirely wound about with cords, and then tethered as before. It seemed a sure capture now, but it wasn't—not quite. Attached to a hawser, at dawn, was one seal and one tangle of cordage. Half the game, persevering, had duly made its escape !

Winter awnings were now rigged over the ship, a snow-bank built as a descent from the gangway, another from ice-foot to hut. Boats also, which interfered with the awning, were hoisted overside and put in a row some hundred yards from the ice-foot—an unlucky proceeding, as presently we shall see.

On 20th April the sun finally vanished, and so fell the long pall of winter gloom. Steadfastly, day by day, the winter routine was carried out : Scott himself, in the absence of a chaplain, conducted regular services ; every morning all timepieces were set by the chronometer ; specimens collected were arranged ; health tested at intervals ; the instruments concerning temperature, velocity of wind, snow data, astronomy, and so on, were punctually attended to by those appointed. It was also necessary every day to quarry ice for drinking purposes. The sledge-load of hard blue ice, won with pick and spade, was discharged alongside the hatchway, and a quantity dealt with each day by the cook's mate, who filled same into ice-melters which were heated by the galley fire.

Besides lighter pastimes, the more useful occupations of wood-carving, debates, and mat-making went forward ; while



Shackleton—who had been a journalist before going to sea—started a neat magazine entitled the *South Polar Times*. Gales during these months howled through the rigging, and also there were hours of poignant cold, but few of the expedition had need to venture far afield. One call out of doors, however, and a very serious one, arose by concern for the boats. The Antarctic blizzard, as we have seen, deposits snow by the ton, and this, heaping upon ice-floes, has the effect of sinking them more deeply into the ocean.

Successive snowstorms had thus buried the line of boats out of sight; when a digging party went to excavate they found the craft bedded in slush, and this, in the cold air admitted, froze quicker than the sailors could work. Delve as they would, the pick-men were foiled every time, for even the brine flowed in and was transformed to solid ice ere means for hauling the boats out could be devised.

It was seen at length that the craft would have to stop; the only possible check was to clear off snow after every fall and so arrest that patch from sinking deeper. It would indeed be an unheard-of thing if the expedition were left to sail without a single means of quitting ship, owing to their boats all being frozen into the heart of a massive floe!

It was now the end of July, so in three weeks the sun would be back. But adventures of the darkness were not quite over. Jolly shows of one sort or another were frequently arranged to relieve the winter dreariness, and Royds, on one occasion, was rehearsing a nigger minstrel troop in the big shore hut while Skelton and Bernacchi were absorbed with pendulum observations in the adjoining one. Having completed the job and leaving the minstrels to finish theirs, Skelton and his colleague agreed to get back to the ship.

The latter was only 200 yards from the hut, but, as a



guide for stormy times, a rope was stretched between. This, without a doubt, would be needed to-night, for the two scientists, on issuing forth, found themselves in the teeth of a seventy-mile-an-hour hurricane, the same being laden with snow that hissed into their faces more like sand or hail. Grasping the guide line, they put down their heads and butted along till they had passed that tide crack which marked the joining point of the shore-ice with the sea-ice. Suddenly the guide rope disappeared, and the pair found themselves lurching into a great cold mass.

It was so densely dark they could not see a hand before the face, yet they guessed what had occurred. The wind-harried snow had here banked so high that the rope was actually buried. They battled forward, hoping to pick up the line again, or else grope to the vessel without it. But, when they had stumbled on and on for what seemed like hours, trying this way and that, their numb fingers locating neither rope nor hull, they realized they were badly lost in the blizzard. The latter, moreover, was raging madly, so that shouting was all in vain ; the ceaseless bellow of the gale being such that they could not even make each other heard.

Their one slight hope, they felt, was to re-discover the tide-crack, fumble along this till they came again to the rope, and so follow back to the hut. But, though they appeared to locate the tide-crack, they never came to the guide-line, and their strength was rapidly failing. The chief reason for this was the overwhelming cold, which paralysed their limbs and froze their breath so that ice formed thickly in the opening of their helmets and continually had to be broken.

Meanwhile, in the hut, the coon singing went gaily on, though not a note of it was heard without, because of the frenzied gale. Rehearsal, an hour and a half later, being over,



this party also emerged to face the weather. By joining hands they formed a long string, one end of which clung on to the buried point of the guide-rope, while the other end quested round till the line was picked up beyond. Thus they gained the *Discovery*, and were mounting aboard when something like a thin cry came down on a blast of wind.

The cry seemed fairly close, so they joined hands once more and moved that way, to tumble presently over two forms—those of Skelton and Bernacchi—lying prone in the snow. As a rescue, it was only in the nick of time, for both victims were far gone and terribly frost-bitten. For hours, in the darkness of that snowstorm, they had groped round in circles, finishing the effort on hands and knees. They lacked at length even the strength to crawl, and the point of their collapse was only 30 yards from the frozen-in vessel—round which most likely they had trailed again and again!

That two members such as these, both steady-witted and cautious, should have got so badly astray, within call of the ship, was altogether astonishing. It was distinctly a warning to those who were inclined to be careless whenever they walked abroad.



## CHAPTER IV

### SOUTHWARD HO!

“WHAT a wild confusion of peaks and precipices, foothills, snow-fields, and glaciers! How vast it is! Over all the sunlight spreads with gorgeous effect after its long absence; a soft pink envelops the western ranges, a brilliant red-gold covers the northern sky; to the north each crystal of snow sparkles with reflected light.”

Thus writes Scott of the moment when, standing with others on Crater Hill, 1,000 feet above the floes, he surveyed the effect of the returning sunshine—and his words help one to realize the strange fascination of the Antarctic, so grim and so full of hazards and yet so vastly beautiful.

Every one was cheered, and on 24th August they kept what they termed the Feast of the Sun—turtle soup, tinned fish, seal cutlets, and mutton, followed by a concert, and next day every one was busy with preparations—assembling the sledges, overhauling the dog-harness, seeing to fur attire, and weighing out provisions.

It was now pretty clearly known what was needed for sledging journeys, and an 11-foot ash sledge, besides provisions, carried cookers, pannikins, spoons, Primus lamp, tent, spade, sleeping-bag, sleeping-kit, crampons (worn over feet for traversing smooth ice), finneskos, ski-boots, ski, bamboos, and



flags (the latter for marking positions), medicine, ice-axes, rope, tools, camera, and box of instruments.

The last was a very heavy item, weighing more than the sledge itself, for the instruments taken had to include a theodolite, for sun observations ; two aneroids, the portable barometer ; a compass ; two thermometers ; a hypsometer, for finding altitudes, and a book of tables. This box of instruments scaled at 50 lbs. ; a couple of sledges loaded as described, with food added, amounted to full 1,200 lbs.—no mean freight to be dragged over icy wastes, the inner conditions of which remained unknown.

This latter was a fact to which Scott was very much alive, and, before setting forth southward in earnest, he determined to make several short trips in that direction to determine the route as well as the nature of the ground. He had decided by now that Barne and Shackleton should be his companions on these skirmishes, though Wilson—being a doctor—would probably take Barne's place in the actual bid for the Pole.

The return of the sun, however, did not mean a cessation of gales ; and on 17th September, after a couple of successful short trips, the scouting trio quitted ship only to enter a biting head wind that obscured all land in snow-mist, and with the temperature at 45° below zero. Stay-at-home folk must think hard to imagine what such horrible coldness means. First fix your mind on zero—then drop forty-five degrees ! Dogs and men, by 5.30, were completely done up, being obliged to pitch the tent and turn in.

Experience had taught them the necessity of heaping snow on the skirting of the tent to keep it down, but so exhausted were they to-night that they piled on scarcely enough. Scott, as a result, awoke next morning to find himself and his sleeping-bag out in the open—one side of the tent having



given way before the raging storm. The snow that lashed in his face also awoke the others, and by now the sleeping-bags were almost covered.

Rolling over, they grabbed at the flapping tent just as it was being ripped from its bamboo, and then, half-sitting on it and still holding, they tried to decide what was best to be done. The flakes were hissing so thickly—for the snow of the Antarctic falls in gritty particles—and the temperature was so low, that to venture forth must have meant a bad crop of frost-bites. So they literally clung to their meagre shelter throughout that day, the actual sleeping-bags becoming so full of snow that the luckless trio were at length lying in a horrible slush.

Barne and Shackleton, at the first slight lull, made a dash for the sledges, stumbling back with two bags of food. Though absent for only a couple of minutes they returned with cheeks dead white from frost-nip. The tent was re-fixed in a sort of way before darkness fell; the squalls lessened, but our trio were in a miserable state of shivering moisture.

By 3 a.m. they and everything about them were thickly caked with ice, and they knew it would be crazy to do anything now save return to the ship. A hot meal of cocoa and pemmican restored some circulation, and the dogs—who had lain quietly in their beds of snow throughout the storm—were roused and hitched up. “I shall remember the condition of my trousers for a long while,” writes Scott; “they might have been cut out of sheet iron. It was some while before I could walk with any sort of ease, and even when we reached the ship I was conscious of carrying an armour plate behind me.”

Clearly any assail on the Pole, whenever ventured, would involve the sternest struggle, but our pioneers were not discouraged yet. Bad weather cooped them up till 24th Sep-



tember, when Scott, with light sledges, led off for another reconnaissance. Barne's fingers had suffered so cruelly that he was forced to nurse up longer; so the chief's companions on this trip were Shackleton and Feather the bos'n. They camped out that night 23 miles from the ship, and on the 26th made what was known as the Bluff. Beyond loomed the obstacles, piles of rubble, hummocks of old blue ice, with increasing fissures and crevasses, the latter being sometimes bridged with hard or semi-frozen snow.

The successive days were exhausting to a degree, with broken and twisted fields of ice which tired the dogs and often beat them entirely. The three, however, battled on through wind and drift, till at last Shackleton spied a good line to adopt between a crater on the Bluff and a cone on Mount Discovery. Beyond this, they settled that their route should lie outside what was known as White Island—a point till now wholly in doubt.

Scott this time, though badly fatigued, got back to the ship in better frame of mind, and was delighted to hear that Koettlitz and Armitage had also been doing well on independent surveys. Unluckily, two or three members of the Armitage party had developed ill symptoms, returning to the ship with swollen legs and gums—the upshot being an outbreak of scurvy. This was serious indeed, but, dealt with rigorously, appeared to be got under in time. Royds was able to start with a party to Cape Crozier, which this time he duly reached and placed a further writing in the "Record" post. On the 24th, after travelling against furious storms, he and his band arrived back.

Satisfied now that everything had been done to direct a possible relief ship to Hut Point, Scott prepared in earnest for his march on the Pole. The scouting had shown him that,



after quitting the Bluff, the main party—to consist of Scott, Wilson, and Shackleton—would have to travel over a snow waste away from all land, so that depots beyond that might not be feasible. There was for this reason to be a strong supporting party of twelve, led by Barne, these to start in advance of the dog-teams.

On 30th October Barne and his merry men duly set forth, amid scenes of great enthusiasm, with the Union Jack and other decorations fluttering upon the sledges. Two days later Scott himself was off, amid more wild cheers, and the dogs in such great form that men had to sit on the sledges to curb such a headstrong rush. The supporting party, which had been fouled by bad weather, were overtaken at White Island, and it was agreed that the two parties should continue independently. Blasts of squally snow now beat down on the sledge-trains, and the first burst of speed had slowed to a fighting trudge.

The dawn of 12th November was another occasion for cheers, for the course, on this day, veered due south towards the Pole. Moral tenacity was needed, for the weather was cold to rawness, with a pall of mist, but observations on the 13th showed the vanguard to be close on the 79th parallel—farther south than human feet had ever travelled before. Half the support party here set back, bearing with them the encouraging news.

Out here on the Barrier snow-plain the *sastrugi*, or wind-waves, were more harassing in character, flowing up into hard, ribby mounds over which the dogs could hardly pull. The work was utterly wearing, conducted nearly always in a 'wilderling haze of snow, and on the 15th—after a hearty good-bye had been said to the last of the supporters—the southward bid was continued under even harder conditions. Yet



satisfaction was not absent in the hearts of the main three—Scott, Wilson, and Shackleton. At least they now held the record ; anything else they managed to achieve would be gain added to gain.

What happened now, however, was the surprising failure of the dogs ; all life seemed to be going out of them, and at times they were too weak to move the sledges along at all. Whipping was of no avail ; in order to sustain some advance it was at length necessary to halve the load, taking on the one portion first and then returning with empty sledges for the other. This, of course, was a totally unlooked-for trouble ; it simply meant that all ground had to be covered three times. Thus, on 18th November, the sledge-meter registered fifteen miles, yet the real advance was a painful five.

The pioneers tried to foster hope—predicting that, with the gradual lightening of freight, matters would improve. Instead, they grew worse ; there were times when the teams tottered in their weakness, sinking in their tracks and compelling halts simply because they hadn't the power to stagger on. It was realized that such a sapping of energy must be due to something more than the hard going ; soon the fodder was suspected, and the surmise proved only too correct. Scott, on expert advice, had adopted a dog-food composed of Norwegian stock-fish, split and dried. This fish-diet, though accounted to be so nourishing, was causing the present mischief—by it, in fact, the dogs were being slowly poisoned.

It was a sorry conclusion at which to arrive, yet a feeling prevailed that the endeavour must somehow continue. When a dog was specially listless he was taken up and allowed to ride, and somehow the southward move was maintained, until, on 28th November, Scott took a meridian altitude and found the position to be  $80^{\circ} 1' S$ . This provided a new thrill, for



now our pioneers were within that mystic circle which, on contemporary charts, was left always blank. So utterly unknown was this Polar territory that even the meridional lines stopped short.

"This," declared Scott with enthusiasm, "compensates for a lot of trouble." A fillip, at all events, was needed. The temperature had been up to  $+ 20^{\circ}$ , with such a glare of sun on the stark white snow of the Barrier that even goggles did not quite prevent eye-trouble. Now this changed back to a howl of blizzard, and a sharp rheumatic attack for Dr. Wilson. Next day, however, the weather was up again to  $+ 20^{\circ}$ , and the fatigue of heat to the dogs, more than to the men, caused night marches to be adopted.

This was a slight relief, but could not altogether save the poor animals. The whip had gone into disuse; they simply could not answer it, and they were now beginning to die one by one; about the time of a mountainous range being sighted to the west the men were beginning to shoulder the dogs' work. A rocky patch enabled them to establish another depot of food, and so at last the heartbreaking work of relay journeys was over. The dogs were now in a state of vomiting, and practically useless; after discussion, however, the manful trio determined to push on, and this was adhered to despite the fact that Shackleton, on the 21st, seemed far from well, his gums being angry-looking. "Certainly this is a black night," wrote Scott in his journal, "but things must look blacker yet before we decide to turn."

Christmas Day dawned brightly, and the prevailing state of things did not prevent the exiles from attempting some festivity. There was a specially big breakfast of biscuit and seal-liver, fried in fat; a hot luncheon; for supper double supplies of boiling cocoa and hoosh—the latter being a thick



sort of camp-soup prepared with pemmican. To crown all, Shackleton groped in his baggage, producing a spare and fairly clean sock, from the toe of which he pulled what proved to be a real plum-pudding, about the size of a big tennis-ball ! He next exhibited a crumpled sprig of holly, and so, made piping-hot in the cooker, the surprise pudding was served in decorated form, admired first and then heartily devoured.

The three pioneers were now always marching within sight of land, an actual continuance of the Victoria Land coast-line, forming a grand succession of hills. Only now and then would a coastal ice-cape obscure what lay behind, for the range was beginning to rise to 4,000 feet above the level of the snow-plain. A magnificent sight in itself, overpowering in beauty, we can imagine the thrill it created in those three men—themselves but moving dots on a waste of whiteness—when they reflected that human gaze had never before rested upon these scenes. The wonder of it, no doubt, made them push farther than was warranted, for food stock was running low and rations were seriously shortened.

Excitement kept them struggling, and this literally reached its height on the 27th, when a twin-peaked mountain arose to an altitude they had never dreamed of, over 15,000 feet, its top pinnacles being wreathed in cloud. It was quite the grandest discovery yet, and was promptly named "Mount Markham" in honour of him who had fathered the adventure. Among other features to the north of this were Cape Wilson and Shackleton Inlet.

These marked the limit of effort ; so short had food now become, and so jaded all resources, that to persist would have spelt sure calamity. The position was  $82^{\circ} 16' \text{ S.}$ , a very substantial record, yet nothing, certainly, to what might have been done but for the disastrous ailing of the dogs. Even



now, desiring the utmost, Scott and Wilson left this last camp and made a dash southward on ski; but the weather was so thick, leaving only their own light trail to work back by, that, after a few miles, they bowed to the inevitable and faced around. Next morning—the last day of the year 1902—they struck camp and set homewards.

The state of the dogs, bad before, became pitiable; from time to time it was necessary to put one or the other out of its misery. No longer could they make any pretence at pulling, so they were turned loose, while the three men harnessed on themselves. Almost it was a relief when the last dog had expired, for now what was left of their fodder—unfit in any case—was dropped. A sail, when the wind favoured, was rigged of the tent floorcloth, stretched on bamboo ski-poles, and this helped, yet progress was maddeningly slow. Sometimes the “going” was so bad that their utmost efforts failed to drag the sledges at all; at such moments—hope mingling with grim despair—they simply had to wait till a weather-change should improve the surface.

The second outward depot must now be near—but could they succeed in spying it? For long their anxious eyes perceived nothing ahead save the grey monotonous waste. And the food-bag was almost empty, with all three of them so famished that the little left might have been cleared at one halt. The three lives were hanging on a thread when Scott—after another vain scrutiny, and in the very act of lowering his telescope—glimpsed a coloured speck. Eagerly he located this again, and on either side of it two others—flags, beyond all doubt.

“Boys,” he cried sharply, “there’s the depot.”

New life surged back; there was a wild cheer and they braced to a renewed struggle. Two hours of dogged labour



were needed before sledges could be brought to those fluttering marks, but the vital reward was provender—sardines, pea-soup, marmalade, and the “fat hoosh” their stomachs pined for.

The trio by now were fearful to look upon; grizzled and unshaven, soiled, skin burnt by the sun from brown to black, hair long and ravelled, all haggard, and worn and torn as to dress. In the case of Shackleton there was more the matter than outward appearance; all the symptoms of scurvy had now re-developed, with swollen gums, bad throat, hard breathing, and fits of coughing. Dr. Wilson, in an aside to Scott, had to make a very grave report; Shackleton’s state was such that breakdown might come at any moment.

Everything shaped for a climax, and, with the bare hope of getting him to the ship alive, the chief ordered Shackleton to spare himself as much as possible, to attempt no further share in the pulling nor yet in the work at the halts. The idea of becoming so useless irked Shackleton to the core, but perforce he obeyed, and indeed soon it was only his indomitable spirit that kept him in motion at all. His extraordinary temperament would buoy him to the end of a march, when he would sink down dizzy and half-fainting.

Scott and Wilson now had only one object, that of saving their companion—for which reason they abandoned all surveys and cut a bee-line for “home.” Keeping a true course on the Barrier was hard, for landmarks on which they relied were blotted out by dense weather. Also, beneath an inch of soft snow came a half-frozen crust which would break beneath their weight and let them down another three or four inches; the punishing character of such a trail to a couple of men with no dogs to aid can well be imagined. When the cone of Mount Discovery peaked up through the haze it was like some glimpse of a blessed land.



On went the wearing grind till Erebus loomed to view, then the Bluff, then Mount Terror, but with progress down to a crawl and the invalid nearing a crisis. On the morning of the 30th, after a racking, sleepless night, he got up livid and bereft of speech. Breakfast revived him somewhat, and—knowing how much his life hung on the maintenance of his will-power—they got him on ski at last and sent him tottering ahead. But it was all a stagger now, and on catching up with him they put him on the sledge.

Scott and Wilson were nearly spent men; the first outward depot had now been passed, so food was no longer a problem, but the stint of those middle marches was yielding its ill effects. One thing on these final stages favoured all three, and that was a spell of very fair weather. White Island was slowly rounded, Castle Rock hove up, and then Observation Hill.

A straining trudge of two hours towards the last-named landmark and then two dots appeared, resolving themselves into the persons of Skelton and Bernacchi. Hearty hand-clasps and—thank heaven!—brand-new strength to hitch up to the load. In due time they rounded the cape, and once more before our wanderers' eyes lay the good ship *Discovery*, still imprisoned in ice but entirely trim and fit. Bunting was being flown from her masts, while the shrouds and deck were crowded with friends, all cheering lustily.

The hand-wringings, the joy and comradeship of that return, was something in itself to repay a tedium of suffering. Creature comforts followed; razors, soap, steaming baths, and the blessedness of clean linen. To bed then, a real bed, and—after ninety odd days of rigid self-denial—the healing boon of untroubled sleep.



## CHAPTER V

### AT THE FARTHEST WEST

BEFORE the *Discovery* set sail from the British Isles there had been some thought of a relief ship being sent out at the end of twelve months to make sure that all was well. Scott, in view of this, had mentioned six places where he might *cache* particulars as to his whereabouts. The first of these was Cape Adair.

In due time a small whaling-vessel, the *Morning*, left London Docks on this errand, being captained by no other than William Colbeck, R.N.R., whom we have met before on the *Southern Cross* expedition. After an adventurous voyage through the ice-ridden seas, during which Scott Island was discovered, he came at last to Cape Adair and landed on the old familiar ground of Camp Ridley. In Borchgrevink's hut he found the tin cylinder whose contents informed him that the *Discovery* had duly made these shores a year ago and would be cruising south.

Southward, therefore, sailed the *Morning* by a yet more hazardous course, for the coast all along was closely packed with ice. It was soon an exciting game of hide-and-seek ; the Possession Islands were visited without result, while two of the other points could not be got at because of the pack-ice. After Franklin Island they tried Cape Crozier ; a search



was made here for hours, and was just going to be abandoned when a sailor shouted that he could see a post stuck up above. They scrambled for it, and so learnt that Scott's quarters were in McMurdo Sound. Thither they steered under a full head of steam, and so at last sighted the *Discovery*; but the latter was still frozen in, and many miles of solid ice divided the two vessels.

This was the state of things to which Scott returned from his bid for the Pole. Last year at this time the Sound had been quite free of ice, and he was astonished to find the *Discovery* so firm a prisoner still. Moreover, the sunny weather was already waning, so there was small likelihood of a break-up this season. The only plan was for all hands to turn in at once and sledge the fresh food brought by the *Morning* over six miles of ice. The *Discovery* even before had ample stock, but now her larders overflowed—there could be no fear of starvation for many years to come.

Even so, Scott felt that her numbers ought to be reduced. On inquiry he found all eager to remain except eight. These latter were from the mess-deck, but there was one other, an officer, whom Scott felt compelled to send home—and that was Shackleton. All three had suffered severely in the struggle southward, but whereas Scott and Wilson were recovering, Shackleton was still in a very weak way. The least exertion left him breathless, and his chief felt called upon to lay down the law. On 3rd March, therefore, the *Morning* stood out to sea, having nine home-going passengers on board, and leaving behind Sub-Lieutenant George Mulock, R.N., who would take Shackleton's place.

Scott had reason to feel gratified that, during his own battle to the south, those left behind had been very active. Expeditions had been made in many directions. An Emperor



penguin rookery had been discovered, and it was now proved that this species, perhaps alone among Antarctic birds, did not always go north to breed. Other facts were being secured as regards the various species of gull, albatross, petrel, and whale-bird, with notes affecting such inhabitants of this Polar ocean as whales, sea-leopards, and dolphins. Of really big game there was none, so here we observe that the northern explorers enjoyed another advantage in being able to shoot bear, reindeer, musk-oxen, and walrus.

The biggest capture in these regions, that of a sea-elephant, was made by Dr. Wilson later on at Cape Royds. So excited was he and so eager not to lose this monster that he stalked it by wading in the icy water. At length he placed a vital shot, but the carcass was so enormous that boats and tackle were required to bear it away. It was a remarkable catch, for the sea-elephant is a vegetarian, and the only vegetable in this far zone was reindeer moss. Being probably the sole specimen ever shot in the quite southerly Antarctic, its skeleton was preserved and taken home for the British Museum. Apart from fish, about the only edible game of this region were skua gulls and seals.

A mighty task was begun in January, that of salving the embedded boats. Winter efforts in this direction had been foiled through the brine freezing directly the pick-work allowed it to rush in. Now, however, the thermometer was above freezing-point for salt water, so the lusty attack was renewed. Ice-saws were used to cut out great blocks of ice, each such block containing one boat. Charges of gun-cotton then severed the block from beneath, causing it to float, and so the toilers—working thigh-deep in slush—chopped and scooped until, by the aid of shears and tackles, the craft could be hauled up to safety. All the boats were thus saved, though, after so



much digging, blasting, and sawing, many stood in need of repairs.

Experience had taught, somewhat bitterly, the worth of fresh meat, and, despite the now enormous store of tinned and bottled food, Antarctic game formed the staple fare. The mutton brought remained good for Sundays, skua gull was eaten on Tuesdays, seal's heart on Thursdays, and ordinary seal-meat all the rest of the week. This, supplemented by fish—caught by a cone-shaped trap sunk through a hole in the ice—with soups, sauces, butter, biscuits, bottled fruits, cheese, and herbs, kept every one in the best of health, and the dark of that winter passed far more agreeably than the last. The returning sun found every one fit and ready.

Royds and Bernacchi were taking on a south-eastern survey, while Barne and Mulock were to try a little up south. Barne had already laid a depot near White Island, and it was during this trip that Joyce's foot was frost-bitten to a dead white. Having no other means of creating warmth, his comrades haply saved the foot by pressing it in turns against their bared chests, circulation being thus restored.

Scott this time had the west in view, and he looked forward to it almost as keenly as to the big trip of last year. The former western party had been of opinion that the glacial gap on this flank—eventually named the Ferrar Glacier—could not be covered by sledges, but Scott himself hoped to devise a way and to penetrate the ice-cap beyond. This western ice continent was wholly a mystery; its exploration was of prime importance.

That the difficulties of the essay had not been exaggerated is proved by the fact that the start was frustrated some days out by three of the sledges being rendered useless, the erratic surface having split up the German silver with which the



runners were shod. Having no material for such repairs, Scott—though exasperated as to what this would cost in time—was forced to order a return.

“Things which have gone fast in the past,” declared he, “will positively have to fly in the future.”

The spirit of celerity was caught by his followers, and on 26th October all were away once more. There were four 11-foot sledges, and the party consisted of Scott himself, Ferrar the geologist, Skelton, Feather, Evans, Lashly, Handsley, Kennar, and Weller. The two last-named were to assist Ferrar.

Scott's stalwarts were now in such marching fettle that the field of sea-ice to the mainland was covered at rattling pace, evoking much interest from a number of Emperor penguins. These, probably, are the most inquisitive birds in the world, and a rare source of amusement. Despite their awkward poise, these birds can make a pace of over four miles an hour by lying forward upon their breasts and thrusting out behind with their webbed feet. Such a group was sighted, and, fascinated as usual by the presence of men, they actually diverted their own course in order to follow behind the sledges, expressing their delight in loud squawks. Soon, however, they grew weary of it and veered southward, propelling themselves away in the same extraordinary style.

Spare runners had now been brought for the sledges, and luckily so, for those of the leading one split again at the first glacial climb. The shreds of German silver lost here before were carefully picked up; this metal was so scarce to them now that every scrap might be wanted, no matter how thinly worn.

Up and up they toiled, to find the glacial basin towered round by rocky scarps and morainic matter—the latter being shale, stone, or grit masses brought down by glacial action. The ice-stream in these glacial gorges, tongue-like in formation,



really does "flow" in the sense that it is subject to a downward movement, gradual as a rule. Antarctica, though appearing to be so still, is a cradle of unrest. The shifting of great ice-crusts will rend the Polar silence with sudden thunder. These roaring voices of the ice are familiar to all explorers.

Strong winds prevailed from this glacial summit, pouring upon the travellers' heads as they clambered, and carrying clouds of harassing drift. A sudden squall beating down on the morning of the 30th, just before they struck camp, caught up a score or so of articles lying loose—socks, finneskos, sleeping-bags and so on—all being whipped away towards a cavernous dip. A laughing dash was made to overtake these flying articles, and the skirmish ended in only a few small belongings being lost over the north-side fall.

Mirth was short-lived, for such a wind now raved that it was as much as they could do to battle against it. Their fur boots, as usual, took no grip on the hard, slippery curves of ice, and men were blown over with considerable violence. Even when crampons had been buckled over the feet, these having steel soles with small spikes, the sheer force of the gale all but worsted the climbers.

They were forced to take shelter amid the moraine boulders, the vehement blasts holding them here for two days, but they profitably spent some of that time in turning down to inspect an awesome valley, where the ice-wall on one hand was stratified like rock, and where the mountain on the other reared a frowning face of red granite, much of the latter being in the form of separate blocks, weighing anything up to four tons apiece, and so delicately balanced as to be liable at any moment to come thundering down on the adventurers' heads.

The wonder of this region somewhat defeats a pen, and grandeur increased as the party again took up their main



ascent, still butting against the gusty snow-drifts which apparently never subsided altogether. Hereabouts they came upon the dead and frozen bodies of two Weddell seals; an extraordinary thing, for this was close on 5,000 feet above sea-level. Romantic titles came into being; after leaving the Vale of Winds, they passed the Solitary Rocks and were now within sight of Finger Mountain. The place, so rich as it was in gneisses, granites, dolerites, sandstones, and other rock-forms, was well worthy to be named after the company's geologist.

Ferrar himself lived to appreciate all this, but the stiff job of the moment was somehow to get along. Again the sledges were disabled, having to be upturned while Skelton and Lashly used up more of the precious metal in shoeing the runners afresh. The grate of the files and the tap of the hammers sounded queer and puny in that majestic chasm of brooding silence—a silence never before broken, save by the howl of winds and the hiss of snow-drift. All this bluster would lull on occasion to dead quiet, only to burst out afresh and hurl everything before it. In one such gale, on 4th November, a full hour was occupied in striving to erect the tents—feet and fingers being chilled to the bone and in danger of serious frost-bite.

One whole week these snow-blasts raged with indescribable violence, and the pioneers were kept huddled in their tents with nothing outside save a thick, driving wall of whiteness, the temperature falling so low that exposure to the storm would have spelt quick death. "If I were asked," says Scott, "to name the most miserable week I ever spent, I should certainly fix on this one."

Frost-bites, even within the tents, were beginning to occur, and a moderate lull on the 11th caused Scott to order a brisk



move. Ferrar and his couple were sent back to shelter beneath a nunatak behind (which was also a depot), while the rest made a dash for the ice-fall. Crevasses occurred, but so eager was every one to escape this gorge of shrieking wind and frozen cascades that snow-bridges were crossed without even a pause to feel if they were sound. Something like a miracle happened at the crest of this slope, for lo ! all in a moment they had passed out of the tempest, leaving it to rage on down the ravine as down some icy shaft. Two days later they conquered the last ascent, standing now on the edge of an ice-plain—nearly 9,000 feet above the sea.

Westward before their eyes stretched the great unknown, broad of bosom, white and dazzling, calling them on as with beckoning finger. A good pace was maintained, and never had men proved more willing, but after five days the speed lessened through sheer fatigue. Trials, indeed, were never absent—arising from ribbly tracks of *sastrugi*, piercing squalls, and the temperature down to 30° under zero. Handsley developed a bad throat, the bos'n's loins ached to the point of torture ; yet, for fear of being sent back, these gallant fellows did their utmost to conceal the worst from Scott's eyes. If told to rest while the fitter ones worked, they merely begged him not to shame them before their comrades. "What children these men are !" exclaims Scott—"and yet what splendid children ! They won't give in till they break down, and then they consider their collapse disgraceful. What is one to do with such people ?"

It was the case of Shackleton over again ; Scott, of course, was compelled to issue the edict. He was now precisely south of the South Magnetic Pole, with the queer yet natural result that the northern point of the compass-needle turned directly towards the South (geographical) Pole. There-



fore, in directing Skelton to turn eastward towards the ship, taking with him Feather and Handsley, Scott told him to strike due west by the compass—another extraordinary example of how normal conditions are turned topsy-turvy in the Polar Circles.

Scott's companions now were William Lashly and Edgar Evans, two stalwart blades who, like Scott himself, were possessed of singular stamina and that blessed gift for "worrying through." The pace as a result, rising to a rapid march, took everything as it came—wind and haze, smooth and rough. Around them was the boundless plain, vastly silent, with not a hint of life and not a glimpse of land. The coldness was bitter, the thermometer dropping to 40° below zero, and so punished was their skin that speech became painful and laughter a sharp agony. They had vowed if possible not to turn before the end of the month, and always, at every undulation, there was the hope that new land might loom up beyond, perhaps even a new coast-line.

But such was not to be. The last eastward march on 30th November revealed but the same bleak monotony stretched on and on into the dim horizon. Here the wind-waves of frozen snow—*sastrugi*—were of an appalling nature, described as being "shaped like the barbs of a hook."

With these to toil back against it was high time to turn about. At any rate they had struggled out to 146° 33' E., a robust achievement for three men pulling a full-weighted sledge. And at last they could lay speculation to rest as regards this immense continent. "Victoria Land," records Scott, "must be considered the most desolate region in the world. There is none other that is at once so barren, so deserted, so piercingly cold, so wind-swept, or so fearsomely monotonous."



## CHAPTER VI

### THE HOURS OF DANGER

BACKWARD now plugged the hard-bitten trio, facing the mad variants of weather and again taking them all alike. The terror of these hook-edged, frozen furrows was in no degree over-rated, and there were long stretches where the sledge was repeatedly capsized, while the men were often asprawl. Sometimes, in the hours of bad light, they were forced to halt, but usually it was a case of scramble up and go on plodding.

Rations grew shorter, and stomachs sadder, as day succeeded day, and the sight of some skua gulls made their hearts leap. Better still, on the 10th, Evans espied land, some solitary nunataks, so they knew they were nearing the fringe of the plateau. But here, in this world of wind and endless drift, there was never one's outward trail to rely upon, so it was a matter for doubt whether they were bearing truly in upon their own glacier.

Anyhow, here was the breaking fringe of the ice-cap, and during the next three days—grizzled, frost-scarred, dirty, yet still in health—they forced a passage between the ice hummocks of down-hill slopes. A thick haze made this chance going no very agreeable job, for crevasses intervened, and at any moment a precipice might yawn at their feet. So treacherous had conditions become that, on the 14th, Scott



put his two henchmen behind the sledge to serve as immediate brakes if such were called for.

All wore crampons—the spiked sub-soles—yet even these did not save Lashly from skidding over at length and pulling Evans with him. Scott tried to clutch, but was himself hurled off his feet, and next second all three, along with the sledge, were hurtling down a rough incline. Sometimes they slid, sometimes they rolled or bounded off, and then, just as it seemed they must all be dashed to pieces, a bed of rubbly snow seemed to rise from below and bring them to rest—knocking, at the same time, every breath out of their bodies.

The sledge-load, in the last pitching thud, had burst its bonds and was now scattered far and wide, but the men, by merciful fate, were not damaged beyond scrapes and bruises. Moreover, they sat up with notes of elation, forgetful of their sores in the sudden view of familiar landmarks. The 300-foot fall they had sustained had landed them in the highest of the ice-cascades cutting into the Ferrar Glacier. Away down the rift they could espy a peak of basalt—none other than the Depot Nunatak, where food in plenty was *cached* !

What wonder if they kept jubilant, even though, from the present wreck, they were able to save little else than a tin of scattered biscuits. Anyhow, they could prepare a hot reviver by brewing cocoa, and, greatly invigorated, they pressed downward towards their depot.

Though worn of energy, and with battered limbs, they had before their eyes a positive goal, and one that meant hunger appeased. Perhaps this, and the after-effects of the fall, put them somewhat off their guard ; they did not dream of that something worse into which they were rapidly heading. They were harnessed up as usual to the fore part of the cargo, having come to the second cascade, when that fearsome



wind-blast began to tilt the sledge. They were about to pull wide in order to correct this when Scott and Evans simply shot from view down the yawn of a chasm.

Lashly leaped backward, trying to stay the sledge, but this had whizzed onward, into the very mouth of the crevasse, where it nose-dived, buckled partly, and then wedged. As for the other two, they were hanging by their harness in the cold maw of the crevasse, ice splinters and frozen snow still spinning about their heads. Evans, when this cleared, could see his chief dangling just below, and he saw him strive to get a grip with his feet on the wall of hard blue ice.

So glassily smooth was this wall that even the spiked crampons slithered, but now Scott, swinging slightly, had found a projection on which to stand, and now he had helped Evans to a like foothold. Twelve feet above they could see the jammed sledge on which their lives literally depended, while the air in this chasm was so deadly cold that life could not be sustained here for long—that was freezingly evident.

“Lashly!” shouted Scott. “Are you still up there? Can you do anything to help us?”

“I’m here, sir,” came back the voice of the stoker, in quite a level tone, “but I must not shift or the sledge will pull down as well.”

Indeed, it was thanks solely to Lashly’s enormous strength, and his cool nerve, that the dangling pair had not already been cast off to their death. Every movement the couple made was an added strain on the lop-sided sledge. Lashly, hugging on to it with one arm, had used his other hand to draw out some ski from the pack, and these he had poked across beneath the sledge to form rafters and added support. It was the shrewd and typical act of a handy seaman, but still it would never have done for him to relax his own muscular hold.



Scott guessed something of this, and, with all an adventurer's readiness, he started to climb. What with plated soles, heavy attire, and frost-bitten hands it was no small deed to attempt, but, having discarded his wolf-skin mitts, he pulled up somehow till one foot was set in the harness-belt. Next he was up to the rings, then to the rope-span—then a grip on the framework, and so to the snow-edge beyond.

Sprawled there, gulping for breath, he heard Lashly say, "Thank God!" The veins in the stoker's forehead stood out like whipcord; his thews in that last dragging strain had all but cracked. Now, however, with one man's weight off the traces, and with two above to work, the landing of Evans was a far simpler matter.

The last-named, when safely up, was seen to have shared his leader's fate in being badly frost-nipped. He was, however, quite unperturbed, and it was not till they were encamped by the nunatak, in brilliant sunshine, that he said thoughtfully,—

"My word, sir, but it was a close call!"

That summed it up. Trials, however, for this journey were pretty well over, and, after a fascinating passage amid the glacial rocks, they made the *Discovery* on Christmas Eve. In a period of about 60 days they had covered some 725 miles of the wildest beauty and solitude ever experienced by men.

Other parties had also done yeoman work, health had never been better, and the chances are that explorations might have continued over another year but for the astonishing appearance, on January 5, 1904, of two ships in the offing. One no doubt was the *Morning*, but what was the other—and why had she come? Explanations were made as soon as boat-crews rowed ashore.



Scott, last year, had felt it his duty to send home a full report, a perfectly plain statement; but somehow the good friends at home had added much from their own imagination as to the terrors of the Antarctic. Cut off from the world, with the *Discovery* frozen in, they had come to regard the expedition as being quite exiled, if not actually cast away! So the Government had undertaken the onus of a second relief voyage, and, by way of being thorough, had detailed the *Terra Nova*—another whaling-vessel, under Captain Harry MacKay—to accompany the *Morning*. Beyond this, no later relief could be promised; the expedition must come away now. The *Discovery*, if she could not be freed, must be abandoned.

All this fell as a bolt from the blue; any hope of another spring and another dash for the Pole was finally quashed. Scott knew this; though chagrined, he was himself a sailor under orders and perforce must obey. Elaborate operations with ice-saws, with a view to freeing the ship, had already been attempted, and these were supplemented by explosives. Scott firmly refused to abandon his ship till every means towards liberation had been exhausted.

It was highly dangerous work; the method adopted, under Scott's instructions, was to lower 35-lb. charges of gun-cotton, three at a time, through holes made in the ice, sinking them five fathoms deep, electric wires being joined up to the battery carried on a sledge some 150 yards distant. Every one being well away, the switch was pressed, and then followed a thrilling spectacle—tearing masses of ice carried sky-high on three roaring spouts of water, the whole to subside with a thudding tumult of ice and foam.

It is, however, doubtful whether even these drastic measures could ever have succeeded alone; it was a natural break-up



of the pack which set in about now that hastened the desired end. The relief ships, on their arrival, had been obliged to anchor miles out, but now, with bold gallantry, they put their bows to it and both began to smash a passage in.

As a contest it was stirring to watch, for speculation was rife as to which of those armoured prows would first crash in and bear alongside the *Discovery*. The *Terra Nova*, with her more powerful build and sturdy engines, just led the plucky little *Morning*; and now all three vessels, amid rounds of cheers, rode side by side among the shattered floes that were fast swinging out to sea.

The time had come for the closing act—that of erecting a stout wooden cross on the top of Hut Point to the memory of Vince, the member who had lost his life over the high cliffs during that blizzard of the first year. It was a short, impressive ceremony, carried out on 16th February during a quiet spell; the entire company standing barcheaded in a light fall of snow while Scott read the few brief prayers.

They noticed, while rowing back to the ship, a certain “oily calm,” and the tinge of the sky was also disquieting. It was an omen; slumbering fate, those few summers since, had suffered the *Discovery* to cross the Antarctic Circle and come far south without any let or hindrance. It was, indeed, as if the grim ogres of the ice-world had drawn aside to wait and have her trapped. To-night, when she had freed herself, and was raising a head of steam, a note of anger came rushing down on the wind. Loose ice crashed about the ship, and the sea took the ice-foot behind with a breaking snarl.

To hasten the engineers would not be wise, as bother might arise with the pipes, but Skelton, at about 8 a.m., promised steam in 30 minutes. Things now were so bad that the ponderous ground anchor was failing to hold, and the vessel



was being hurried towards the ice-foot. Now the sea was surging over her poop, and now came a shaking concussion. The ship's stern had struck, only to sheer off and then to ram again. She was falling broadside, shivering in every bolt and beam, when—the engines began to throb.

Bit by bit the ship laboured out—unable to head windward in such a gale, but straining for Hut Point. Once round that extremity she would have the free expanse of ocean. At the last moment, however, a hidden current was felt to be tearing past the Point, so that now, beset on every hand, there was nothing for Scott to do but to swing his helm and go hard as he could for the open. Tightly he set his teeth ; the vessel plunged at the current, fell battling away before it, and then smashed stern on to the reefs, shuddering like a spent monster held close in the toils of another.

The time was 11 o'clock, and from now till 7 in the evening—eight harrowing hours—the ship was bumped and ground without cessation upon the shoals that held her. Instead of abating, as was fervently hoped, the wind uprose to a raging fury, carrying seas over her bulwarks, which, in the low temperature, thickened to slush as it poured to the scuppers. Soundings showed the *Discovery* to be grounded amidships, so the question arose whether she could be driven clean over the reef. Foresail and foretopsail were unfurled, and the engine-room spoken for full speed ahead. The effect, alas, was merely to slew her nose to the crags ; sails were furled back, while the vessel returned to her helpless grinding. Inlets were also choked, so the engines were rendered impotent.

Everything possible had now been done ; the coolness and discipline throughout was splendid, though it was believed that the ship was doomed. The shipwrights who laboured to make her so strong had borne only ice-floes in view ; little



dreamed they that their work would be tried on the rocks of a weather shore ! Hour after hour she survived it, though now as she bent and strained the whole shape of her bent also. Below decks was a rolling commotion of any detached ship's furniture ; above, the deadlights of massive glass were cracked by the buckle of timbers. And all the while, within cable's length, the peak of Hut Point rose darkly above, topped by the wooden cross they had planted there in memory of one who had gone.

The officers, to observe routine, assembled at 7 o'clock for mess. The officer of the watch was Mulock, and the meal was about half over when he hurried in with a report.

"The ship's working astern, sir !" announced he.

Naturally that was enough for Scott ; he hastened up, to find heavy seas still breaking over the vessel's counter, yet with less violence. That galloping current had now turned, and the *Discovery*, with harsh complaints, was inching backward. The inlets being free, engines were rung astern, and now, with the propeller to aid, the ship swayed off into deep water. The relief of that prayed-for moment could not be expressed in words, and yet more relief was in store. The carpenter, having sounded the wells, reported no leak of any consequence ; indeed, the loss of her false keel was the only permanent damage the ship sustained. Cruising forward to the south, she sighted the *Terra Nova* and berthed up to the fast ice alongside.

The *Discovery's* merciful deliverance from this gale was shared by the little *Morning*, which, driven leeward, had contrived to steal shelter at last in New Harbour. Very generously her master, Captain Colbeck, gave up 25 tons of his coal, and this, with the 50 tons brought by the *Terra Nova*, rendered Scott's dearest wish possible—that of ex-



ploring farther by sea before steering for home. It was not, therefore, till 7th March that the last iceberg was eluded and the *Discovery* stood back for civilization.

By daybreak on 10th September the trusty bark lay at Spithead the centre of a large and varied fleet, all of which, laden with friends, had come to bid the heroes welcome. It was agreed on all hands that never, from every science point of view, had an expedition returned with such rich results.



## CHAPTER VII

### ROUGH SEAS AND THE "NIMROD"

ERNEST H. SHACKLETON was one who took his defeats hardly ; indeed, something of this could be ascertained from his personal appearance. Square of build and square of brow, his eyes were eloquent of strong imagination—a quality marked again in the big set of the mouth.

He had broken down on his backward march with Scott, had been invalided home in consequence, and was naturally regarded now as one who was physically unfitted to adventure in the great grim lands. Yet the soul in him rebelled ; bit by bit the agitation began, till soon he was actively striving to scrape up the funds necessary for him to launch an Antarctic attempt of his own.

Though rebuffed from the first, almost derided in certain quarters, he continued his appeals. It was his dream to determine the limits of that mountain range beyond Mount Markham ; he hoped also to send an expedition to the Magnetic Pole, to settle the mystery of the Great Ice Barrier, and to develop other research at the point where Commander Scott left off. He would try to manage effectually on about a fifth the first cost of the *Discovery* expedition, but he could not manage with less. This meant £20,000, and every one assured him that, with his record, the bare proposal was ridiculous.

Shackleton stuck to his main purpose. During and since



Scott's voyage there had been several other explorers engaged in the Antarctic regions. A German expedition, sailing in the *Gauss* under Professor Drygalski, had named Kaiser Wilhelm II. Land; Otto Nordenskiöld, the Swede, had discovered Oscar II. Land; Dr. W. S. Bruce, the Scotsman, had done useful work in a high latitude; while the French savant, Jean Charcot—who voyaged again in 1909—had accomplished much in the difficult locality of Alexander Land. None of these, however, had cherished Shackleton's ambition. "I do not intend," announced he, "to sacrifice the scientific utility of the expedition to a mere record-breaking journey, but say frankly all the same that one of my great efforts will be to reach the South Pole."

The Royal Geographical Society said politely that he had their good wishes, but they could extend no practical support, while numbers of folk who had promised to contribute drew back on second thoughts and shut up their cheque-books. Yet still this extraordinary young man went perseveringly on, obtaining what he wanted by degrees. The final sums were covered by guarantees—that is, he undertook on his return from the Antarctic to raise money by lecturing, and by writing a book, and so pay the amounts back. Having pledged which he hurried off to Norway to order equipment and to look for a ship.

The vessel he wanted was the *Bjorn*; not only was she expressly built for Polar work but she was also new. He could not, however, afford to pay the price demanded, so back he went to London and made a deal with the owners of a sealing-vessel named the *Nimrod*. The latter was at the time absent on a cruise, but Shackleton pretty well knew what he was getting. The *Nimrod* was small and slow, with a maximum speed of under seven knots, and she was also forty



years old. Though having been told all this, it is certain that Shackleton underwent a disagreeable shock when first he set foot on the craft. She was leaky and battered, her masts were defective, and she positively stank of seal-oil. What a ship this with which to attempt the South Pole !

The *Nimrod*, happily, was a better boat than she looked ; she belonged to the sturdy old *Jason* class, and was not really the worse for having knocked about the seas. Still, even when scrubbed, painted, and fitted with new masts, she could never have been mistaken for the *Discovery* !

It was Shackleton's intention on this trip to test different means of Polar transport. Unluckily, his experience with Scott had prejudiced him against the use of sledge-dogs, so he decided to employ ponies instead. During visits to Shanghai he had seen and admired the sturdy Manchurian ponies, which do such virile work in these regions and in the cold parts of Northern China. He ordered fifteen, and, once they were got across, he felt sure they would prove naturally fitted to Antarctic conditions. A pony, he argued, while requiring ten times the food, would also do ten times more pulling than a dog, and would do a longer stretch per day. Just a few dogs, as a matter of precaution, would be shipped as well.

Shackleton's other experiment was a motor car, for it seemed to him that a good deal of the Barrier surface might be covered in this way. He chose a 15 h.p. Arrol-Johnson with a four-cylinder engine. Any water-cooling device would have been useless, for the water would soon have frozen, so a special air-cooling scheme was adopted. The wheels took ordinary tyres, but wooden runners were made for use in squashy snow, with chocks to fit on.

As regards human essentials—food, clothes, tents, sleeping-bags and so on—Shackleton wisely obtained the best, and the



Admiralty helped other matters out by lending a batch of instruments. A complete printing outfit was procured, a typewriter, two sewing-machines, hockey sticks, a football, a gramophone, and—for the first time—a cinematograph, as well as nine ordinary cameras.

The *personnel* of the venture was a matter to which much thought was devoted. About four hundred people of all grades were eager to join, the final selection being Professor Edgeworth David, F.R.S., chief of scientific staff; Sir Philip Brocklehurst and Raymond Priestley, geologists; Lieutenant J. B. Adams, R.N.R., meteorologist; Douglas Mawson, D.Sc., B.E., physicist; J. Murray, biologist; and two surgeons, Drs. Mackay and Marshall.

Two others, Ernest Joyce, who would look after the dogs, and Frank Wild, in charge of provisions, we have met elsewhere. They were members of Scott's expedition; Wild figured in that terrible adventure of the blizzard upon the cliffs, and Joyce was the man whose frozen foot had been so strangely saved. An innovation was G. E. Marston, a clever water-colourist, who would endeavour to do the beauty of the Antarctic full justice. Bernard Day was engaged as a motor expert and W. Roberts as cook. The ship's staff numbered fifteen, with Lieutenant R. G. England as skipper.

Christened the British Antarctic Expedition, and comprising now so much talent, the enterprise wore an important air. At Cowes, on August 4, 1907, their Majesties King Edward and Queen Alexandra, with H.R.H. the Prince of Wales, Princess Victoria, Prince Edward, and the Duke of Connaught, paid a visit to the *Nimrod*, made an interested inspection, and expressed their good wishes. Queen Alexandra made Shackleton the gift of a Union Jack—to be carried, she hoped, to the South Pole.





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SIR ERNEST SHACKLETON

As he appeared at the time of his leading adventures  
*(By permission of Mr. William Heinemann)*







Setting sail from Torquay on 7th August, the *Nimrod* reached Lyttelton, New Zealand, on 23rd November, and here a crowded month was spent in completing cargo. Rough stalls for the ponies were built upon the already cramped deck-space, but only ten of the fiery, restive little animals could be squeezed in—these rejoicing in the names of Chinaman, Doctor, Billy, Zula, Sandy, Socks, Queen, Grisi, Mac, and Nimrod. Shackleton, amid a multitude of other matters, was officially created "Postmaster of the Antarctic," and a supply of specially printed postage stamps was put in his charge. In order to conserve coal, the *Nimrod*, outside the harbour on January 1, 1908, was taken in tow by the *Koonya*, a steel-built steamship of a thousand tons register.

It was Regatta Day, and Lyttelton Harbour thronged with a cheering concourse. Cannon roared from the pier-head lighthouse, while cheers resounded again from three Australian warships berthed within the Heads. From the deck of the flagship—named the *Pioneer*, as it happened—the strains of band-music broke forth; "Hearts of Oak are our ships," to begin with, and then "Auld Lang Syne." The Shackleton expedition was looking up.

Exhilaration for those aboard the *Nimrod* cooled all too soon. Besides her other lading, she carried now 250 tons of coal—floating so low in the water that, directly the *Koonya* had her in tow, the sea began to dash through the scupper-holes and wash-parts. Yet the weather was calm; what would happen if she met an Antarctic gale?

Foul weather came down that very night, beginning a tale of adventurous misery that will long be remembered by the unfortunate victims. Shackleton apparently, in those awful days that followed, nursed no bitter thoughts, though such



might have been forgiven him. This was the first Antarctic expedition to suffer the indignity of being towed, and even the *Nimrod* herself appeared to be sulky about it all. Added to her over-burden, some tons of heavy cable between the two vessels tended to submerge her bows, and soon she was a running flood. The pitching roll, the combined odours, the overcrowding, and the ceaseless swill of brine turned all but the toughest sailors sea-sick, and in this state they passed from ill weather to worse. Wind-harried waves broke full over the beam, drenching even the top-sail yards, and ropes had to be slung along the deck for men to grasp as they stumbled about their duties.

Meals were a scramble, and slumber a mere chance ; those on the *Nimrod*, throughout that distressing fortnight, did not know what it was to undress and comfortably retire. The poor boxed-in ponies underwent afflictions even more trying, these being shared always by two hands set there to guard them. "Night in the pony stables," records Shackleton, "was a weird experience—with inky blackness all round, save only where the salt-encrusted hurricane lamp, jerking to and fro, made a glimmer of light. The roar of the tempest rose to a shriek as the wind struck the rigid rigging, and the seas crashed dully as they fell on board. Even from the bridge, far aft, we could hear the frightened whinnies of the animals as they desperately struggled to keep their feet in the water that flooded the rolling stables."

A wonder the luckless animals should ever have survived ; as it was, in a violent lurch on the night of the 5th, the pony named Doctor collapsed, and by some strange means—the stall being no wider than himself—turned on his back. The tussle to get him up again wore out his ostlers and left them baffled ; there he had to be left on his back till dawn, when



the bout was renewed. The ocean, running in great hills, was breaking over the ship and swamping the men as vainly they laboured. Poor Doctor by now was weak and half-drowned, so Shackleton, in mercy, ordered him to be shot—it was the only way in that hurricane, and with the attendants' lives also in jeopardy.

It is, of course, one of the most fixed superstitions of the sea that never should an albatross be slaughtered. Flights of these birds had been riding out the gale in the *Nimrod's* wake, and on the second day a specimen had been brought low by the naturalists. The old salts aboard therefore shook their heads; when winds raged high and seas grew savage they muttered, "I told you so." Their gloomy apprehensions, however, did not prevent them from turning in at the pumps, for the *Nimrod*, making three feet of water per hour, was by now in some peril of foundering.

Bergs were being sighted by the middle of the month, and anon the ice-pack loomed ahead; this was the hour for the *Koonya* to cast off and leave the little sealer to worry it out alone. Departing cheers were answered with courage; soon the bigger vessel disappeared in the squally snow to the north, while the *Nimrod*, as if proud to prove herself at last, revealed an independent strength which was heartening to every one. Surrounded by the familiar ice-birds—Cape pigeons, skuas, and petrels—with now and then a glimpse of some seal, she eluded the worst of the pack and ploughed steadily in till she was steaming up the glistening face of the Great Ice Barrier.

Now Shackleton had elected to winter upon the Barrier ice, rather than on land, and had favoured Borchgrevink's bight, named by Scott "Balloon Inlet." To his amaze, however, on getting there, he found that a great stretch of the ice-cliff had calved away, widening into the Bay of Whales. A



subsidence such as this, some millions of tons, must have been terrible, and, even in his disappointment, he derived consolation from the thought that this crumbling away had happened before he and his band were camped thereon !

Seeking about, they found the inner curve of McMurdo Sound ice-locked, with 20 miles of pack ice between themselves and Hut Point, so it was finally decided to camp at Cape Royds. Shackleton, going in with a shore party, located a snug valley of volcanic earth, well sheltered by a hill, where the winter hut might be built ; so the discharge of stores was begun at once.

The motor car, in the interest of elbow room, was landed first, and Joyce got the dogs ashore, but then the ship gave trouble by tearing her anchors out of the bay ice to which she was moored. There was no other remedy but to run her 6 miles south and warp her up to the fast ice. The ponies, by means of the main gaff, were then slung overside, led over the tide-crack, and so to a sandy patch near where the hut would stand. Here they were picketed, after which the general cargo was carried over the tide-crack to what was imagined to be the fixed shore-ice above.

Warning cracks, however, caused them to bring the ponies into use and have stores dragged yet higher, an operation which terminated in a thrilling manner. Leads in the ice were now beginning to open and close, while suddenly a sheet on which the ponies stood shattered clean away and began drifting seaward. Those near by rushed for the animals' heads, contriving somehow to jump a couple of them back over the widening gaps. Another pony, however, Chinaman, becoming fractious, plumped clean into an icy channel, and this happened to be one that was closing up.

It was a nasty event for those afar off to watch, for some-



thing worse than drowning threatened the poor beast. Dr. Mackay, however, had hold of the head-rope, while Chinaman's pawing fore-hoofs got a purchase upon the broken ice-rim. Others came to haul, and so the pony was fetched forth as the lead closed again with the snap of a sharp guillotine—a very narrow squeak. A strong dose of brandy just saved the trembling creature from dying outright of cold, and Shackleton promptly decided against any more pony-work on the pack.

Work yet went on apace; the hut was nearly finished and the various locations received names—Back Door Bay, Blue Lake, Front Door Bay, Derrick Point, and Flagstaff Point. All the while it was a fray with the treacherous ice, while on 18th February there developed a blizzard of such severity that the *Nimrod* was obliged to sheer off and weather it, her engines standing up to a wind-velocity of 100 miles an hour. Some were ashore and some aboard, the two parties divided by hurtling snow-drift and towering seas. After two furious days of this the *Nimrod*, which had been driven to Cape Bird, some 30 miles out, steamed her way back through slush and pancake ice—the latter being queer round masses of newly-formed ice which have broken off in a restless sea and have crinkled up at the edges by knocking against each other.

All hands made haste to finish discharging coal. This done, the ship, which was to winter in New Zealand, turned north in a fair wind and was soon lost over the horizon. Once again a small band of explorers were wholly cut off from the world.

The shore party, in the aftermath of that two days' gale, showed up pretty well, but an amazing thing had happened to the stores at Front Door Bay. Such was the force of those



recent gusts that the tops of the waves had been cleanly sliced off, sea-water in masses being blown a quarter of a mile inland. This water, freezing as it fell, had left all boxes and bales embedded in solid ice. Iron crowbars, picks, and spades had to be brought into use ; five days of stiff labour were required before the bulk was dug up, while a few chests were permanently lost. Luckily, the perishable goods were packed in triple-sheath birch-wood cases, these being dressed with water-proof cement. The result, otherwise, must have been very disastrous.

Huts, stables, and dog-kennels, within a few weeks now, were all complete, and the hours of relaxation were healthily occupied in hockey, football, and strolls abroad. The animals had to be exercised, and Sandy Beach, about a mile nor'-west, was beloved of the ponies ; they would gambol about there or lie down and roll on the shore. Their liking for this sort of spot had a tragic sequel, for suddenly they lost their skittish air and became distrait. The one named Sandy, by coincidence, was the first to expire, and so puzzling had been the symptoms that a post-mortem was held by the surgeons. The outcome astonished them, for pounds and pounds of sand were found lodged in Sandy's interior.

Shackleton—alas, too late!—now understood. These Manchurian ponies have a voracious appetite for salt food, but since none had been given them they had quested for themselves. The whole neighbourhood, owing to the craters of Erebus and Terror being close by, was sprinkled with volcanic grit. This contains a certain element of saline, and the sea-spray made large additions. So the ponies for weeks had been eating sand !

Two others went the way of Sandy, and yet a fourth died



through swallowing shavings in which chemicals had been packed. Thus but four ponies remained—Socks, Grisi, Quan, and Chinaman. It was a blow for Shackleton ; his hopes for the South Pole were bound up so much with the fate of these plucky little animals. Needless to say, the greatest care was expended on the four to survive.



## CHAPTER VIII

### THE CONQUERORS OF EREBUS

IF the expedition, when aboard ship, had suffered acutely for lack of space, its members had no cause to complain of their quarters at Cape Royds. The hut was roomy and convenient, lit by gas from their own plant, complete with long dining-hall, bunks, laboratories, commander's cabin, large stove, storage, dark room, and printing office. In the latter, during the Antarctic winter, a very live journal was produced, being named after that beautiful phenomena, the *Aurora Australis*, whose glimmering frills of light were visible about this time.

Ere darkness fell, however, a very important venture was to be made, that of attempting the ascent of Mount Erebus. The presence of volcanic peaks in these regions provided always a curious contrast of nature, an effect of once vivid heat surrounded by evidence of the most deadly cold. Ever in some degree active, Mount Erebus reared 13,000 feet above sea-level, with a cloud of steamy vapour seen drifting from its summit. This would constitute the biggest Polar climb ever attempted; but many were keen to try, so Shackleton detailed a party.

These became two groups; Professor David, Douglas Mawson, and Dr. Mackay were to try for the top, while Adams, Brocklehurst, and Dr. Marshall were to assist in every way





#### THE RAMPARTS OF MOUNT EREBUS

The white immensity of the ice-cliff is made the more striking by comparison with the man and sledge below

*(Photo, H. G. Ponting)*







possible up to any chosen point. Sledges were laden with provisions, sleeping-bags, ice-axes, tents, crampons, rope, and other necessities, the actual start being made on 5th March. Sledges, of course, would be usable only so far; the main party, on gaining the mountain side, must needs stow their gear in knapsacks and convey same on their backs.

Along Back Door Bay, over Blue Lake, and so to the eastward rise, they were accompanied by all hands, from which point the mountaineers struck forward on their own, climbing steeply beside the moraines in order to give crevasses a wide berth. Four hundred feet up came the first trouble in shape of a transverse moraine, over which the 560-lb. sledge had to be lifted. Beyond this glacial matter occurred what Alpine guides would call *névé*—that is, packed snow; a massing together of tiny ice crystals. Here the party suffered their first collapse, the sledge skidding bodily over.

This, however, was nothing to what lay in wait. Soon came slopes of hard blue ice and *sastrugi*, and here, for ski-boots and finneskos alike, it was just one thing. The solution was to get down on all-fours and crawl, fetching the sledge up in jerky stages, performing all in face of wind and scurrying snow. By 6 o'clock they had mounted nearly 3,000 feet, so repose was fully earned. The tents were pitched by a nunatak of rock, a hot dinner was eaten, and then came refreshing slumber.

The climbers, hercabouts, enjoyed probably a finer view of the Great Barrier than Scott had obtained from his balloon. The plain before their gaze rolled away in white immensity, its belting ranges pointing towards that hidden goal of hope—the South Pole itself.

Next day the mountaineers about doubled their height, but with the sledge nose up and often in somersaults. It



would be vain to try tugging it farther, so it helped to form a depot at their second camp, together with ski, some cooking pots, and a portion of provender. Adams, whom Shackleton had put in command, found the supporting members quite fit to aspire the summit. There was a shortage of crampons, but substitutes were invented, after which all six, each man bearing a 40-lb. pack, bent their heads to the steep. The latter, in parts, became a little dizzy, and the ice-axes were brought into play in order to carve out footholds.

The first alarming episode arose from this, for Dr. Mackay, busy with axe on an ice-wall, lost his footing and went hurtling downward. He clutched as he fell, but, owing to the dead weight of his pack, could not keep a grasp. It had happened in a flash; the others, of course—themselves clinging like flies to the ice-face above—were powerless to help. They stared in dread fascination, seeing the doctor's body spin and slither till it thumped on a narrow shelf of snow which just sufficed to take his weight. Though breathless and shaken, he was happily undamaged. Creeping once more abreast of them he continued the climb, but other excitement was pending.

That evening they encamped by a craggy ravine, and a squally wind overnight developed to a blizzard by morning. Adams, Marshall, and Brocklehurst were using a three-man sleeping-bag; the last-named, crawling out to observe the storm, had one of his fur mitts whipped off and blown down the ravine. Making a rush to recover it, he was himself caught by a roaring gust and thrown headlong into the chasm. Adams, witnessing this, made a dash to rescue, and was also toppled over like a ninepin, while the sleeping-bag itself, insufficiently weighted, was swept up by the tempest and rolled towards the abyss along with its sole remaining occupant.



The rest was a pure scramble, with three lives depending on a hair of chance. Brocklehurst, down in the chasm, remembers thudding, grazing, and gripping for dear life. He had stayed the drop as by a miracle, and now he edged up bit by bit till he was over the brink—being in time to assist his bed-mates in their rolling struggle with the gear. Exposure itself grew serious, for such a gale at  $20^{\circ}$  below zero cut them to the core, but at last they were all three under the flapping canvas and back in the bag. All this, in some measure, was due to the absence of the tent-poles, which they had been unable to carry, so that the tent slopped over them loosely. And there they had to huddle, unable to make a hot brew, subsisting on biscuit or chocolate, till the bellow of wind dropped on the 9th and they were able to emerge.

The high altitude soon began to affect their breathing, and Mackay, after hard work with his axe on a sheer ice-wall, collapsed in a swoon. At the moment, as it happened, he was on a safe perch. Marshall took his pack, while soon after they were on the dizzy brink of a lava wall that formed the rim of an extinct crater. Confronted by a snow-field where crevasses might lurk, they roped up together and pressed on with care. Great felspar crystals now dotted in the snow, with lumps of lava and pumice-stone, much of it bearing traces of sulphur.

Brocklehurst, unluckily, had got several of his toes frost-bitten, but he insisted next day on being with them in the final bid for the summit. This was a terrible pull: only by rigid patience and daring did they at last win. They stood on the very top of Erebus, over 13,000 feet above sea-level—the first men in the world to achieve what is still the loftiest climb ever made in the Antarctic. Respiration was here so difficult that the conquerors had a sensation of wearing tight



bands around their chests. Yet that was ignored: indeed, all they had suffered was deemed wholly worth while, for the scene before them was grand in the extreme.

"We stood," they reported later, "on the verge of a vast abyss, and at first we could see neither to the bottom nor across it, on account of the huge mass of steam filling the crater and soaring aloft in a column 500 to 1,000 feet high. After a continuous loud hissing sound, lasting for some minutes, there would come from below a big dull boom, and immediately great globular masses of steam would rush upwards to swell the volume of snow-white cloud which ever sways over the crater."

Awed before, they were altogether stirred when a waft of wind momentarily cleared this vapour, revealing beneath their eyes a cauldron of terrifying depth, roughly half a mile wide. Mawson, from a lower part of the volcanic rim, obtained a photograph of the four others as they stood aloft on the topmost brink. The picture showed the explorers as mere pygmies, indicating somewhat the curious sense of smallness which all had felt while standing on the lip of that gigantic pit.

With those sullen explosions still in their ears, and a reek of brimstone in their nostrils, they turned and descended to the area where numerous fumaroles—a volcano's lower vent-holes—still vomited spiral columns of steam. Here some one made a singular discovery of golden ice, dazzling to the eye, but practically explained by the scientists as being impregnated with sulphur.

Where ice-slopes invited, they were bold enough to accelerate their return by glissading, first trundling their packs before them. The bundle of tin pots, besides becoming dented, set up a crazy rattle, while the men's pace in sliding sometimes



became impetuous. Ice-axes, trailed skilfully, were the only brakes, and these, when speed developed, cut the *névé* so that snow feathered up and showered over their heads. In the course of four hours, by this helter-skelter, they dropped 5,000 feet—at a cost of one aneroid lost, and one thermometer broken.

On coming to their depot they found the sledge flung upside down with load scattered far and wide, most of it deeply interred—the effects of that memorable blizzard. Having righted matters and dug what they could from the beds of snow, they continued the descent, to encounter presently more evidence of the frantic gale. *Sastrugi*, with furrows five feet deep, ran aslant their course, and work thereafter became plaguing, particularly at the sharper grades.

Getting the sledge up-hill, accounted hard, was never to be compared with this job of letting it down. Two men slithered ahead of the sledge, with the remaining four behind to steady it up or act as brakes; even so it was constantly out of control, jumping forward in an ugly manner and dashing its bulk upon the pair below, who sustained some bad falls and bruises. Dr. Marshall's skill, not to mention his thirteen stone, presently did something to remedy this, for now, when the sledge burst forward, he would leap upon it from behind and guide with his heels, kicking right or left to keep the nose true. Often the velocity was such that the jolting sledge would hurl him to the *névé* with a thud, but no bones were actually broken, and they came at last to the first upward camp by the nunatak.

All, by this, were pretty well sore and beaten, while flaky drifts on a snarl of wind awakened new fears of a blizzard. They were so low in strength and so low in supplies that no added risks could be faced, so it was decided to abandon the



sledge and allow it to be brought in afterwards. It was a prudent move ; the sledge, later, was easily recovered by men and ponies, whereas the returning six did not know what this output had cost them till it came to the last half-mile. That was the hardest of all, a broken, stumbling trudge ; so exhausted were they on reaching in that they could not at first answer the babel of inquiries.

“ Did you get to the *top* ? ” shouted Shackleton, for they even seemed incapable of hearing.

“ Yes ! ” gulped Adams, with palpable effort—and then cheer succeeded cheer.

Food proved the best medicine ; those sore and fatigued men just ate and ate. Milky porridge, a brimming panful ; loaves of bread, New Zealand butter, and one fresh ham—all this dwindled before them, and lo ! it was gone. They lit up pipes, joked, talked themselves drowsy—and then “ toddled off.” Having excelled in vigour, they slept that night as the giants slept of old.



## CHAPTER IX

### SHACKLETON'S STRONG RECORD

HUT POINT lay 20 miles farther south than Cape Royds, and possessed some other advantages, so Shackleton decided to make that his base for the attack on the South Pole. Early in the spring he paid the old spot a visit, and was not a little moved to gaze once more on Castle Rock, Observation Hill, and other familiar landmarks. The hut itself was fairly well preserved, though snow had crept inside it and much of coal and débris was scattered about. All the cases that Scott had left of tinned meat, biscuits, tea and coffee, were still piled as left.

Sledging began at once, and journeys between these two winter quarters put every one in admirable practice for the big thing ahead. The motor car, after exhaustive tests, proved a comparative failure. It was taken out on the Barrier, and really did serve a turn in the initial activities, but by no device could it be coaxed to travel over the softer tracks of snow.

The ponies on the whole inspired optimism. They worked with a sinewy vim, putting plenty of fire into it, but this very quality of spirit made them a mixed blessing. The animals were the embodiment of all mischief ; in their freakish periods they would gnaw through their tether ropes, steal fodder by



eating through bags, or else frisk round and take a bite at anything which could be classed as "chewable." Yet, as stated, they were willing toilers—well able to tackle a maximum load of 650 lbs. per pony.

Shackleton felt encouraged in his choice of these beasts, but it was hard lines that, owing to the *Nimrod's* limited capacity and to their fatal passion for salt, the ponies at his disposal numbered only four. There would now be none in reserve, for he could have done with twice as many; so he calculated to aid matters by establishing a pony maize depot 100 miles south from Hut Point. The journey was accomplished by Shackleton and five others sledging a load of maize and oil amounting, with rations, to 170 lbs. per man—no trifling task in a temperature dropping to 59° below zero. They marked the dump with a black flag and an up-ended sledge, getting back frost-scarred to Cape Barne, whence the motor car jolted them in.

Dr. Marshall, Lieutenant Adams, and Frank Wild were the three men chosen by Shackleton to form with him the Southern Party, and they would have with them the four ponies drawing four sledges. Armytage, Brocklehurst, Joyce, Marston, and Priestley would constitute a support for the opening stages. It was also arranged that a small company under Joyce should, in the new year, lay out a depot at Minna Bluff for use of the main party on their return.

Everything was now ready, but the usual vexations intervened. Two of the ponies, Quan and Socks, went badly lame, due perhaps to slips on the razor edges of ice between Cape Royds and the new base. The chief and Adams, having called a halt, were sitting near the animals, discussing matters, when Grisi had one of his wicked fits, kicking with hind-hoofs at the sledge. Worse, one of the kicks caught Adams on the



knee, with such force as almost to lay bare the bone. So now a man was lame as well—and he one of the keenest members of the Polar party.

Adams, after this, could barely hobble, but said not a word in complaint, insisting by his manner that he did not intend this episode to render him unfit. By the beginning of the month he reported himself almost free from pain. The two ponies also seemed to be recovering their wonted gait.

On 3rd November, therefore, Shackleton risked all and embarked on the adventure he had dreamed of for years. The start was made from Hut Point at 9.30, with Socks and Chinaman hauling 600 lbs. apiece, Grisi 615 lbs. and Quan 660 lbs. Another such load as the last was being pulled by men—the dogs being completely out of it. Sledge-flags and the Queen's Union Jack were waving on the breeze, the result altogether being a brave show. The supporting party came plugging behind, their exhibition of strain, even thus early, being a sharp contrast to the easy style of the ponies. The latter were doing grandly.

The surface was irksome to a degree ; soft snow upon a crust frozen just hard enough to bear a light footstep, but no more. The consequence was that men and ponies were breaking through all the way, but where the men were hampered the ponies were able to forge strongly on. Shackleton, that night, evinced gratitude to his dumb assistants by serving them out a feast of biscuit, in addition to their feed of maize. The explorers themselves, on this adventure, were receiving a daily ration of 34 oz. per man. Nearly half of this consisted of biscuit, the rest being pemmican, cheese or chocolate, cocoa, patent oats, plasmon, and sugar—with tea, salt and pepper as extras.

The supports got off next morning in advance of the ponies,



and, their weights reduced by 100 lbs.—dumped as a depot—they did rather better. Till this there had been a glare of sunlight, calling for goggles, but as the light grew diffused, casting no shadows, there was serious trouble with the going. *Sastrugi* lurked unseen, while later Marshall and a pony were all but lost in a crevasse. A snow-fall thickened during their rescue, and very soon after—down howled the inevitable blizzard.

A day of forced idleness under canvas was the result, while outside the Antarctic gale bellowed with all its customary violence. Next morning continued squally with a thick drift, but Shackleton resolved to move, for every hour of delay meant a serious inroad on supplies, with no corresponding gain. Good-bye was said to the supporting section, and the latter gave three lusty cheers as the ponies pulled gallantly away into the spinning drift due south.

Immediately after, however, the Polar party were in a labyrinth of crevasses, with nothing to warn or guide in this pall of whiteness. Shackleton, for instance, abruptly found himself staring down a gap full 6 feet wide, before realizing that, with Quan and a sledge, he was actually standing on a frail snow-bridge that spanned this void! It was distinctly a case for holding one's breath. Unhitching the pony, and moving almost on tip-toe, Shackleton drew him gently across. Then the sledge, bearing three months' food, was tenderly slid off as well. It was a lesson; even progress might be bought too dearly. Tents were pitched forthwith, and the report for next day was "Drawn blank again!" The 9th, however, dawned beautifully clear, and, escaping with difficulty from this maze of chasms, they trudged out a tale of 14 miles.

Ill weather at this period was replaced, as it were, by



other torments. The ponies were a sheer exasperation, for never an object was safe from their instinct for gnawing. They nibbled their body-rugs—the lining of Quan's was soon all eaten; they fed off their masters' jackets, gnawed straps, canvas, rope, or nose-bags, and when there was nothing else they chewed each other's tails.

Eye-trouble also became so acute that Shackleton, on the 13th, lost his power of sight altogether. "Snow-blindness," writes he, in his diary, "is a particularly unpleasant thing. One begins by seeing double, then the eyes feel full of grit; this makes them water till one cannot see at all." Despite which tale of affliction he is able to add at once—"The weather is beautiful and we are as happy as can be."

Weights were lightened at the depot, and by mid-month they were overhauling the 80°, with the mountainous crests standing up dimly like forts in a mist, trending away on their right.

Shackleton was steering well east of the Scott trail, as he hoped in so doing to elude the broken ice that fringed the Barrier plateau. Out here, however, he was encountering a surface almost as bad, with the ponies floundering deeply. They were gallant to the extreme, nerving all their sinews to a game which, by every token, is the most killing one on earth. Another two days of it told on them all, especially on Chinaman. When they made the next depot he was stumbling, so Shackleton, in mercy, had him shot. It was decided, on conference, that his flesh must be eaten in order to conserve stores. He was skinned and cut up, 80 lbs. of the meat being *cached* here and the rest sledged on.

From here, the going was rather better, despite soft snow, and the three ponies got bravely to it. The men were heartened, if not thrilled, by the sight of Mounts Longstaff



and Markham—standing beyond Scott's farthest. On the 26th the point was actually passed, so that Shackleton now held the world's record.

The zest of this can be imagined ; also, Wild and Evans, both of whom had been ailing, were bearing up better. The nutriment of the pony-meat had something to do with this. The meat, though tough, was fresh ; small portions of it, raw and frozen, helped them upon their way, while at the night camp they would have fried pony, or pony mixed with pemmican in the hoosh. To a new glow of health was added the zeal of the pioneer, who knows not what lies beyond.

"It falls to the lot of few men," declared Shackleton, "to view land not previously seen by human eyes, and it was with feelings of keen curiosity, not unmingled with awe, that we watched the new mountains rise from the great unknown that lay ahead of us. Mighty peaks they were, the eternal snows at their bases, and their rough-hewn forms rising high towards the sky. Our imagination would take wings till a stumble in the snow, or the dull ache of physical weariness, brought back our attention to the needs of the immediate present."

This "dull ache," of course, was shared by the poor ponies ; they did not enjoy the same ambitions as their masters to help them to endure, and the tense hardship of the daily struggle was surely fretting them out. Grisi, on the 28th, was snow-blind and broken, so that night he also was shot. A third depot was made, and next day conditions were heart-breaking—the snow being so soft and deep that the ponies sank in to their bodies.

The Barrier surface hereabout was thickly strewn with round discs of snow, and the glassy facets of these would catch the sun and reflect it as from a myriad of tiny mirrors.



The result was similar to an "ice-blink"—a winking blaze of light most dreadful to the eyes. The worry of it, plus toil, was almost intolerable to the travellers, but particularly so to the jaded beasts. Poor Quan was staggering at last; he had to be released from harness on 1st December, and gently led to next camp, where he also was shot.

This gradual loss of the ponies was a grave matter, yet 300 miles had been covered in a month, and the aspirations of the party were by no means dashed. The fact of the pony-flesh, *cached* and frozen for their backward march, gave them special confidence, while a great new chain of mountains—rising from 10,000 to 15,000 feet—lured them on. But this range was stretching eastward, athwart their course, and so, in their advance upon the Pole, they realized they would now be called on to climb.

It was clearly the end of the Barrier—which, in reality, was a great tableland of sea-ice—the end being marked by pressure-ridges and yawning crevasses. Over all this, and roped together in single file, they somehow managed to struggle, leading Socks, their one remaining pony, who whinnied piteously for his dead companions.

By about midday they were among granite boulders, and soon they had the satisfaction of being upon the most southerly ground ever trodden by man. Scaling a hill of red granite—afterwards christened Mount Hope—they were overjoyed to espy a glacial gap trending up due south. This, which afterwards grew famous as the Beardmore Glacier, promised them access to the Polar dominion above, just as the Ferrar Glacier had given Scott a road to the snow-plain of the west.

Descending, they set in that direction, soon to find themselves in a region hazardous beyond telling. Holes and fissures



yawned everywhere, veritable man-traps. Dr. Marshall was into one at the outset ; only by a smart dig of the elbows did he contrive to stop himself and to hoist himself out. Doubtless many of these chasms, being well choked with snow, were passed over unsuspected, but on the 7th came swift disaster. Wild, leading the pony sledge, was stalking warily behind the rest—the idea being, of course, that by following their trail he was on snow already proved to be safe.

Wild suddenly felt what he described as “a sort of rushing wind” ; the rein was whipped from his grasp, and he beheld the pony go down headlong before him in a sinking patch of snow. It had happened in a flash, and the sledge was being jerked on as well. With a roar for “Help !” Wild seized the sledge, being dragged along face downwards, and just saving himself at full stretch by catching hold on the opposite edge of the crack. The others came rushing back to help, but all was over so far as poor Socks was concerned. The snow that had let them across had failed to support the pony. Lying down, they gaped into the cold, forbidding cavity, but could hear nothing, nor could they discern any bottom.

Shackleton slowly arose ; this episode, the tragic loss of his last pony, marked a critical stage in the enterprise. Haulage henceforth devolved on themselves, but this had been so far anticipated. The real gravity lay in poor Socks being lost entirely ; his food value, in these desperate latitudes, had increased day by day—Shackleton had fostered hopes of a pony-meat depot right here in the Glacier, with half quantity to carry on. The importance of this was not over-rated, as we shall see.

The pony-sledge, luckily, was saved ; Socks' falling weight had ripped the swingletree clean off, the upper bearer also



being damaged. Hitching up themselves, they toiled on, having now a cargo of 1,000 lbs. Somehow they mastered the successive gradients, though the climbs were not all gain, for many downhill runs marked the first miles of their glacier. Rubbly blue ice, however, and saw-like edges, made rapid work unfeasible anywhere, and utterly unsafe. The haunting presence of crevasses kept the party on tenterhooks, and count was soon lost of hairbreadth escapes that affected all in turn. Yet their optimism was unaffected.

"Difficulties are just things to overcome," wrote Shackleton. "Every one is very fit."

In this mood, when they reached glassy inclines where a slip might spell death, they began relay work, bringing on one sledge at a time. Days followed when the strain was all but backbreaking; the sledges, suspended on stout Alpine rope, had sometimes to be hoisted up sheer faces of ice. At 6,000 feet they laid a depot, and hereabout the scene began to enchant them. Beyond the ordinary shales and moraine matter, there was granite, reef-quartz, and erratics of marble. The most amazing discovery was made by Wild, who located a dead black strata. Some lumps of this, afterwards, were definitely identified as coal!

This find, in itself, was fated to astonish the world of science, but our staunch quartette at the moment had sufficient to move them in the snow-capped splendour of the scenes they were conquering. These were kings amid mountains. "No foot has ever trod on their mighty sides," was said by Shackleton, "and until we reached this frozen land no human eyes had seen their forms." Those flanking the western side of the glacier were called Queen Alexandra Range. The loftiest peak here became the Cloudmaker, while the three at the crest took names from the party, Mount



Adams, Mount Marshall, and Mount Wild. Many tributary "tongues" ran into the main one; the lowermost of these they named the Socks Glacier, after their plucky and longest-lived pony.

Desire to attain their goal was now becoming a fever—if such a term may be applied to men whose whole power lay in strength and calmness. But now, still 300 miles from the Pole, they counted up days and marches, to discover that the thing could never be done except by forced pace and shorter rations. So every day now, despite their mountain hunger, they saved pemmican and sugar, as well as two biscuits apiece. They also soaked what was left of the pony maize and began to eat that. "And to-morrow," said they, "we shall finish this climb and emerge on a better level."

But many morrows passed, of galling labour, before Shackleton was able to say, "If a great snow plain, rising every 7 miles in a steep ridge, can be called a plateau, then we are on it at last, with an altitude above the sea of 9,820 feet." No more crevasses now—but in their stead the sharp-ribbed *sastrugi*, or the brittle snow that broke at every step. A branching arm of mountains—called afterwards Dominion Range—behind the frontal chain, pointed south-east, so these were on the pioneers' left as they battled up this Polar desert, the wheel of the sledge-meter tailing behind, with the cogs at work ticking out miles.

The lamentable truth, however, was that now, in the hour when ample subsistence was chiefly needed, they were living on mere mouthfuls. Privation and the high altitude were having ill effects. Heads ached as bodies became famished; Shackleton's sensations were as though his nerves were being "twisted up with a corkscrew and then pulled out." The others bled from the nose.



"In spite of this," says the diary, "we are getting south. We are only 198 miles off our goal now."

Hope did indeed die hard in these super-men, and it was not till 6th January, when on the verge of breakdown, that they admitted their dream to be impossible. Courage to endure was still unfailingly theirs, but they were sinking in their tracks for mere lack of food, and a cutting wind from due south helped cruelly to scourge their bodies and emphasize their plight. To-morrow, resolved Shackleton, they would quit camp and make a last dash; but even in this he was thwarted by a shrieking blizzard that cooped them in their tents two days. Here their feet so continually went dead from frost-bite that they had to press these members against the body of a comrade, inside his shirt, to coax them back to warmth.

The pony-maize was all gone, and for the rest it was a case of counting crumbs. Still, on the 9th, they put down their heads and plunged southward, bearing only compass camera, glasses, and the Queen's flag, together with a metal cylinder containing their record. The latter, as far south as  $88^{\circ} 23'$ —a brilliant new record—they buried, and planted over it the Union Jack. It is interesting to remind ourselves that a degree of latitude represents 60 miles, corresponding with the minutes (in this case 23 minutes), the South Pole being represented by  $90^{\circ}$  S. Thus, these four men stood short of the Pole by only 97 miles.

With their powerful binoculars they peered south—towards "the last spot in the world," as Shackleton used to name the South Pole—but could see nothing save "the wilderness, the vast and godlike spaces, the stark and sullen solitudes, that sentinel the Pole." This vast waste Shackleton named King Edward VII. Plateau.



Their altitude at the moment approached 12,000 feet, and the cold was intense. With beards and faces caked with ice they stumbled their way back ; while Shackleton, in spite of disappointment, plus the misery of pain and hunger, was able to say from his heart—" We have done our best, and we thank God for having allowed us to get so far."



## CHAPTER X

### A SHEAF OF CHANCES

SOME atmosphere of monotony creeps into all the standard books on Polar achievement, simply because this is one of the very elements against which all ice-heroes have to combat. The tale of Shackleton's return journey might seem tedious if recounted in detail, though it was in fact a day by day wrestle with death, a stern reaching out from this depot to the next.

Blizzards in their backs helped for once on the plateau by driving them along, while at times in the Beardmore Glacier they risked all by rigging sail and making a fast toboggan over filled crevasses and frozen cascades. All their smaller possessions were contained in a tank—that is, a big canvas hold-all used for sledging—while the rest of their kit was tightly strapped; otherwise, in this headlong glissade, there must have occurred some serious losses. At the bottom, amid the roughest ice, Wild fell in a faint from exhaustion, and next day the same thing happened to Adams. Half-blind from the sun and hunger and weariness, they somehow struggled through the Gap.

"Thank God, we are on the Barrier at last," was Shackleton's fervent entry on 28th January. Thereafter, it was a scrape along with a ramshackle, worn-out sledge till the depoted maize and pony-flesh could be dug out from what had devel-



oped into beds of solid ice. Even now, they had barely enough to subsist on, for savage blizzards delayed. On a black day early in February all four were down with dysentery and could not crawl. From here onward those who felt slightly better had to help the weaker brother, but on the 19th they were rejoiced to sight Mount Erebus in the far distance.

"It is neck or nothing with us now," declared their leader. "Our food lies ahead and death stalks us from behind. Thank God, we are nearing the Bluff. If we do not pick up the depot there will be absolutely no hope for us."

They saw it first in a mirage on the 23rd, its flags hailing them bravely, and at once they greedily devoured the few scraps of food they had left. Joyce and his depot party had faithfully done their part, and the haggard four crept in to find a wonderful store of provisions—cake, figgy pudding, eggs, gingerbread, porridge, fresh boiled mutton, preserved fruit, jams, and heaps of other more ordinary edibles. To know Bluff Depot was to know a sort of wayfarers' paradise—yet they had to eat carefully, because of their long fastings and denials.

A note was here to inform them that the *Nimrod* had returned and was preparing to get away—for Shackleton's orders had been that she must sail off without the Polar party when there seemed no hope of their returning. So the four pushed on at once, though a protracted diet of stringy pony-meat and coarse maize had sapped their physique. Dr. Marshall was ailing from paralysis of the stomach; he plugged along two more marches with brave uncomplaint, but then a blizzard rushed down and made it impossible for an invalid to travel. So the doctor, with Adams to look after him, remained in the tent, while Shackleton and Wild pressed on to try and inform the ship.



It was all in the teeth of a wild snowstorm, but new foreboding urged their footsteps, and they strove in at last to Hut Point. No friends to bid them welcome ; the hut was chill and deserted, but there was another note to say that the *Nimrod* would wait till at least 26th February. Judge the effect of this on the belated couple—for to-day was the 28th ! The ship, according to this, had sailed already—at any rate the likelihood was strong.

What was there to do ? It was now dark and dangerous to try to go on ; besides, if the vessel were cruising they might only grope in some wrong direction. As long as impatience allowed, they sat hunched in cold discomfort ; their thoughts occupied with the dread prospect of being abandoned, along with their two comrades on the Barrier, to these solitudes of ice. Some kind of signalling must be attempted, and before dawn they clambered up the hill.

A small disused shanty stood upon this steep, while the peak was crowned by that wooden cross erected to the memory of Vince by men of the *Discovery*. So numb to the bone were the castaways' fingers that, for a long time, they could scarce strike a match nor yet tie a knot with any effect, but at length they contrived to get the shack ablaze, while to Vince's cross they fixed a flag. Then slowly the daylight came, and away in the mists a shape emerged—the phantom shape of a ship. Yes ! it was the *Nimrod*—soon plainly to be seen. Shackleton flashed with the heliograph he had brought ; before long his signals were answered, and in brief course the two were aboard.

The Polar quartette had indeed been given up for dead, yet, before putting off, the ship contingent had decided to send a questing party out upon the Barrier that very day. All now was jubilation, but the returned chief's first aim was to get in Adams and Marshall. It speaks eloquently of



Shackleton's character that he insisted on leading this venture himself, being fortified for it by a square meal of fried bread and bacon.

On 2nd March, in company with Douglas Mawson, Dr. Mackay, and McGillan, Shackleton made the last Barrier camp, to find Adams still fit and Dr. Marshall much better. A little after midday on the 4th all were safely embarked upon the *Nimrod*, the attempt on the Pole having covered 1,530 miles, out and back, the period being 127 days. This gave a daily average of about 12 miles, an excellent record; yet this figure, compared with the North Pole average, is a striking testimony to the far harder conditions that prevail in some parts of the Antarctic. At the same time, it must be remembered that the Arctic explorers were always wise enough to keep their faith in dogs as the right means of sledging.

Now Shackleton was able to tell his tale, and listen to what the others had to relate. It was lucky the *Nimrod* was here at all, for her master for this voyage, Captain P. F. Evans, had had a terrible time in fighting the ice. The latter, screwing in great pressure-ridges, had threatened to crush her, and at length the second officer, Mackintosh, with McGillan and two others, were detailed to sledge in the mails over miles of ice—meeting mishaps that would form a stirring tale in themselves. Roped together, astray in a dense blizzard, they were at length accosted by Day and carefully guided in. It was about midnight on 15th January that the *Nimrod* found lanes of water and so worked through.

Armytage, Priestley, and Brocklehurst, visiting the Ferrar Glacier in quest of rocks and fossils, had come in for a threatening adventure. Camping at Butter Point, on what they believed to be fixed ice, they woke next day to find that their portion had broken away and was drifting out to sea—they



were in fact divided from the shore by about two miles of open water! Any wild thought of swimming in that dead-cold ocean would soon have been discouraged by the "killer" whales that were spouting all around. Their plight seemed really serious, but after about five helpless hours the floe bumped into some fast ice and they were able to rush the sledge across. It was the closest escape, for now the floe sailed north and was lost to view on the far bosom of ocean. The marooned trio were eventually picked up by the *Nimrod*.

To Professor David, however, Douglas Mawson, and Dr. Mackay went all the laurels to spare, for they had made an achievement second only in importance to that of the Polar party. In a journey totalling 1,260 miles, and pulling every ounce of gear themselves, they had actually located the South Magnetic Pole—that is to say, they had stood on the precise spot, claiming it formally for the British Empire.

This journey also comprised a tale of remarkable heroism under conditions of stress; a task of toil, hunger, aches, cracked or bleeding lips—and a sprained limb in the case of Mawson, which did not deter him from going stubbornly on. But they were "done" men when at last they dragged back to the coast, and their outlook, by the mouth of the Drygalski Glacier, was pretty nearly hopeless. Pitching their tent they were holding an anxious council when a loud *bang!* resounded in their ears.

"A gun from the ship!" shouted Mawson, and plunged through the tent door. The other two followed, tripping over each other like excited schoolboys. It was indeed the *Nimrod*, standing about a quarter of a mile out. Cheers arose from her decks as the running figures were sighted, and then it was that Mawson, heedless, not looking where he went, dropped headlong into a crevasse. The bottom of the latter was deeply



filled with surge, Mawson's body being miraculously stopped by thumping on a ledge just two feet above the swilling brine. Though shaken to the spine, no limbs were broken, and he was faintly able to answer when the others shouted down.

The Professor and Mackay, doubling back, untoggled their sledge-harness and presently let this down the chasm, but were unequal to pulling the other up till help arrived from the *Nimrod*. It was a tense period for all three, but Mawson, not much the worse, was hoisted up at last. Shortly after the wayworn trio were on board the *Nimrod* and partaking of afternoon tea.

Undoubtedly the ship had been most timely in all these sightings and rescues, the sum of it being that every single soul was now back on board and looking more hearty every day. The cry was now "Homeward Bound!" Lyttelton, New Zealand, was made on 25th March, and the fact of the cheering folks who thronged every inch of the quays must have warmed the wanderers' hearts. The wires of the world were throbbing with the fame of Shackleton, and so in due time he was proudly received by his own citizens in the Port of London.

As for the record march on the South Pole made by Shackleton, Adams, Marshall, and Wild, we may leave it to another explorer—himself a conqueror of another nationality—to sum the matter up. Reviewing it afterward, he wrote of the feat as follows :—

"Every one who reads Shackleton's diary must feel a boundless admiration for these four heroes. History can scarcely show a clearer proof of what men can accomplish when they exert their full strength of will and body. These men have raised a monument, not only to themselves and their achievement, but also to the honour of their native land and the whole of civilized humanity."





THE "TERRA NOVA" IN MCMURDO SOUND

A magnificent camera study---and one which nearly cost the photographer his life

(Photo, H. G. Pontiac)



## CHAPTER XI

### ON THE "TERRA NOVA" WITH SCOTT

CAPTAIN SCOTT'S historic voyage of 1910 was made in the *Terra Nova*, R.Y.S. ; his former ship, the *Discovery*, having by now passed from the ways of exploration.

The promoters of the British Antarctic Expedition of 1910, we are led to suppose, did not put the winning of the South Pole first and everything else last, but rather the reverse ; indeed, Scott's orders were to make it primarily a scientific venture, and to those orders, as a sailor and a man, he robustly adhered.

It is freely admitted that a lesser personage than Robert Falcon Scott, in the circumstances that arose, might have acted differently. He was a bold adventurer, yet he did not miss the fact that the main function of a Polar explorer, apart from general research, was to map and make known the parts nearer home—the parts most likely to be of service to future icefarers. There was, at the same time, to be a Southern party, and the attack on the Pole was to be a very determined one indeed—designed, as one might even say, to succeed at the highest cost.

Eight thousand odd was the record number of volunteers for this enterprise, the chief and his second-in-command, Lieutenant E. R. G. R. Evans, R.N., being kept full busy at their office in Victoria Street writing, interviewing, and ap-



pointing. The other naval men chosen were Lieutenant Victor Campbell and Lieutenant Henry R. Bowers (the latter in charge of stores). Dr. Edward Wilson was coming this time to act mainly as Chief of the Scientific Staff, so that two other surgeons, Drs. G. M. Levick and Edward Atkinson, both naval men, were appointed in addition. At his own keen desire, and by strong recommendation, a young army officer was, for the first time in modern years, admitted to a British Polar venture—Captain Lawrence Oates of the 6th Inniskilling Dragoons.

Among the scientists we observe two whom we have met before : Raymond Priestley, geologist, and Bernard Day, motor engineer, both Shackleton men. Other geologists were T. Griffith Taylor, B.A., B.Sc., B.E., and Frank Debenham, B.A., B.Sc. Apsley Cherry-Garrard, B.A., was assisting in the zoology, while George Simpson, D.Sc., was the weather-man, Edward W. Nelson for biology, and Charles Wright, physicist.

A member of great popular interest was Herbert B. Ponting, who signed on as camera-artist, and excellently did he live to fulfil that rôle. One by the quaint name of Tryggve Gran, a Norwegian officer, was engaged as ski-expert, while Cecil H. Meares was to look after the dogs. Among the rest, which numbered fourteen, we encounter old friends in Edgar Evans and William Lashly, Scott's two companions during that close call in the ice-ravine of the Ferrar Glacier. Thomas Crean also was one of the old hands.

Dogs, as we have noted, were not to be omitted entirely ; during the small chance they had been given on the Shackleton trip they had done admittedly well, so an adept dog-driver was this time engaged, one Demetri Gerof.

It is much to be feared, however, that as a means of Antarctic transport the canine element was relegated by our



friends to about third place ; probably, and with good personal reason, Scott still put man-haulage first, while (in view of the Shackleton test) he might secondly favour horse-flesh. The Siberian variety was selected, and nearly a score of these fine little beasts were eventually brought across. Oates was put in charge of the ponies, to be assisted by a native groom, Anton Omelchenko.

The ship's party alone numbered over thirty, and when all were aboard, together with those thousand and one items with which our chronicles make us familiar, it was seen that only dirty weather was needed to give the *Terra Nova* as bad a dose of rolling as the *Nimrod* ever got. Among the deck cargo alone was counted  $2\frac{1}{2}$  tons of petrol, 30 tons of coal, 3 motor-sledges, an ice-house stacked with meat, bales of fodder, the 19 ponies in their stalls, and some 33 dogs. Trouble was brewing. A bluster on the third day out from New Zealand quickened to a galloping gale on 1st December.

Cargo broke loose on the upper deck, and the sea-sick men below were in a welter of brine. Sail was shortened and engines rung stationary, but in vain ; nothing could check the drunken plungings of so heavily loaded a vessel. Pumps choked and the flood rose over the gratings, creating a serious prospect ; before dawn, at this rate, the ship must undoubtedly sink.

Oates, even thus early, proved his trusty qualities. He was a taciturn son of Britain ; since first presenting himself with a brief "I'm Oates," he had turned to his jobs in a stolid way and soberly carried on. Assisted by Atkinson, he laboured throughout that bellowing storm to save at least some of the ponies. By sheer strength, for Oates was finely built, he would drag ponies up when they staggered and plant them once more on their hoofs.



Bill Lashly, meanwhile, up to his arm-pits in gurgling water, was striving to free the pump-suctions. Donkey-engine and bilge-pump would chug for five minutes, then a chokage would happen and the flood would swell madly upward. The decks were now "a solid sheet of curling water," while Scott at one time, even mounted on the poop-rail, discovered himself waist-deep. Twenty-four men, as a last-moment resource, were put on to man buckets, and this, with the hand-pump just a-trickle, helped matters over till the hurricane slowly abated.

Two ponies had perished despite Oates's utmost care, and—after a 60-hour unremitting struggle—he betook his numbed, sodden body below, the sea-sick Russian groom being left here awhile in charge. The storm was costly in objects washed overboard—one dog was missing and some 65 gallons of motor-spirit.

Beset by mountainous seas and lashed by further squalls the *Terra Nova* battled southward into the ice-pack. Here Ponting, at imminent risk of life, became active. With Campbell to aid and advise, he got a platform composed of three stout planks projected a dozen feet out from the starboard bows, with a rope slung from the yard-arm to support the far ends, to which a cinema-camera was screwed. The camerist then crawled out and, sprawled on his stomach, clinging like a limpet, began to manipulate.

We know now what a shake-up it means when a ship is hammering her way through the ice-pack; the lurch, the grind, the smash, and the sudden stagger back. The doughty Ponting, again and again, was all but hurled from his perch, yet, with one arm hugging and one leg hooked to the rope, he steadfastly turned his handle, while the sea and the shattered ice raced in a dizzy turmoil beneath. The film thus secured



of a ship fighting the floes was one of extraordinary stir and realism.

Economy, however, soon made it necessary for the captain to restrain his engines, working them only when open leads favoured, for somehow coal must be saved. This irking game spun out more than a fortnight, having no good effect on the stalled ponies and in some degree fretting the men. But not one complained, for they all possessed—now and throughout—what is perhaps a typically British knack of making the most tedious set-backs a subject for light-hearted joke. It is a spirit which has eased many aches, and which has carried the flag across many continents.

Not till January 2, 1911, did the vapouring cone of Mount Erebus rise to view, and so Ross Island was successfully made. Scott was anxious to find a more sheltered spot for wintering than his former one at Hut Point, and he finally pitched on Cape Evans, which lies in McMurdo Sound a few miles south of Shackleton's site at Cape Royds. Nature had provided this new site with a level front of ice, exceeding a mile wide, which presented a capital quay on which to land stores.

The *Terra Nova* drew up to this ice, the surface of which formed so smooth a threshold to the vast white world of adventure; and Ponting the camerist, whom fate seems to have marked out for thrills, did not need to pass far over the threshold in order to find some. It was on the second day, when discharging had barely begun.

There is something about a sunlit ice-scape which, in its marvels of blue and white and gold, almost surpasses the grandeur of the tropics. Ponting was frankly enthralled, and this morning, having packed his camera on a sledge, had just started forth when eight "killer" whales appeared, blowing loudly and swimming towards the vessel.



The "killer" whale, the *Orca Gladiator*, is really a terrible fellow, distinctly nastier than any shark because of his voracious appetite, combined with brute ferocity. These finned cannibals prey even on their own kind; "a herd of white whales," says an authority, "has been seen driven into a bay and literally torn to pieces."

Scott was particularly eager to get some photographs of these savage mammals, so he shouted for Ponting to take a "shot." Already, however, that keen artist had seized his reflex camera and was running for a spot on the ice-edge under which the whales had dived. His idea was to secure a snap immediately the creatures re-emerged; but imagine his amaze when, to a series of thuds beneath his feet, the floe-ice heaved and the whales' backs came breaking through!

Scott, up on deck, was horrified at the sight, and abruptly he realized the meaning of it all. There on the ice-edge a couple of sledge-dogs were tied to the *Terra Nova's* wire hawser, and these dogs were the bait towards which the "killers" were blundering. The great fish were now charging in line, their scaly flanks almost touching as they heaved at the whirlpool of ice and "blew" into Ponting's face.

The whales, though cunning in the assault, were yet baffled of their main object—which beyond a doubt was to tip the dogs into the water; though surrounded by cracks the yelping animals were still afloat. This being so, the malignant fish turned all their attention on Ponting, who luckily had collapsed upon his back instead of pitching forward into the boil of brine. Before he could retreat, however, all eight "killers" were striking hard at the ice towards him, creating such waves with their powerful fins that the split ice rocked dizzily up and down.

"Run! Run!" shouted those on the deck; but could



see, even as they spoke, that Ponting could scarce stand upright on the reeling ice-blocks, let alone run. When at last he had tottered on to another floe, there came a concussion beneath that, followed by a hideous head that bored clean through. There was a flash of bared teeth, sharp and conical, and Ponting stumbled aside as this piece was also splintered in half. The infuriated creatures were now all round him, pouncing again as he hopped from floe to floe—sometimes rising as high as eight feet from the brine in their efforts to seize him.

All, of course, had happened at considerable speed, and the several portions of ice were now drifting out with the current. Ponting took desperate running strides over the widening channels, with the whales still surging to get him. Now only one lane of water intervened between the man and the fast ice, but that one gap was too wide for Ponting to spring, and the ensuing seconds were the most tense of all. The “killers” sensed their chance; with snort and wilder spouting they rushed to make an end of it, when—by a merciful act of Providence—that piece of ice swung back and so reduced the channel.

“Jump, man—jump!” implored the lookers-on; and Ponting did so, taking his life in the leap, being just successful in clearing the watery space, though not one second too soon.

“As I reached security and looked back,” related the camerist afterward, “a huge ‘killer’ pushed his head out of the water and rested it on the ice, looking around with his little pig-like eyes to see what had become of me. As he did so he opened his jaws wide and I then saw the most terrible array of teeth in the world.”

A close shave indeed; but the artist in Ponting was strong, and the fact of having “bagged” no picture was his principal



cause for regret. It was the onlookers, indeed, who had suffered most in anxiety, especially the chief, of whose character we here obtain an illuminating glimpse.

"I shall never forget Captain Scott's expression when I reached him in safety," adds Ponting. "During the next year I several times saw that look on his face when he thought some one was in danger. It always showed how deeply he felt the responsibility for life which he thought rested so largely on himself. He was deadly pale as he said to me, 'My God, old chap, that was the nearest squeak I ever saw!'"

Eight days saw the new hut built and disembarkation completed, the smooth working of it all being attributed to Bowers, who proved himself a model stores-master. There was only one serious mishap, and that was due to the rapidly thawing ice, through which a motor-sledge (the latest experiment in transport) sank bodily and was lost in the sea.

Scott got briskly to work upon his schemes of depot-laying in early preparation for the southern journey. A dozen men, eight ponies, and 26 dogs were employed to bear some eight tons of supplies to a point on the Barrier 6 miles south-east of Hut Point. This, comprising a home base, became known as Safety Camp. The development of the plan was to carry portions of this steadily on to Corner Camp—where the course turned due south toward the Pole—and so up to the 80° S., where Scott hoped to establish his One Ton depot, the nature of which is indicated by the name.

Hindrances arose; dogs were answering well, and also the ponies, but both were intractable at times—the dogs prone to savage mix-ups among themselves, the ponies flinging off at times into impish capers. Once there was an ugly bout between the two kinds, an indication in itself of how these animals needed watching; the half-wolfish dogs, in particular,



though so faithful in working, were by way of being dangerous when hungry. On this occasion Weary Willie, a pony true to his name, was loitering behind on a return march, when his tired legs failed and he fell. A dog-team to the rear espied this and, with a united howl, they all leapt upon the sprawling pony—intending, beyond doubt, to tear him to pieces even as they sometimes tore each other. Weary Willy bit back with his powerful teeth, and the battle was quite horrifying till men rushed up and whacked the dogs off with ski-sticks and other weapons.

At Corner Camp a three days' blizzard had punished the ponies severely, owing to the fact that their coats were too thin as yet to protect them from low temperatures. Three of them, at the Bluff Depot, were ailing badly and had to be sent back, the One Ton Camp being now established at 79° 28' S.—a falling short of the mark which was fated to bear the most tragic fruit.

With the outpost depot completed there was no special call for pony and dog sections to retrace the trail together, so Scott, with Wilson, Meares, and Cherry-Garrard, got ahead with the dog-teams at once. Light lading resulted in rapid progress, but on the night march near Corner Camp they ran into a nasty scrape.

The time was about 11.30, and the light illusive, objects ahead being mistily indistinct. The gaunt lines of pressure-ridges loomed, betokening fissures, and suddenly Wilson broke forth with, "Hold on to the sledge!" He had located a crevasse perilously near, and now Scott made a most wary advance; yet five minutes later the hazy light beat him and all in a moment the dread thing happened.

The middle dogs of his team vanished from view; then, pair by pair, the others went whirling after. The runners



jolted to a standstill, whereupon, to their dismay, Scott and Meares perceived that both they and the sledge were actually poised on a frail snow-bridge in the mouth of a chasm. Thirteen dogs were hanging by a loop in the narrow ravine, twisting and howling pitifully, one end of their harness being still fastened to the sledge, while the other end was being supported by the leading animal.

The latter, a fine, vigorous dog named Osman, had crossed the gap without slipping, and was now on the firm brink opposite, bravely exerting himself to sustain the weight of his brothers in the abyss. Scott's and Meares's first thought was to draw the sledge out of danger, after which they sought to relieve the splendid Osman, who must soon be dragged into the gap himself, or else be throttled by the tense strain.

The task of relief was in no sort easy, but tent-poles from the baggage were brought to span the crevasse. Cherry-Garrard and Wilson were now here to help, and the forward pull was at last removed from Osman, who was cut free. The suspended gear by now, owing to the squirming weight of the dogs, had so cut into the snowy brink of the chasm that for a teasing while it could not even be got hold of. When, at long last, this trouble was overcome, the main trace was hauled up, and the dogs—who had been hanging there for an hour—were freed from their painful lashings, till all were safe save two. These, in wriggling, had slipped their harness and dropped to a second snow-bridge some 60 feet deeper down the chasm. The sorry creatures were howling in dismal duet.

Scott's humane regard for all animals was a factor that cost him certain prestige as an explorer of the grim lands; the ruling system of working dogs to the bone, and then slaughtering them as they dropped, was ever detestable to him.

Anyhow, he was not content to abandon this couple, so he



had an Alpine rope measured off. Judging this to be long enough, he noosed one end under his own armpits and directed the others to try and let him into the gulf. It was a weirdly ticklish job, but inch by inch he was lowered into that icy maw till his soles touched the lower snow-bridge, and on this he must needs stand, hoping for the best, while the line was employed for hoisting the dogs up, one at a time. Finally Scott was back himself on the firm summit, and all were again able to breathe freely.

"All's well that ends well," smiled Scott. "If the sledge had gone down Meares and I must have been badly injured, if not killed outright. Our future need is to adhere rigidly to the first pony-route, where the cracks appeared to be very narrow."

Fatality, however, of another sort, had overtaken the ponies, for Lieutenant Evans and his party hove up at Safety Camp with one shivering beast only, the other two having perished as the result of the blizzard. Shortly afterward, at Hut Point, poor Weary Willie expired from a like reason; so now the solemn fact emerged that these animals, though reared in dour Siberia, could not withstand the harder bite of a full Antarctic gale. The South Pole programme became thus affected; the early start planned for next year became absolutely impossible.

Ironical, indeed, that, in the hour of this conviction, Scott should arrive back at Hut Point to learn that he had a rival in the field! "Every incident of the day," admits Scott, "pales before the startling contents of the mail bag which Atkinson gave me—a letter from Campbell, setting out his doings and the finding of Amundsen established in the Bay of Whales." The latter bay was towards the other end of the Barrier cliff, and Roald Amundsen—to quote the simple fact



—was there with the vigorous hope of being first at the South Pole. The Norwegian, moreover, had brought with him over a hundred dogs ; on these he relied for sole means of transport.

“There is no doubt that Amundsen’s plan is a very serious menace to ours,” declared Scott. “He has a shorter distance to the Pole by 60 miles. I never thought he could have got so many dogs safely to the ice ; his plan for running them seems excellent. But above and beyond all he can start his journey early in the season—an impossible condition with ponies.”

Scott, sitting down, composed himself to a very rigid spell of thinking. The honour of his people, of his profession, of himself, all this must be taken into account, together with those very clear instructions issued by the promoters of the venture. He had to remember this was no haphazard bid for the Pole upon which he was engaged ; everything, for months past, had been evolved and fashioned and pared to a nicety. In any case, both expeditions—the Norwegian and the British—*must* wait in patience until the spring. Scott, weighing all this, arrived at his decision.

“One thing only,” asserted he, “fixes itself upon my mind. The proper, as well as the wiser, course for us is to proceed exactly as though this had not happened. To go forward and do our best for the honour of the country without fear or panic.”

That, then, was to be the keynote—without fear or panic.



## CHAPTER XII

### A WHITE AND WONDERFUL WORLD

THE elaborate business of depot-laying occupied about three months of the autumn, and during that period there was plenty of movement among the *Terra Nova* scientists in all directions. Ponting, in particular, was enormously in his element, his photographic zeal being proof against any amount of frost-nip and icy drenching. The result was a photographic gallery that brought home the beauty of the Antarctic more than any previous collection.

His picture of "The *Terra Nova* in McMurdo Sound" is specially unique; not only is it full of realism but the getting of it was fraught with unnerving risk. It was obtained, moreover, by the brilliant rays of the midnight sun!

"It was a glorious night," records the artist, "though it does seem strange to write of night when the sun was almost as high as noon. The mercury stood about 20° below freezing-point, as I started off across the frozen sea to the stranded bergs which were such a paradise for my work.

"As I neared the bergs, perspiring from the effort of dragging my well-loaded sledge, I felt the ice sinking under my feet. I shall never forget the sensation; I realized instantly that if the heavy sledge to which I was harnessed went through it would sink like a stone, dragging me down with it. I have



had more than one thrilling adventure during the course of my many years of travel, but I shall never forget the horror of those moments as I struggled on, expecting every step to be my last. Imagine, therefore, the joy when at the very last ebb of strength, with perspiration dripping from every pore of my body, I felt my feet touch on firm ice! With one final effort—the last ounce of strength I had left—I pulled the sledge on to it and fell prostrate with exhaustion.”

He might, as he knew, have found a quick way out of the menace by slipping harness and leaving the sledge to sink, but, in the true heroic spirit, he had stubbornly refused to ensure life at the expense of his apparatus. Thrills, however, were not yet over.

“When,” he continues, “I had recovered my strength I made the picture of the *Terra Nova*. Just after, I lay down on the ice, by the opening where the reflections appear. The waters were alive with minute creatures, and, as I was watching a beautiful silvery fish, a seal came rushing into the field of view, in evident terror, the cause of its fear immediately appearing. It was a dreaded ‘killer’ again, in hot pursuit of its prey; it came so close to me that I could see the evil gleam in its eyes. For a moment I lay transfixed; then I remembered, and fled as fast as I could to a more secure spot!”

Ponting freely admits that, on looking back, he sometimes shudders at the risk he took so recklessly in those early days, yet all was not tear and turmoil. Some of his more peaceful studies were made among the birds, such as the stately Emperor and the smaller Adolie penguins. The penguins are prolific breeders; their rookeries are often so thickly populated that scarce a foot of ground can be seen. A big rookery conveys to one the impression of penguins by the thousand, if not indeed by the million.



The little Adelie, with its quaintly stuffed appearance and bead-like eyes, is the friendliest of fellows, while the Emperor is extremely polite, having all the manners of a courtier. The penguins do not flee at sight of visitors, whether men, dogs, or ponies, but instead they advance in a group, full of pomp and curiosity, while one fat male will waddle forth to greet the stranger with squawky speech and a series of deep bows. Among themselves, when travelling groups meet, they observe a similar ceremony.

Ponting's cinema-camera did full justice to all this, as also to the habits of other Antarctic creatures, including the Weddell seal—though the latter, unexpectedly, proved a far more vicious customer to deal with. Our enthusiast, owing to this, came in for another hot few minutes.

"A large Weddell seal," he explains, "will measure from 9 to 12 feet in length, and weigh from 600 lbs. to half a ton—half as much again as that of a fat ox. On one occasion, when I was trying to pose one of these monsters, it evinced the most decided objection, and, lunging out at me, sent me flying for half a dozen yards. I was taken quite unawares. The seal's teeth penetrated all my thick clothing and bit me to the skin-bone, causing acute pain for a time; but beyond that, and a slight loss of blood, I was none the worse."

The artist, with his high-power telephoto lens, secured some striking long-distance studies, notably one of Erebus in eruption, being a "shot" of full 15 miles. For pure elegance, however, his "Arch Berg from Within" would be hard to beat. All travellers to the Antarctic had, in turn, been entranced by the glorious ice-caverns which occur in that region—fairy grottos of enormous size are frequently found in the imprisoned bergs. The cave specially referred to gave the Arch Berg its name. Scott, when back at the ship, speaks



of how he paid this magic den a visit, in company with his camera-man.

"I had rarely seen anything more beautiful than this cave," avers Scott. "The sky could be seen through a screen of beautiful icicles—it looked a royal purple, by contrast with the blue of the cavern. Through the larger entrance could be seen, also partly through icicles, the ship, the western mountains, and a lilac sky ; a wonderfully beautiful picture."

Not less fascinating were some of the forms of sea-ice ; as, for instance, the "ice-spray," being billowing ridges of frozen spray, three or four feet high, the after effects of the coldest gales. As delightful, yet more delicate, were the "ice flowers," dainty clusters afloat on the surface and having all the semblance of crystal-white nosegays.

More rugged varieties were manifold and all excellently rendered by the camera. Of the giant ice, stranded or afloat, perhaps the Castle Berg was secondly the most notable, rising as it did in three tiers or bastions—a resplendent monster in white and sapphire. From the towering blue cliffs and the lordly bergs we graduate to "berg bits," which are masses about the size of a cottage that have calved off. Soon after come the "growlers," of a greeny tint, and showing only slightly above the ocean. Smaller still are "brash," which are smashed and crumbled lumps, while "sludge-ice," the minutest of all, is much on a par with slush.

From the poetry of ice, however, and its picture-yielding quality, we must pass again to its sterner phases. Misfortunes, we are told, never come singly ; assuredly this seems true where the adventurous life is concerned. Within a short period of Scott's trouble at the abyss, and his receiving tidings of Amundsen, another episode occurred which all but ruined every project he had in mind.





THE ARCH BERG FROM WITHIN

"I had rarely seen anything more beautiful than this cave  
(Photo, H. G. Ponting)







The pony track between Cape Evans and Hut Point, thence round Cape Armitage, had been carried over Glacier Tongue along the sea-ice; the latter, until this, having provided a thoroughly safe road. Judge Scott's dismay then—when nearing the seaboard early on 2nd March in company with Oates and Gran—to note vast severing masses of ice beneath a lowering sky. Not only was the Sound, as far as the eye could reach, a-tremble with breaking floes, but bergy bits and vast blocks from the Barrier cliffs were sailing out like phantom ships in a mirage. What, then, of the Bowers and Wilson parties?—these having been sent ahead on the night previous with dogs and ponies.

Scott and his two companions, in a fever of anxiety, followed rapidly along the ice-fringe till brought up by a working crack—a long flaw, that is, which leaves the ice to gape or close with the heave or drop of the sea underneath. As soon as the crack closed they dashed over, and so on with successive cracks till solid ice was reached, eastward above the old hut. The chief deemed it best to pitch his tent right here, and his eager gaze soon after made out two approaching specks in the dim morning light.

“Thank God!” exclaimed Scott fervently, for he recognized the newcomers to be Wilson and Meares. These two, despite the untoward break-up, had run the dogs safely to Hut Point, but were apprehensive about the ponies. They had caught a glimpse of the animals through their binoculars from Observation Hill, and believed them to be adrift on the sea-ice. Solely because of this, they were hurrying along without partaking of breakfast. Scott knew from experience that empty stomachs wouldn't do, so cocoa was brewed at once. Scarce had they gulped the same before Tom Crean, one of the pony section, came hastening up from the ice-foot.



Crean, beaten for breath and bearing traces of toil, was presently able to blurt out his story. He, Bowers, and Cherry-Garrard had been having the tussle of their lives, and as yet it was far from finished. It seemed they had been well out upon the sea-ice before the splinterings warned them ; indeed, the frozen field on which they walked was actually afloat and drifting out to sea. As soon as they realized this they freed the ponies, putting them to jump the gaps while they themselves, when chance afforded, dashed back to fetch on the sledges.

Winning at length to what looked a secure patch, they pitched camp, for men and beasts now were spent to the point of collapse. Sleep came the moment they lay down, but Bowers ere long was roused by a loud grinding sound, with glassy concussion. The cause was not far to seek ; the ice, even here, was splitting up, the camp was encircled by water, and one of the four beasts had totally disappeared—drowned beyond the shadow of a doubt.

There was not a moment to squander ; this eternal losing of ponies, by one mishap or another, would spell ruin if it continued—would put the attainment of the Pole beyond all bounds of hope. Bearing this in mind, and packing with haste, the trio slaved like Trojans for five successive hours, jumping the ponies from one floe to another and lugging on the sledges as opportunity occurred. Yet, through sudden awkward moments and the ceaseless drift, they never could work in to the ice-foot, and, even had they succeeded, there was no conceivable way of getting the beasts up that sheer ice-wall.

The jaded group, still hemmed by water, were forced to halt, for killer-whales now surged around the floes, snorting wickedly and alert for prey. Had a pony blundered into the sea he would have had short chances, so Crean volunteered to



reach ashore somehow and try to summon help. It was a desperate essay, and how he contrived it is a matter for marvel; yet, darting from floe to floe, with sometimes a striding leap, he at length gained the Barrier cliff, which he scaled with the aid of a ski-stick.

This was Crean's story; it also appeared that the trusty Bowers was resolved to stand by the ponies, and that Cherry-Garrard had vowed to stay with him. Both, no matter what happened, would no doubt be faithful to their word unless ordered otherwise.

Scott got briskly to work; there was no undue scurry, yet every minute was used. Sending Wilson, Meares, and Gran back to Hut Point with directions, Scott sledged with Oates and Crean to Safety Camp, where he loaded on oil and provisions, heading straight after that to the place of disaster. This rescue party, on gaining the ice-fringe, were rejoiced to see that the vagrant floes had closed up to the Barrier edge in a loose pack; the marooned ones were also located.

Bowers and Cherry-Garrard, being so ordered, endeavoured to come in first, being hauled to the ice-edge by means of an Alpine rope. The general gear was next manœuvred and duly salvaged, but the exasperating floes were opening out again and the ponies were just missed. There had been opportunity to feed them, however, and extreme fatigue on the part of all counselled immediate rest. Tents had already been pitched, and, after fixing ice-anchors, the five men turned in.

Four hours later they were astir once more; to their chagrin they perceived that the ice-anchors had torn away, so that the floe bearing the ponies had drifted about a mile north-west. But the ice was snuggling in, so a smart descent was made to that point. There were lanes of water, but these the men were able to cross, so they determined to court fortune



and hurry the animals ashore. Unluckily there was a misunderstanding. Scott's intention was to seek first for the surest route, and he had actually found it, but he swung round to find that the others had been trying to rush Punch over a gulf. This poor beast had blundered in, and was so injured that he had to be killed.

"It was awful," says Scott, when recounting this moment of crisis. "I recalled all hands and pointed out my road. Bowers and Oates went out on it with a sledge, worked their way to the remaining ponies, and started back with them on the same track. Meanwhile, Cherry and I dug a road at the Barrier edge. We saved one pony; for a time I thought we should get both, but Bowers's poor animal slipped at a jump and plunged into the water. We dragged him out on some brash ice—killer-whales all about us in an intense state of excitement. The poor animal could not rise, and the only merciful thing was to kill it. These incidents were too terrible."

Three whole days were required for them to get the odd pony—the one to survive out of four—over the dangerous ice-foot, and so by a roundabout way to Hut Point, where they were held up in the old *Discovery* quarters for not less than five weeks, waiting for the sea-route to freeze over, the land-route being simply a maze of crevasses. They profitably occupied the wait in seal-hunting. After the flense—that is, after the cutting out of blubber from skin and carcase—they improvised a new blubber stove, for the old type smoked so dreadfully that oily soot had made them black ruffians for looks, while the reek was nauseating. This discomfort removed, they made some investigation of the growing ice near by, their interest particularly quickened by the numbers of fish frozen in—one specimen being so caught in the act of gobbling a younger brother!



Other research, and the sledging of more stores to Corner Camp, spun out the time, till at last they were able to battle through a snowstorm back to Cape Evans, reaching there on 13th April and finding all well. One sorry piece of news was that another pony—a truculent beast nicknamed Hackenschmidt—had sulked away and died. Out of the original nineteen ponies only ten were now left! Scott, true to the Polar tradition, was tenacious in hope, yet he could not deny the gravity of his very depleted stable. A prompt inspection, however, proved to him that Anton, the groom, was doing everything possible to safeguard the remnant, and Oates now joined forces in carrying the matter on. “Oates’s whole heart is in the ponies,” said Scott.

All settled in for the winter, the week-days packed with industry, and with divine service conducted regularly by Scott on Sundays and such occasions. The *South Polar Times* again made its appearance, and lectures were the order of the evenings. The popularity of these discussions was remarkable; subjects which, at home, had been deemed “dry as dust,” were now discovered to throb with interest, if not indeed with romance. Oates revealed the secrets of training ponies; volcanoes and such were explained by Debenham; the Antarctic birds were Wilson’s theme; Day told some truths about motor sledges; Ponting gave travels, with slides to illustrate; while of very practical moment were Bowers’s talk on sledging diet and clothes, with Taylor’s careful account of the Beardmore Glacier and its expected obstacles. Scott’s own prophecies of the South Pole trip formed a sequel, this latter being fully debated by his audience.

All this gave enormous impetus to the inquiry side of the expedition, waking in the experts a new respect for other men’s subjects. Indeed, it is stated that a biologist went so far as



to offer a geologist a pair of socks if he would teach him some more geology! The mass of work already accomplished gratified Scott deeply, making him proud of his band. "A very demon of unrest seems to stir them to effort," wrote he, "and there is not a man who is not striving his utmost to get good results in his own particular department. Nothing, not even priority at the Pole, can prevent the expedition ranking as one of the most important that ever entered the Polar regions."

Fellowship, as ever, was the secret power; enabling a group of exiles once again to face the cold horror of the Antarctic dark with happy composure. Here in this rude hut was gathered a party of intellectuals, each a picked man in his own branch of science; yet in their human relations they were just a jolly set of schoolboys. A study of their nicknames will impress the truth of this. The sturdy little Bowers was known to every one as "Birdie"; Simpson was "Sunny Jim"; Atkinson was "Jane"; Ponting was "Ponco"; Pennell was "Penelope"; Campbell was "Mr. Mate"; Lieutenant Evans was "Teddy"; Oates was "Titus" or "Farmer Hayseed," but more often "Soldier"; Levick was "Tofferino," or "The Old Sport"; while Dr. Wilson—one who commanded a respect only second to that of the chief—was genially known to all as "Uncle Bill."

Sailors, indeed, with their ready sense of humour, have a special bent for nicknames, and even the animals could not be overlooked. The ponies, for instance, were supposed to bear the titles of the Public Schools which found money for their purchase, but eventually these names had to go in favour of Snatcher, Jimmy Pigg, Michael, Jehu, Nobby, Snippets, Chinaman, Christopher, Victor, and Bones—these being the ten ponies still alive.



It was during this winter that telephony was adopted with marked success. Far out over the ice a hole had been sawn and an instrument sunk for measuring the sea-currents, while nearer in another such cavity was cut for the tide-gauge. Telephone connection was made here with a bare aluminium wire and an earth return, while other lines were carried to an isolated chamber in the adjacent ice-wall, where magnetic apparatus and pendulums were in action in an even temperature. Accurate time signals, by means of the telephone, were transmitted from this ice-chamber to the hut.

Success fed enthusiasm, so now came the query: Why not link up with Hut Point, 15 miles away? Being sanctioned, this bold proposal was duly carried out, and the working of it was capital. Hut Point being their base for the Pole, it was naturally of the greatest value to be in speaking reach of it. Of other innovations perhaps the most novel was a small air-balloon devised by Simpson for charting air-currents and the temperature high up. These balloons trailed a three-mile strand of silk along the ground, the course of which could be traced, while a parachute carrying the air-recorder was liberated by a slow-match, when it duly floated to earth with its mechanical message.

The hounding blizzards of that dark spell were terrible in degree, rising to hurricanes which shuddered the hut and all but tore its roof off. The stress of such a tempest was now known to have a blunting effect on the faculties, and the venturesome Atkinson, visiting his thermometer in North Bay, got hopelessly befogged. A flare was lit on Wind Vane Hill, and a network of search parties "swept" the flocs as far out as the islands. Despite such prompt measures six hours elapsed before the wanderer was brought in torpid from the cold—more dead than alive.



The temperatures were the lowest on record, and a winter party, visiting the penguin rookery at Cape Crozier, encountered  $109^{\circ}$  of frost— $77^{\circ}$  below zero! “Although in this truly fearful cold” we read that “the air was comparatively still, every now and again little puffs of wind came eddying across the snow-plain with blighting effect. No civilized being has ever encountered such conditions before with only a tent of thin canvas to rely on for shelter.” Wilson, Cherry-Gerrard, and Bowers made up this particular party, and well they emerged from the test. Dr. Wilson by now was, of course, a toughened campaigner, yet “Birdie” showed up the best. “I believe,” wrote the chief of Bowers, “he is the hardest traveller that ever undertook Polar journey, as well as one of the most undaunted. More by hint than direct statement, I gather his value to the party, his untiring energy and the astonishing physique which enables him to continue work under conditions which are absolutely paralysing to others.”

Various spring journeys culminated with a spell of 13 days spent in the Western Mountains by Scott, Bowers, Simpson, and Edgar Evans, covering 175 miles in 10 marching days. After this, there could be no doubt about Bowers, while Edgar Evans well maintained his reputation for being a “tower of strength.” By November 1, 1911, all things were ready, and the bid for the South Pole began.

Distances were known to a nicety; the whole journey out to the Pole would be 923 miles, consisting of four stages. First—from Cape Evans to the Base, 21 miles; second—from the Base across the Barrier, 424 miles; third—up the Beardmore Glacier, 125 miles; fourth—from the glacial summit to the South Pole, 353 miles.

Every one was calmly optimistic; despite the handicap of time and distance there was the feeling that Scott, given



moderate good fortune, should outstrip Amundsen in the first and final stages. Win or lose, the great thing was to accomplish all in their power, and that was the actual spirit, strong and cheery, prevailing at the start.

Lieutenant Evans, Day, Lashly, and Hooper were already ahead with the motor sledges when, on the 3rd, Captain Scott led off from Hut Point with the pony Snippets, Dr. Wilson with Nobby, Bowers with Victor, Oates with Christopher, Crean with Bones, Edgar Evans with Snatcher, Cherry-Gerrard with Michael, Atkinson with Jehu, Keohane with Jimmy Pigg, and Wright with Chinaman. To these were added Meares and Demetri with the dog-drawn sledges, the result being a most imposing cavalcade. Ponting, of course, was there with his cinema-camera to record the combined start. Every one was in prime fettle, the ponies almost too much so ; each step of the way their capers needed watching, and Bones began by eating Christopher's goggles ! Still, they were going well, and the attempt was strong in trust.

What, however, of Scott's Norwegian rival ? It is high time for us, having seen the British effort upon its way, to turn back the page of history and review that other attack.



## CHAPTER XIII

### AMUNDSEN THE OPPORTUNIST

ROALD AMUNDSEN, the son of a Norwegian shipowner, began his career as a student of medicine, but the streak of adventure in his composition made him restive, and eventually he went to sea. Possessed of lean, almost ascetic features, and the hawk-nose of a conqueror, his youthful yearnings grew, being turned now towards the Polar regions. By 1905 he had done various exploring in the Polar seas and, in the yacht *Gjøa*, led a party through the North-West Passage.

Amundsen's South Polar story, besides being the romance of an individual, is also the romance of a ship, no other than the redoubtable *Fram*. The North Polar Basin was the first objective, but, after enormous trouble in trying to equip the vessel, backed only by a few enthusiasts, chief among whom was the veteran Nansen, Amundsen, in September 1909, received that momentous piece of news—"The North Pole has been reached!"

Truly, for Amundsen, a bolt from the blue. His programme in the main had been scientific, but he shrewdly perceived that many of those from whom he expected aid were being actuated solely by the hope of his winning the North Pole for Norway.

Amundsen's moneyed countrymen, to tell the truth, even



with that prize to entice them, had been tardy enough to persuade; now, without a doubt, they would shake their heads and shut their purses. What rendered the situation even more awkward was the fact that much of the money safe in hand had also been derived from people who placed the getting of the North Pole in the forefront. In view of all this it seemed scarcely honest to go on; the big laurels dreamed of had gone to Peary and America. Then dawned the audacious idea—why not turn directly about and, without breathing a word, *make for the South Pole instead?*

Amundsen was a born opportunist; he was never the man to hesitate long. Even while that message flashed over the wires, "*The North Pole is reached!*" this new plan evolved in his brain and was partly adopted. "The North Pole, that last problem but one of popular interest in Polar exploration, is solved," argued he. "If I am now to succeed in arousing interest in my undertaking there is nothing left for me but to try to solve the last great problem—the South Pole."

By which remark it will be seen that he had not by any means abandoned his project of exploring the North Polar Basin; on the contrary, the winning of the South Pole would merely open the way, by making him better known and turning the hearts of many who now hesitated to trust him. Why, if he could but succeed in this, the whole world would applaud and be at his feet; such donations would flow in that he would be able to fit out for the northern trip on quite a lavish scale.

The pieces after that fell into place as of their own accord. Antarctica was by no means a closed book to Amundsen, for he had been mate to the famous *Belgica* expedition of 1897–1899, under Captain Gerlache. The *Fram*, he decided, should leave as early as possible in the spring; he would make for the Bay of Whales and there establish winter quarters.



By choosing this point for his base he would be 350 miles distant from Cape Evans, so that his critics, if any, could not accuse him of encroaching on Captain Scott's area. (His critics, nevertheless, were rather harsh about it all—but that by the way.) Amundsen, in any case, would have chosen the Bay of Whales in preference to McMurdo Sound; it was 60 miles nearer the South Pole—a whole degree of latitude; the *Fram*, with any moderate luck, could be cruised full up to the Barrier ice, and thence, without deviation, the assault could be launched on the Pole.

Shackleton, it may be recalled, had conceived this very scheme for himself when he sailed in the *Nimrod*; on arrival, however, he perceived a vast calving away of the ice-cliffs, from Borchgrevink's Bight (Balloon Inlet, as named by Scott) into the Bay of Whales, and for this reason he had believed that encampment on the Great Ice Barrier would not be safe. He had therefore sought out a land-pitch at Cape Royds.

Amundsen, though a student and admirer of Shackleton, had ever regarded this change of plan as an error of judgment; but for this, he believed, the British explorer would have reached the South Pole in 1909. For Scott's theory of the Barrier ice being afloat did not commend itself to Amundsen; anyhow, the nature of the Bay of Whales seemed to prove that the ice in the bight was firmly founded on land, so that a further calving away was quite improbable. He would have no hesitation in camping there.

On another point the Norwegian meant to challenge both Shackleton and Scott—that was in the matter of draught animals. He did not believe in ponies, nor yet in mechanical transport. He believed in dogs. "There must be some misunderstanding," declared he, "at the bottom of the Englishman's estimate of the Eskimo dog's utility in the Polar regions.



Can it be that the dog has not understood his master ? Or is it the master who has not understood his dog ? ” Amundsen, as yet, knew only of the Barrier surface by what he had gleaned from the Scott and Shackleton chronicles, yet his confident policy was “ Dogs only, the best procurable, and plenty of them.”

So much was this to the forefront of his mind that he resolved to select his shore-party solely from men who were experienced dog-drivers. As this was to be a pure dash for the Pole and little else, he did not have to bother about men highly gifted in branches of science. This, of course, was an enormous advantage, enabling him to muster a band every one of whom was a trained unit, broken-in, as it were—used from birth to outdoor work in the cold and hardest conditions, able to assist in taking accurate bearings, and all completely versed in the whims and the wiles of sledge-dogs.

The new skipper of the *Fram* was Captain Thorvald Nilsen ; under him Lieutenants Prestrud and Gjertsen, with Helmer Hanssen (ice-pilot) ; Oscar Wisting (in charge of dogs) ; Olav Bjaaland (ski- and sledge-expert) ; Sverre Hassel ; Jorgen Stubberud (carpenter) ; Adolf Lindstrom (cook) ; Hjalmar Johansen, and a full ship's company. Amundsen, in the absence of a doctor, had to shoulder that job himself, while Gjertsen took a “ lightning course ” in surgery at a hospital. Others picked up what knowledge they could on divers subjects. Prestrud and Gjertsen, for instance, studied oceanography ; for the *Fram*, having once discharged the ice-party on the Antarctic continent, was to occupy the winter interval in deep-sea research, extending from Africa to South America—a distinctly ambitious side-issue.

Limited means did not prevent Amundsen from laying in a very full cargo of provisions, simple yet wholesome in nature,



with scrupulous caution regarding tinned goods. The dreadful accounts of scurvy in the South had put him well on his guard ; all groceries were contained in sealed tin cases, and afterwards enclosed in stout wooden boxes. To ensure quite fresh meat for as long as possible, the *Fram* even went so far as to ship live-stock—sheep, pigs, and fowls. Milk-powder was to be a very valuable addition to the Polar party's sledging diet.

It was by now necessary for Amundsen to "look twice at every shilling" he spent ; in the matter of garments the main thing was to get something "warm and strong," giving mere appearance the go-by. About two hundred old navy blankets were presented to him, and his greatest brain-wave was to have these converted into clothes ! By this economy he was able to fit out the rest of the attire on a proper scale. Reindeer-skin was the material mostly favoured, made Eskimo-fashion into anoraks (blouses) and breeches—not less than two hundred and forty hides being cut up in the process.

Fridtjof Nansen throughout was the assisting genius, helping specially as regards instruments, numbers of which were lent, and some of which already belonged to the *Fram*. Add ski, sledges, tents, hut material, bags, cameras, ammunition, crockery, ice-drills, explosives, tools, rifles, cookers, sewing-outfits, diaries, medicine-chest, and the hundred and one such items, and you have another epoch-making enterprise all fitted for the send-off.

The actual start was stealthy yet alluring, being made from a garden on 7th June—Amundsen's waterside garden at Bundefjord—being preceded by a farewell supper partaken in the summer dusk amid the trees. At midnight the *Fram's* cable tinkled up through her hawse-pipe and the brave old ship stood out once more. "A glimpse of white handkerchiefs in the twilight and then—farewell !"



A quiet launching, just as Amundsen desired ; indeed, so secretive had he been regarding his amended plan that only Captain Nilsen of those aboard knew anything about it as yet ! Judge of every one's amaze, therefore, when, at Christiansand, some ninety-seven dogs were brought tumbling and yelping aboard, converting the *Fram* into a sort of floating kennel. The two officers, Gjertsen and Prestrud, under a strict oath of silence, had now to be informed, but it was not till the ship had passed far from British waters—until she stood in Funchal Roads, Madeira—that all hands were piped on deck and the bold scheme disclosed. To a man, of course, they stood in blank astonishment. This voyage, they were told, was not for the North Pole at all, but for the opposite end of the globe—the South Pole ! Its object, indeed, was to win the South Pole for Norway !

There is a human love for surprise, for the sudden revealing of unguessed secrets, especially one so intriguing as this. "Before I had finished," remarks Amundsen, "they were all bright with smiles. When I asked each whether he was willing to go on, every single man had his 'Yes' ready. It is difficult," the explorer adds, "to express the joy I felt at seeing how promptly my comrades placed themselves at my service."

The voyage, thus well begun, continued prosperous, from the north-east trades through the doldrums to the south-east trades, the vessel, within two months of quitting Madeira, standing south to the Cape of Good Hope. Here the *Fram* met her first gale, but scarce a sea came aboard, for she rose over the mountainous rollers just as grandly as she had risen above the packing northern ice those many years ago.

The *Fram*, beyond a doubt, was a ship of fortune ; when, on 2nd January, the Antarctic Circle was crossed and the



ice-belt reported ahead, every one looked now for a hammering fight. But lanes of water opened to such an extent, with leads in between, that the four days' cruise through the floe-belt was one of complete ease. Indeed, the Ross Barrier was made without any great battle, while on the 12th she sedately entered the Bay of Whales.

Such a comfortable approach to the Ross Sea had never before been made, not even by the *Discovery*; Amundsen and his friends, indeed, were a trifle disappointed at the facility of it all. So much had they read about the terrors of this region that they had come, as it were, with braced muscles, ready to fight for their footing. But the landing was as simple as the approach, and a prompt reconnoitre was made on ski.

"After a hurried dinner," relates Amundsen, "four of us set out. This first excursion was quite a solemn affair, so much depended upon it. The weather was of the very best, calm with brilliant sunshine; a few light feathery clouds in the beautiful pale blue sky. Seals were lying along the ice-foot as far as the eye could reach—great, fat mountains of flesh; food enough to last us and the dogs for years.

"The going," he continues, "was ideal; our ski glided easily and pleasantly through the newly fallen, loose snow. After half an hour's march we were at the Barrier. What would it be like? A high, perpendicular face of ice, up which we should have to haul our things laboriously with the help of tackles? This mighty and terrible monster would, of course, offer resistance in some form or another. . . . One, two, three, and a little jump—and the Barrier was surmounted! . . . Without striking a blow we had entered into our kingdom!"

No wonder these Norsemen glanced at each other and





CAPTAIN AMUNDSEN

A snapshot taken on board ship  
(Photo, Miller, Seattle)



smiled. To express the truth in a nutshell, this was the real gate to the Antarctic, seen by Sir James Ross, entered by Borchgrevink, visited by others, yet somehow passed by *as a gate*. As for the storm-terrors of the Antarctic, we know they were real enough, and had not been over-stated, and we are familiar also with these misleading periods of sunny calms. Amundsen, as it chanced, was being most graciously received, and his mood of satisfaction was heightened by the fact of the Barrier ice being stably founded on land. Of this he was now positive, so that he would have no compunction in building his quarters right here by the fringe of the Bay.

The site chosen was a snug shelf on a small elevation to the east; the dogs—now increased to over the hundred—were brought ashore, and the task of sledging up stores and material began in earnest. Sea and shore parties were at this point listed off, the last consisting of the leader, Bjaaland, Hanssen, Hassel, Johansen, Lindstrom, Prestrud, Stubberud, and Wisting.

Amundsen's first taste of trouble was concerned with those four-footed allies who were his shining hope—the sledge-dogs. Deliberately, to start with, they refused to work at all, and at first sting of the lash went off into spasms of temper, warring wildly among themselves till the traces and the teams were one frantic tangle. Here, then, the challenge for firmness; these men had hearts to feel, and also a full regard for dumb creatures, but the question of who was master had to be settled right out of hand.

"Poor dogs!" sighs Amundsen; "they got plenty of thrashings in those days." But the men, because they must, were unrelenting; whip-thongs continued to whistle till the last of the rebels was cowed.

Amundsen did not permit the smoothness of nature's



reception to affect his sense of caution ; he had heard of the Antarctic blizzard, of its abnormal violence, and for such he prepared by having the hut-foundations sunk four feet deep in the ice. This involved gigantic labour, but Bjaaland and Stubberud, on a diet of pancakes and black coffee, dug and builded well ; by 28th January the home was completed, and the waiting cases—no less than nine hundred in number—moved into place. They christened their settlement “Framheim.”

On 4th February came an event of some import ; always half-expected and ever regarded in a half-dubious way. The night-watch at Framheim had gone below for a drink of hot coffee, and when he climbed up again he beheld—not one ship, but two ! The man was dumbfounded ; was this a mirage or— ? Abruptly he remembered—the *Terra Nova* ! Without a doubt this well-found barque was the rival ship.

His surmise was correct ; in due course the British officer in charge, Lieutenant Campbell, paid a visit to Captain Nilsen on the *Fram*, and so all the facts came out. If Campbell was astonished he did not betray it, nor did he evince anything but the most genial interest in the Norwegians’ project. He explained that he would now be sailing back to New Zealand, after another call at Cape Evans, and would be pleased to convey any mails. This sporting spirit commended itself. Campbell, later, in company with Pennell and another, met Amundsen ashore—if such a term can be applied to the Ice Barrier—and the trio were entertained at Framheim. In further exchange of compliments, Amundsen and two of his stalwarts partook of lunch on the *Terra Nova*—with the pleasant result that, when the British ship steamed away, an *entente cordiale* had been established.

Amundsen’s affairs, thus far, had gone like clockwork, and



he determined to use the time gained by sledging out a depot to 80° S., as a preface to next spring's activities. The three sledge-teams called up for this were controlled by Helmer Hanssen, who broke trail, with Johansen second, and Amundsen—in the approved manner of Peary—bringing up the rear. Each sledge scaled 660 lbs., with half a dozen animals to pull it. Prestrud went ahead on ski to “smell” the course and give a lead to the dogs.

The latter were in magnificent form, long stages per day being the result—for, though the light was often bad, general conditions favoured. At every 15 kilometres the route was marked with flags on bamboo staves, and in such fashion the 80° S. was made on 14th February. Sledges now being emptied, the men sat themselves thereon and were rattled back to the bay at quite exhilarating speed, the distance thus covered on the last day amounting to 62 miles. Homage to whom homage is due; at this point we must accord Roald Amundsen the fullest credit for his sturdy belief in dogs—a belief based on the shrewdest wisdom and knowledge.

More good cheer awaited at the base; the depot-layers arrived there to learn that the *Fram* had now departed on her voyage of deep-sea research, but, before doing so, Captain Nilsen had managed to sail her up to 78° 41' S., the most southerly point ever attained by any ship. So Colin Archer's famous child—of whom both he and Nansen had unlimited cause to feel proud—held the double record of Farthest North and Farthest South!



## CHAPTER XIV

### THE DASH FOR THE POLE

AMUNDSEN, before the winter dark set in, had laid three tons of provisions in three depots out on the Barrier, the third lying as far south as the 82nd degree. These dumps included over 20 cwt. of seal-flesh, of which, in the neighbourhood of the hut, no less than 60 tons was cut and stowed away. A prospect of plenty was thus created for both men and dogs—the latter being comfortably housed in eight kennels, secure from all possible blizzards.

Than blizzards there is probably nothing more erratic in the whole Antarctic Circle; this vale may be madly wind-swept, while the near-by hills may stand quietly becalmed. Authentic cases are known where two men skinning a seal have experienced this strange phenomenon. The man at the head of the seal has been working in perfect stillness, while the man at the tail has found himself caught in a very inferno of wind, the drift-snow carried by it growing so dense that he has become invisible to his fellow-worker.

This is literally true, so it will be understood how localities 100 miles apart may undergo entirely different weathers. And the Amundsen luck held good! Low temperature certainly did come to him as a revelation—on one occasion the thermometer showed 74° below zero—but the furious



blows did not spread so far east. "We expected blizzard after blizzard," he writes in his diary, "but had only two moderate storms."

More than ever he anticipated an early start south. The sun returned on 24th August; every day now there was a peering forth and a restless pacing about. The idea of the rival expedition occupied every one's thought.

"I'd give anything," declared one, "to know how far Scott is to-day."

"Oh, he's not out, bless you!" with some reassurance. "It's much too cold for his ponies."

"Ah, but how do you know they have it as cold as this? I expect it's far warmer where they are, among the mountains; and you can take your oath they're not lying idle. Those boys have shown what they can do."

Every day the same sort of talk, until, on 8th September, the die was cast. If the men were eager, the dogs were more so, and the first thing they did was to bolt with their sledges. The teams went scudding in all directions, with their fuming drivers racing to overtake, and, even when they were got in line, squabbles commenced in which ninety dogs were all going hammer and tongs, the frightful din of which may be somewhat imagined. It was a brief march that day, and no rest to follow, for those ninety dogs howled and snapped and yelped all the night long.

A tiresome business, as Amundsen admits, and somehow it was taking the glamour off the bright outlook of heretofore. Real disquiet came on the 11th, when the air was down to 69° under zero; immediately the animals weakened in such intense cold. "One's breath was like a cloud, and so thick was the vapour over the dogs that one could not see this team from the next, though the sledges were being driven close to one



another." Hanssen, in this extraordinary haze, all but perished in a crevasse.

Next day matters were more perverse, for there was a head wind, and Amundsen, grudgingly perhaps, admitted Antarctic travel to be "undeniably bitter." The dogs were wilting under it; no team-battles now, no frantic barking, only the most piteous of whines. Even the fluid in the compasses had frozen, and the atmosphere had become so thick that the sun-rays were blotted out. The rest was Blind Man's Buff, but they straggled along somehow to the 80° depot. The dogs were at such a pass and so woebegone that Amundsen feared the worst. The unwelcome fact was that he had started much too early in the season; to persist would probably mean every dog dead before he was off the Barrier. Though it galled him to the soul he decided he must turn back.

Accordingly, having dumped their provender, they wheeled round, and soon, with lightened sledges, their teams made good enough going for the men to sit on to ride. Better, perhaps, if they had not. Till this, thanks to winter furs, plus exertion, the human element had withstood the cold all right; now Hanssen's heel went suddenly dead with the frost, then Stubberud's followed suit.

"The sooner we get those bad heels in the house the better," said their leader; and so, in the cause of speed, all the feeblers were turned loose. Some listlessly followed, two of them must have died—they were never seen again—while a third fell and expired in the traces. A heart-felt relief for Amundsen when Framheim loomed into view; both Prestrud's heels had "gone" by then, while the dogs, though finishing gamely, were enervated from over exposure.

It was, for the Norsemen, a salutary lesson on the folly of being too previous; yet what they had endured, and this



ignominy of being thrown back on the base, only fed their impatience the more. Amundsen, to improve the mobility of his Polar party, decided he would reduce it to five; the three to drop out, Prestrud, Johansen, and Stubberud, would go east to Edward VII. Land—this having been Campbell's part in the British programme, only he had been unable to get ashore there. The food aspect would improve if the depots laid had need to support only five instead of eight. The chief gain, however, should be one of quickness on the marches; delay might yet be retrieved by smartening the pace.

So now once more the pottering round: the daily watch and weary wait. Seals and Antarctic petrels reappeared along the ice-foot—both harbingers of spring—yet still the cold was piercing. Week succeeded week, and more weeks followed; would the winter *never* end? Every one felt gloomily certain that Scott would be well on his way by now. Dense air, mere glimmers of sunshine, and stinging drift—ugh! it was intolerable. A second risk must be taken if they sought the reward at all; so again the word from Amundsen—"Go!"

Hanssen, Bjaaland, Hassel, Wisting, and himself—five men with four sledges and fifty-two dogs, making thirteen dogs to a sledge. Neck or nothing now; the dogs who fell lame, or failed to do their share, were simply turned out and left on the Barrier.

It was the custom with Scott to sledge his etceteras in canvas hold-alls and bags, but the Norsemen favoured neat square cases; indeed, they looked for all the world like five commercial gentlemen sledging out samples to the Pole! During their first night abroad it blew a gale; next day sleet, fog, and gritty flakes on a cutting breeze.

"It was really vile weather," admits Amundsen, "snowing from above and drifting from below, so that one was quite



blinded." Soon after Bjaaland's sledge went wholly into a crevasse and was salved only by the stiffest labour. They had marched into a mazy patchwork of chasms, hummocks, cracks, and screw-holes; in groping out the lives of several dogs were all but lost. Somehow, as they dangled, they were hauled out, while the shaken quintette were enabled to camp at last through haply encountering a couple of snow-huts built last trip. Next day they made the 80° depot and gave the dogs as much seal-meat as they could eat.

Snow-beacons, 5 or 6 feet high, were now built at intervals all along the route, as a guide for the homeward jaunt. This job prolonged the halts, yet the pace between was smartening until at the 82nd degree they attained the handsome average of 30 miles a day. Now and then a half-spent dog would tend to hinder his fellows, in which case he was killed at once; but the teams as a whole were pulling grandly. Indeed the men themselves, without in any way retarding progress, were able to grasp at straps and be towed along with the sledges, thus conserving their own powers, while enjoying a rare rush on ski. The Norsemen felt assured that, wherever Scott might be, they themselves were making a real race for it now.

It was a weird thing at night being camped here on mid-BARRIER, for great ice-crusts, owing to pressure and atmospheric reasons, were for ever on the slide, the result to one's sense being much like that of an avalanche in the Alps. The noise, as of a peal of thunder, would burst on the sleepers' ears, starting them from their bags and often shivering the ice upon which they lay—indeed sometimes their pitch would actually sink or move. At other times, round about the camp, a measured booming broke forth, like the deep bass of cannon, or a dull moaning, or else the quick spitting fire as of numberless small artillery.





# HELL'S GATE, ON THE DEVIL'S GLACIER

"To go one yard forward I am sure we had to go at least ten to one side

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The broad, rolling snow-plain, with each succeeding mile, developed a yet smoother surface, while the weather was ideal. Out of the softly-merged distance a row of mountains began to loom—the lordly chain of South Victoria Land, trending south-east from the Beardmore Glacier. The eye of man, for the first time since creation, was able to gaze on the whole of this circling range, which probably enclosed the Ross Barrier, linking down to South Victoria Land on the one hand, and to King Edward VII. Land on the other.

A dump of provisions was being made at each degree of latitude, thus lightening the sledge and easing matters for the tougher work ahead. The party, at 85°, stood like midgets beneath the rocky sides of obstructing land; this, rising to snow-capped heights of 10,000 feet, looked well-nigh impassable. And beyond, farther south, yet more virgin peaks, these lofting to 15,000 feet, if not higher!

Surely they were in for it. A main dump was made, leaving food sufficient on the sledges for 60 days; then the tussle began. With courage the dogs assailed it, putting their every ounce to the collar-work, till bit by bit the first slopes were vanquished. Anon, steep glaciers barred the climb, whereat a score of dogs were harnessed on together, the four sledges being hauled up by repeated journeys. Next day they had risen 2,000 feet; the next they had doubled that height—a toilsome business, and not all profit, for often fissures and screw-holes compelled downward detours.

The far-flung, majestic mountains through which they were now threading, clad as in cold ermine, were named Queen Maud's Range, while the downhill gorge of the third day was called the Axel Heiberg Glacier. Flanking giants, with pinnacles rising to the clouds, were christened after Fridtjof Nansen and Don Pedro Christophersen. Mount Engelstad,



at the bottom of the glacier, some 19,000 feet high, pointed to the dome of heaven like a snow-giant's finger.

It was a world of silent marvels ; even ugly crevasses, sown thickly along the route, did not deter our dwarfs of humanity from pausing at times to lift an awed gaze at these colossal forms of primitive nature. An up-grade was soon renewed, and here the sturdy dogs, in a single day, accomplished nearly 20 miles over ground that rose about 6,000 feet ! Surely a record performance ; the more so considering that, during the past few days, the teams had traversed fully 440 miles of steeply broken ice. Even Amundsen, with all his deep-rooted belief in these animals, was astonished.

Alas ! the time had arrived for reducing the number of dogs to be fed, for the Polar plateau was all but reached. "Twenty-four of our brave companions and faithful helpers were marked for death," writes Amundsen. "It was hard, but it had to be so. We had agreed to shrink from nothing in order to reach our goal."

Dog-meat for man and beast was the order here, and a rest of two days was considered. A sudden gale settled the matter, and, willy-nilly, they had to inhabit their tents. Two, three, four days passed, and still the storm hissed on ; it was not exactly a full-bodied gale, but the whirling drift put a stopper on any scheme of advance. Again impatience ; once more a fretting at the leash. The sands of time were dribbling, and here they were, idle, growing stale, losing the ground they had gained. Everybody growled.

"Oh, it's awful !" was the verdict. "This is the fifth day and it's blowing worse than ever. There's nothing so bad as lying weather-bound like this !"

"You're right. Do let's try to move."

Amundsen, having peered out, consented ; a depot was



made of the dog-meat left over, then forth into the snow-swirl they headed, five men and three sledges, with a team of six dogs apiece, the unwanted sledge being left up-ended for a mark.

A blind plunge, with *sastrugi* underfoot, "hard as flints and as sharp as knives." At three in the morning the storm-fog thinned and the truant sun beamed forth. Gusts sprang up afresh, but the light kept good, and they barged along with the howling squalls in their backs. "A sledge-journey through the Sahara could not have offered a worse surface to move over—it was real torture to all."

Strangers to grief no longer, that much is clear; yet the three sledge-meters, tailing and bumping behind, all agreed in a register of well-nigh 19 miles, so who could grumble at that? 86° S., that evening, ten miles more of sleety fog, and then—near on their right—two phantom ridges, towering to 10,000 feet. A glimpse, no more; round wrapped the haze like a blanket. Crevasses, too; Wisting, sledge, and team all but lost, and the others sloughing—the risk becoming acute, yet they *must* press on.

Amundsen and Hanssen, roped, pioneered ahead into a shattered area of glacial ice, the aspect of which, glimpsed in the spectral fog, filled their souls with awe. "It looked as if a battle had been fought here, and the ammunition had been great blocks of ice. . . . To go one yard forward I am sure we had to go at least ten to one side. Can any one be surprised that we called it the Devil's Glacier?" The point of egress they named Hell's Gate—for that, too, as regards character, earned a sinister title.

"What will the next surprise be, I wonder?" wrote the leader in his diary that night. Well, morning brought him the best surprise of all—clear air and warming sunlight. It



was a new joy, and the chain of mighty hills, running south-east on their left, gave every man a new thrill. Mounts Hanssen, Wisting, Hassel, Bjaaland, were rapidly christened after the leader's companions, with Mount Thorvald Nilsen in compliment to the *Fram's* worthy skipper. It was a vast and rugged pageant ; a region of white enticement.

"Mount Nilsen!" exclaims Amundsen. "Ah! anything more beautiful I have never seen. Peaks of the most varied forms rose high into the air, partly covered with driving clouds. Some were sharp, but most were long and rounded. Here and there one saw bright, shining glaciers plunging wildly down the steep sides." And of Mount Hanssen. "Its top was as round as the bottom of a bowl, covered by an extraordinary ice-sheet, which was so broken up and disturbed that the blocks of ice bristled in every direction like the quills of a porcupine. It glittered and burned in the sunlight—a glorious spectacle."

Exhilarating this, and the road, behold! was improving. Crevasses almost done with; great undulations now, the southernmost limits of ice-pressure, up and down whose frozen waves—now on the crest of them, now in the trough—the dogs bore sprightly along.

Foul weather again—but still on. Now a bare field of ice, swept clean of snow, and so attractively smooth as to suggest a dancing-floor, but when they skimmed upon it—*crackle, crack!*—men, sledges, and dogs all floundering. It was false and hollow, this fair-seeming floor, with a drop of 2 or 3 feet to a bed of rubble-ice below. Clatter, smash!—a teasing game for the nerves; but at last the area was passed with no worse mementos than bumps and barked shins. A strong term was called for again, so they dubbed it the Devil's Ballroom.



87° S. at last, and the clear plateau ahead. Uphill work ; soon the boiling-point of the hypsometer showed an altitude of 11,070 feet. At 88° S. the reading was the same ; was the ascent really over ? They could answer that soon by finding themselves on the *down-grade* ! Astonishing—but most welcome, especially to the dogs. These mettlesome creatures—the picked eighteen from a pack of one hundred—had borne through the last wearing stages in a style that was hardly credible. They appeared to be tireless ; they were pulling as stoutly here as they did on the opening sprint.

The silken flag was unfolded now, tied to a couple of ski-sticks and laid on the leading sledge. This was Hanssen's ; the order was that he should hoist the flag directly the great moment came. Then Amundsen, who was the forerunner, went ahead on ski. Other thoughts, somehow, crept into his mind as he sped along, so that a sudden burst of cheering made him start and turn. From Hanssen's sledge the silken flag was blowing upon the breeze. Shackleton's record—88° 23' S.—was overtaken and passed ; theirs was the " Farthest South ! "

" No other moment of the whole trip affected me like this," says Amundsen. " The tears forced their way to my eyes ; by no effort of will could I keep them back. It was the flag yonder that conquered me and my will. Luckily I was some way in advance of the others, so that I had time to pull myself together and master my feelings before reaching my comrades. We all shook hands with mutual congratulations ; we had won our way far by holding together, and we would go farther yet—to the end."

A brave resolve, with only one doubt to vex it—the memory of another in the field. After all, they could be certain of nothing till the end—90° S.—was actually reached. There was a new tensivity of action, a yearning for greater haste.



All save the bare needs were promptly dropped, forming a final depot, and then they pressed on—scarcely heeding the light breeze that stung their festered and frost-bitten faces.

“None of us would admit that he was nervous,” remarked Amundsen, “but I am inclined to think we all had a touch of that malady. What should we see when we got there? A vast, endless plain that no foot had yet trodden, or. . . No, it was an impossibility! With the speed at which we had travelled we *must* reach the goal first, there could be no doubt about that. And yet—and yet——!”

Try as they would they could not banish the doubt. Straining on, the 89° was made, but no lingering—on, on through the leagues of quiet. The empty deadness of this world was just awesome; they went to sleep that night in a void of silence broken only at intervals by the shifting ice-crusts, whose rumble still haunted their ears.

Off again betimes; their route—how splendidly direct! Save for a slight bend at the glacial gorge they had been able to push due south every step of the way—a straight line, almost, from the Bay of Whales to the Pole. Good indeed!

The reading was now 89° 45' S.—soon they were upon the very threshold. “Our flag was taken out again and lashed to the ski-sticks as before; then it was rolled up and laid aside, to be ready when the time came.” Only three miles left, now two, and now less than one. Hearts were beating fast; the next downhill gradient would actually bring them within sight of the last spot in the world!

The same instinctive thought in every mind; would they be the first? How fared that other effort?—what of Captain Scott?

In order to ascertain this for ourselves we will now take up the former story.



## CHAPTER XV

### WITHOUT FEAR OR PANIC

THE motor sledges being tried by Captain Scott were built on a principle which, sooner or later, was almost bound to be considered as an effective means of Polar transport. To have them readily understood, we may say they bore a resemblance to that form of armoured car now known as the "tank"—that is, they were fitted with tractor belts running over the wheels.

These motor sledges, it may be remembered, were pioneering ahead, and early on Scott picked up a cheery missive from Day saying: "All well with motors, both going excellently. Hope to meet in 80° 30' (lat.)." Alas! soon after came a very different sort of note: "Big end Day's motor No. 2 cylinder broken," and, half a mile beyond, the motor itself—abandoned. Not long after the other was overtaken, also quite broken down. In each case it was the engines which had proved too weak; the tractor-belt idea had panned out well.

This was the first disappointment, though not, of course, one unprepared for; those of the motor support, as pre-arranged, immediately proceeded as a man-hauling party. The ponies, already heavily freighted, had to accept some of this cargo, but they did not object. Even notorious jibbers like Chinaman and Jehu, each with burdens exceeding 450 lbs.,



forged bravely along and finished the day quite fit. A seething blizzard lasting two days reduced the poor beasts to shivering agony ; to every one's surprise, however, they regained full powers as soon as the scourging gale had passed. A snowshoe had been invented for the ponies which made it much easier for them on soft patches. The men also were chiefly travelling on ski.

"The march was a real pleasure," we read in Scott's journal. "One gained confidence every moment in the animals ; they brought along their heavy loads without a hint of tiredness. . . . Every one is as fit as can be." It should be remembered that, as yet, full rations were being enjoyed—of pemmican, butter, cocoa, sugar, tea, and biscuits. Though the latter numbered only eight per man, they were very substantial and each four inches square.

One Ton Camp was made at mid-month by twelve men, ten ponies, and the teams of dogs, a day's rest being taken for an adjustment of baggage. A few days later Scott came up with the ex-motor party, all now pushing on together, but soon after the first of the failing ponies had to go, making four feeds for the dogs. Thus, alack ! the brightness of the start began to be marred ; day succeeded day of stinging squalls and evil surface, finishing the poor ponies, and on successive marches they had to be sacrificed. About this time Day and Hooper of the ex-motor party turned back.

The dread truth was out now : so far as weather went, this was doomed to be an atrocious season ; unbelievably so, as time soon proved. For four days, within sight almost of the Barrier end, the explorers were pinned down by a bellowing blizzard of powdery snow, which melted in the high temperature and drenched everything—clothes, tents, pony-rugs, sleeping-bags—through and through.



Oates, himself soaked by the weather, crouched behind the drifted pony-wall and strove all he knew to keep life in his four-footed charges. He suffered with them, but while he was robust to recover, the ponies seemed to wilt in such torturing conditions.

Calculations were upset, forage gave out, and at a halt just short of the Beardmore Glacier—this taking the grim name of Shambles Camp—the remaining ponies were shot.

On the 10th the Beardmore Glacier was entered, the party toiling past Mount Hope a week behind scheduled time. It was a wallowing process ; where Shackleton had encountered solid ice the present party found beds of snow, deep drifts occasioned by the recent blizzards. Ski helped at first, but with some of the surface growing steep and broken these had to be discarded. Men, thenceforth, were often bogging in snow up to the knees ; the sledges sank also, while coatings of ice fouled the runners. This, of course, was the region of crevasses, and Edgar Evans half-vanished once, denoting the need for caution ; most of the chasms, however, were choke-full of snow.

The dog-teams, on the 11th, pulled up strongly from a 4-hours' run before turning back under Meares and Demetri. This meant bigger weights for the dozen remaining men ; on the whole, they throve as well as they dared hope, but it was a back-breaking climb and progress fretfully slow. At times, on the downward grades of softened snow, the ski were once more a godsend. It was intolerably hot, the glare of the sun bringing cases of snow-blindness, while pressure-ridges, screwed holes, and ice-falls drove the sweating men out in a circle towards the Cloudmaker. *Sastrugi* and *névé* provided their special terrors ; but then conditions improved, giving 17 miles on the 19th and 23 miles on the 20th, rising 800 feet.



At 85° 10' the Upper Glacier Depot was installed; here Wright, Cherry-Garrard, and Keohane were required to set back under Dr. Atkinson. Their sorrow at having to turn homeward to the comforts of a ship only indicated again the lure of Polar travel, and also how fine of will those men were in spite of pain and delays. "I dreaded this necessity of choosing," wrote Scott; "nothing could be more heartrending. We made our depot this morning, then said an affecting farewell to the returning party, who have taken things very well—dear, good fellows as they are."

Pressure-ridges lofting up into veritable walls, with giant chasms intervening, full 30 feet wide, compelled a deal of arduous zig-zagging. Physically, both main and support parties bore up to this well, though ever goaded by the thought of time being lost. All this screwing was succeeded by a quite abnormal stretch where small crevasses tracked in every direction, being completely masked over by a thin layer of *névé*. Along here matters waxed very exciting, for in they all crumbled, one after another, while sometimes they crashed through in couples.

Scott, nevertheless, had reason to feel elated that evening, for by 6 o'clock they had emerged upon the rippling *sastrugi* of the Polar plateau. One uneasy thought crossed our leader's mind, a thought concerning Amundsen. Scott, viewing the Dominion Range from this height of vantage, could not help suspecting that a preferable road to the Pole must lie hidden away to the east. The belief in no way upset him. "I am feeling very cheerful about everything to-night," wrote he. "To me, for the first time, our goal seems really in sight."

Christmas Day, however—when every one, naturally, desired to continue feeling festive—there came the shock of a new field of ice-ravines and more veering to avoid them.



In this all succeeded save Lashly; the latter was forty-four to-day, and he celebrated the happy fact by almost losing his life. Several others had half-vanished, but now, to a shatter of crusted snow, Lashly shot from view and jerked the whole team after him. They were, of course, harnessed, while the sledge, nose-diving to the pull, just happened to wedge, and so remained till those ahead could rush back to aid. The former tables were turned; it was now Scott and Evans's part to let in a rope and haul up Bill Lashly—the latter emerging as cool of spirit as he was also cold to the bone.

Christmas cheer came to warm him: a hot brew, with Yuletide extras such as raisins and chocolate. The supper that night—horse-meat savoured with onion, plum-pudding, biscuits, arrowroot, sweetened hoosh, cocoa, ginger, and caramels—was a real dream-feast which, despite its medley, digested well and gave them all a snug night's sleep.

Followed now days of cumbrous pulling, with runners grating to the point of hardly being movable at all, so at the 87th degree—called Three Degree Depot, being that distance from the Pole—the jostled, roughly bumped framework of the two 12-foot sledges was taken apart and re-assembled to form 10-foot editions.

Never had "Jack" proved a handier man than in this piece of skill-craft, with few tools and meagre material, up there in the dumb spaces of 87° S. The result of their efforts was a new lease of speed; New Year's Day, 1912, found them but 173 miles from the Pole, and by 4th January this had been reduced to 145 miles. A sad and memorable date, however, the time having come for Lieutenant Evans, Bill Lashly, and Tom Crean to turn back, Scott having decided to make the main-party a five-man unit, taking in the young and muscular Oates.



The emotion of this last parting could not have been deeper even had any of them known what lay in store. These were the giants of the earth, strong in all ways, the very embodiment of hardness, yet comradeship up in those solitudes becomes so much a part of men's souls that partings are scarcely bearable. "Teddy Evans," Scott tells us, "is terribly disappointed, but has taken it very well and behaved like a man. Poor old Crean wept, and even Lashly was affected."

Lieutenant Evans gave Bowers a Naval Ensign of silk, asking him to carry it on to the Pole ; Oates handed the Lieutenant a letter to his mother, telling her how happy he was to be one of the chosen. The supports followed out a little way from this camp, to make sure all was well. When Scott found his sledge going strong he stopped, and the actual farewells were said. Oates's voice shook a little, for he and "Teddy Evans" had been the best of pals. He turned to shout over his shoulder,—

"I am afraid, Teddy, you won't have much of a 'slope' going back, but old Christopher is waiting to be eaten on the Barrier when you get there !"

Several times the two parties, turning about, waved their hands at each other, till the one moving south dwindled down to a speck and faded out in the far cold pall of greyness. Then it was that Lieutenant Evans was left to realize the shrewd truth of Oates's good-bye words ; the ceding of one man from his own party seriously affected the speed and strength of it. They could never hope to save their lives except by forced marches.

This was no exaggeration ; indeed, the actual experience of this trio, all that they faced and bore, forms a narrative in itself of bull-dog grit and stamina. Even before reaching



the Glacier a three days' blizzard played havoc with their health, but they worried on through a temperature of 22° below zero. In the Beardmore they were compelled, by the urge of sparse rations, to risk a direct course instead of—as in coming—skirting round the broken ice-falls.

This led to a desperate episode—one never-to-be-forgotten. Glissading a hard blue slope, the sledge suddenly took charge and whipped them off their feet. They were, at the moment, practically one with the load, for all were clinging at the straps which bound the general kit. Instinctively they lay the flatter, and clutched the tighter, kicking out with their feet in an attempt to guide—being whizzed over this declivity and flying on to the next.

“The speed of the sledge at one point,” writes Evans, “must have reached 60 miles an hour, and there was danger of our end being in sight. . . . The sledge seemed suddenly to spring into the air. We had left the ice and shot over a yawning chasm ; then we crashed on to the ridge of ice beyond and below. The sledge capsized and rolled over and over, dragging us three with it until it came to a standstill. How we ever escaped entirely uninjured it is beyond me to explain ! ”

“We had saved three days' hard-foot-slogging by our risky escapade,” adds the officer. “We camped that evening feeling like three bruised pears ; but we were in pretty hard condition in these days. Our bruises and cuts in no way kept us from slumber.”

Alas ! this tune had to alter when they scrambled out to the Barrier, for there Evans showed symptoms of that most baleful of ailments—scurvy. These three, remember—two of them as members of the old motor-sledge unit—had been grinding it like very slaves from the first march out ; while



Evans, previous to that, had been upon spring surveys in a temperature of 73° below zero. Nature now was calling him to account.

Stubbornly, however, Evans stayed to the traces, guiding the course and hauling his share through long days of agony till they made One Ton Camp. Here he broke down, yet again uprose and, though no longer able to pull, hobbled four days with the aid of ski-sticks to the length of 50 more miles. Here he collapsed once more and, failing to struggle up, besought the others to leave him in a sleeping-bag with rations of food, and themselves push on for help. But his companions would have none of it; their answer was to lift him upon the sledge.

“For days,” records Evans, “these two fine British seamen dragged me over the endless snows of the Great Ice Barrier. The marches were weary enough for me, lying on the sledge, but only those—and there are mighty few of them—who have dragged a sledge for 1,500 miles can appreciate what pluck and effort were needed by these men to continue with their almost overwhelming load. . . . At Corner Camp we encountered a blizzard which completely spoilt the travelling surface. The strength of the two men was spent and, great though their hearts were, they now had to give up. In vain they tried to move the sledge with my wasted weight upon it. It was hopeless.”

Tom Crean, in that hour of crisis, set out alone for Hut Point, leaving his mate to tend the sick man and strive to keep him alive. After a non-stop march of 18 hours the splendid Crean reached his goal, to sink exhausted amid old familiar friends. The dogs did the rest, for Dr. Atkinson and Demetri whipped off with a team at once, bringing in the sick man and his guardian in a spanking run of five hours. Treated



first by Atkinson, Lieutenant Evans was afterwards sledged to the *Terra Nova*; returning in it when the ship left the Antarctic, and coming out again in full health.

Crean and Lashly, later, in recognition of their grit and fortitude, were each awarded the Albert Medal. Never, perhaps, has any distinction been more solidly earned.



## CHAPTER XVI

### IN DEATH UNDISMAYED

CAPTAIN SCOTT and his four stalwarts—Lieutenant Bowers, Dr. Wilson, Lieutenant Oates, and Petty-Officer Evans—plugging on Pole-wards through alternate calms and badgering gales, came up on the 6th with Shackleton's southernmost camp. The report for that day was *sastrugi* in "a sea of fish-hook waves, covered with a beard of sharp branching crystals—the hardest pull we've had." On the 9th they passed Shackleton's farthest, and next day lightened matters by dropping a depot.

Now hope would rise and now fall, with the changing outlook of surface and weather—85 miles from the Pole; 74 miles from the Pole; and so to the 89°. Trudge, trudge, trudge—with all around them the vast, unnerving silence of a bare and limitless void.

"The Silence was deep with a breath like sleep  
As our sledge-runners slid on the snow,  
But the fate-full fall of our fur-clad feet  
Struck mute like a silent blow."

How poignant now seemed those prophetic lines, written last winter by Dr. Wilson for the *South Polar Times*. Many there are who believe that poem to have been a premonition of all that was to come, both now and later; certainly it foreshadowed the very atmosphere of these uncanny solitudes.



"Was it the exhaustion of the march," asks one, "or some damp quality in the air that made every one feel chilled that night?—the actual temperature was higher than the night before." It was not good for the spirits, and next day they felt it again—that curious, damp cold. Bad light made it ticklish to steer, but they laid their last depot and soon Scott was able to say—"Only 27 miles from the Pole and nine days' provisions. We *ought* to do it now."

Mileage, by noon of the 16th, was cut down to twenty, and that afternoon they pushed on with quickened zest. Bowers's keen eyes, shortly after, made out a black, fluttering speck in the distance. With sinking hearts they swerved towards it, till the truth came upon them with the dull impact of a blow. The track of dogs everywhere—teams of dogs—sledge-trails coming and going, ski-tracks the same. And the fluttering speck was a flag, tied to a sledge-bearer—a black mark-flag borne here from far Norway.

Forestalled! Amundsen had won the Pole!

"It is a terrible disappointment." This was Scott's brief comment; and then, with his quick, unselfish thought—"I am very sorry for my loyal companions."

The old slogan prevailed—*without fear or panic*. The stuff that has built a great Empire does not feed on regrets, nor yet turn aside in its purpose; these men had come to survey the South Pole and they would do it, quite regardless of their spent condition, and of the fact that another had done it already. Every feature as they pressed onward proved to Scott that his Norwegian rival had found a far easier road up. On the 17th our friends were encamped at 90° S.—to wit, the South Pole—so at length a party of British explorers stood upon "the last spot in the world."

It was horrible weather here; the cold at 22° below zero,



with a piercing wind, while the journal again speaks of "that curious, damp, cold feeling in the air which chills one to the bone in no time." In this also the Norwegians must have been luckier, for actually they had left a tent and some of their fur gear behind! The tent was found, still erect and flying the Norwegian flag, some distance off the Pole. Within the tent were fur mitts, some reindeer bags, woollen socks, and a number of instruments. There was a note for Scott from Amundsen, accompanied by a letter which he wished to have sent on to King Haakon of Norway—a delightful request in its way! There was also a formal record, giving date of occupation, and names of the five Norwegians: "ROALD AMUNDSEN, OLAV OLAVSON BJAALAND, HELMER HANSEN, SVERRE H. HASSEL, OSCAR WISTING. 16 Dec., 1911." So now the date was known; the Norwegians had won the race for the Pole by a margin of about one month.

After quitting this tent the most careful sights were taken by Bowers, and these minutely checked, with the result that Scott made the actual point of the Pole about half a mile removed from Amundsen's mark. Here the Union Jack was planted after a cairn had been built, and they had photographed themselves by means of a pull-line on the lens-shutter—"mighty cold work all of it."

A noteworthy fact was that the South Pole appeared to lie in a depression—named by Amundsen "Polheim" and "King Haakon VII. Plateau." Scott determined the altitude to be 9,500 feet; whereas on the King Edward VII. Plateau behind—at 88° S.—the height was 10,500 feet. So the South Pole was really a bleak basin in the wind-swept uplands of the eternal snows.

The ice-masks were hard on their grizzled beards as they turned about, and five dirty, unkempt figures set upon the



stiff collar-work home—"800 miles of solid dragging, and good-bye to most of the day-dreams!"

Sail was rigged when possible, but the ill-going encountered outward had been rendered less agreeable by reason of ice and drift. A scouring succession of blizzards from the 21st onward crippled the pace yet more, and seemed to foretell of disquieting things. Evans, who had cut his hand coming up, was suffering thereat from frost-bite, and also in the face; Oates showed less able to stand the cold; Wilson had sun-blindness; the others were moderately fit save for accidents—the result, in Scott's case, of an ugly fall; with Bowers it was a strained tendon.

Hunger, in these latitudes, is specially galling to the man unfit, gnawing more deeply at his vitals than if he were normally strong, but Three Degree Depot was picked up at last, and thereafter rations were slightly increased. Scott and Evans, on 4th February, went heavily into a crevasse—a near call for both; while Evans, by a later fall, suffered head concussion from which he never seems to have fully recovered. Earnestly he drudged on, but was never his old powerful self.

From Upper Glacier Depot they plunged into the Beardmore, stumbling along through foggy snow and a "horrible light which made everything look fantastic." Anxieties again; they were down to about one biscuit when the mid-depot flag was sighted. Hereabouts Dr. Wilson discovered coal-seams, and—on the principle that a change is valuable medicine—they spent one day amid the rocks of the moraine. Specimens collected, weighing up to 35 lbs., were fated to play their own part in this tale of unique effort.

Progress now to the glacier-mouth was distressingly slow, the actual fact being that their hitherto stoutest man, Edgar



Evans, was barely able to pull at all. It will never be known how much this grand fellow had endured in silence ; when asked, it was always one answer—"I am all right." Yet clearly, for a full week, he had been altogether the reverse. On the 17th, having trouble with his ski, he drew out from the team, and all four others, when he failed to overtake the sledge, skied back to inquire what was amiss. They found poor Evans in a far-gone state. "I think I must have fainted," he mumbled. Fetching the sledge, they brought him on to a camp ; but soon after midnight, in the tent, he quietly passed away.

It was a shock to all, this astonishing failure of the strongest man of the party ; only after losing him did they realize what a liberal share of dragging Evans must always have performed—an impression, no doubt, exaggerated by the weakening resources of the four to survive. Shambles Camp, at the fringe of the Barrier, provided plenty of horse-meat and a renewed impetus ; even this was but a flash in the pan.

Every stroke of fate, from now on, seemed directly perverse ; the wind by which they had hoped to sail veered completely round and—in opposition to all former experience—lashed their faces with drift and held them back. This, when the temperature sank to 40° below zero, must well have merited the title "blighting."

Mid-Barrier Depot was made on 1st March, with poor Oates a stumbling invalid. His feet were in a dreadful state, reducing him to a limp. Wilson, of the others, suffered most, owing to his unfailing regard for the afflictions of others. So much did he remain still, attending to Oates's ailments, that soon his own feet became nipped by the intense cold of the declining temperatures. This merely means that "Bill Wilson" was living up to his own noble standards, in keeping



with the tribute long ago paid him by his chief, and which may aptly be quoted here :—

“ Words must always fail me when I talk of Bill Wilson,” wrote Scott. “ I believe he really is the finest character I ever met—the closer one gets to him the more there is to admire. Every quality is so solid and dependable. . . . Whatever the matter, one knows Bill will be sound, shrewdly practical, intensely loyal, and quite unselfish.”

Oates himself, encouraged by his comrades' devotion, strove to suppress the thought of his being such a drag on the others—the phase which ever worried him most—and he plodded on. Mount Hooper Depot again just staved off the worst, for their enfeebled plight had been compelling full rations. The ensuing days were heart-breaking, yet running through them a sublime thread of the loftiest courage, a resolve “ to see the game through with a proper spirit.” All now were aware that the tide was sinking fast in the case of poor Oates ; that his life was quite at the ebb. He knew it himself, and bluntly asked their advice.

“ Nothing could be said but to urge him to march as long as he could,” records Scott. “ He has rare pluck. He has borne intense suffering for weeks without complaint.”

The crawling journeys of just six or seven miles per day were minimizing their chances of ever reaching One Ton Depot. “ I doubt if we can possibly do it,” wrote Scott, having calculated the stretch, and the available food. “ We must fight it out to the last biscuit, but can't reduce rations.”

Oates, confronted by all this, felt again the fact of his being a burden to hope. On the 15th, though pleading to be left behind in a sleeping-bag, he heard their persuadings and forced his failing limbs to travel a few more miles. The reading had been down to 43° below zero, an altogether deadly



cold. Oates, that night, fervently prayed he might not wake again—but he did. And, waking, he arose and did that thing which has thrilled the world to admiration. His comrades *must* have their chance, free from all lingering about for him. A blizzard was raging on the Barrier, but still there was no hesitation.

“I am just going outside,” he remarked, “and I may be some time.”

They sought to stop him, but he would not heed; there was a flap of the canvas, a whirl of snow—and he was gone. “He was a brave soul,” says Scott; and later—“We knew that poor Oates was walking to his death, but though we tried to dissuade him we knew it was the act of a brave man and an English gentleman. We all hope to meet the end with a similar spirit.”

Now for the drastic effort; the utmost that lay in them. Camera, theodolite, Oates’s sleeping-bag, and all such, were abandoned, but the journals and the geological specimens were preserved, the last at Dr. Wilson’s personal request. Here again the admirable touch. With ordinary men, we may be sure, those 52 lbs. dead weight of stone would have been the very first ballast to go overboard; but, the cause of science being the root purpose of the expedition, that purpose should not be lost sight of, even at the last extremity. They “will be found with us or on our sledge,” promised the diary. They were, and it is gratifying to state that this dearly-bought collection, when eventually conveyed home, proved of the highest value in showing the age and history of the Antarctic mountains.

“Ill-fortune presses, but better may come.” This was on the 18th, when the three survivors were straining on through the fiendish head-wind. All three had foot-trouble, Scott’s



anguish being such that he quietly had to speak of amputation as being inevitable. There were little patches when the sledge would come smoothly; there were longer stretches when it could be induced to move only by the most gravelling output of labour. Soon it was all one grinding drag. Gritting their teeth, goading their sinews, they plugged on; in every normal sense, they were done men, yet some marvel of force within them, a something grander than human strength, held them stubbornly to the trail.

“ If you can force your heart and nerve and sinew  
To serve your turn long after they are gone,  
And so hold on when there is nothing in you  
Except the Will which says to them : ‘ Hold on ! ’ ”

Kipling's vigorous lines appear to be so apt that they might have been inspired by the last phases of Scott's heroic story. Cut down at last by the overwhelming cold, these amazing men, after a spell of sleep, turned out once more on the 19th to make their last epic fight in an adverse wind at 40° *below zero*. It was withering. Their palsied hands made a camp—their last—within 11 miles of One Ton Depot. Only 11 miles to a land of plenty! At this moment they had two days' food left, with one allowance of fuel.

Yes—they might have fought through, however slow and staggering the marches; knowing the men we may say they would surely have done so if given the slenderest chance. That night, alas! the blizzard really came; a bellowing, tearing blizzard that converted the world outside into a hissing eddy of death. Nothing living could have stood against it, not for three minutes. Two days passed, of pent anxiety; then it was resolved that Wilson and Bowers, directly the gale abated,



should press forward for supplies and oil. But the storm did not abate ; it lasted in full fury for nine days, a hitherto unheard-of spell.

“ Every day we have been ready to start for our depot, 11 miles away, but outside the door of the tent it remains a scene of whirling drift.” This was on the 29th, the last date copied in the journal ; how they had subsisted these ten piteous days can never be known exactly. But the lamp of life now flickered low, and in this hour the great-hearted Scott took up his journal to record the end—without fear or panic.

“ If you can meet with Triumph and Disaster,  
And treat those two impostors both the same.”

That was Scott ; the changing moods of time could not dismay him—the man was ever greater than any exterior force. Two or three of the letters he wrote are of such wide interest, revealing so much as to his own chivalrous nature and that of his comrades, that we may be pardoned for quoting in full.

*To Mrs. E. A. Wilson.*

“ MY DEAR MRS. WILSON,—

“ If this letter reaches you Bill and I will have gone out together. We are very near it now and I should like you to know how splendid he was at the end—everlastingly cheerful and ready to sacrifice himself for others, never a word of blame to me for leading him into this mess. He is not suffering, luckily, at least only minor discomforts.

“ His eyes have a comfortable blue look of hope, and his mind is peaceful with the satisfaction of his faith in regarding himself as part of the great scheme of the Almighty. I can



do no more to comfort you than to tell you that he died as he lived, a brave, true man—the best of comrades and staunchest of friends.

“ My whole heart goes out to you in pity.

“ Yours,

“ R. SCOTT.”

*To Mrs. Bowers.*

“ MY DEAR MRS. BOWERS,—

“ I am afraid this will reach you after one of the heaviest blows of your life.

“ I write when we are very near the end of our journey, and I am finishing in company of two gallant, noble gentlemen. One of these is your son. He had come to be one of my closest and soundest friends, and I appreciate his wonderful upright nature, his ability and energy. As the troubles have thickened his dauntless spirit ever shone brighter and he has remained cheerful, hopeful, and indomitable to the end.

“ The ways of Providence are inscrutable, but there must be some reason why such a young, vigorous, and promising life is taken.

“ My whole heart goes out in pity for you.

“ Yours,

“ R. SCOTT.”

*To a near relative he wrote :—*

“ The Great God has called me and I feel it will add a fearful blow to the heavy ones that have fallen on you in life. But take comfort in that I die in peace with the world and myself—not afraid.”

Of the companion letters, all took much the same tone ;



the writer insisted on shouldering a self-imposed blame for what had occurred, and only in his *Message to the Public* does he attempt a certain defence. Recounting the unlooked-for delays, arising from loss of ponies and ill conditions out, he speaks of Evans's sad breakdown, then of Oates's, and last of the hurricane blizzard which now had them trapped.

*"Surely misfortune could scarcely have exceeded this last blow. . . . We are weak, writing is difficult, but for my own part I do not regret this journey, which has shown that Englishmen can endure hardships, help one another, and meet death with as great a fortitude as ever in the past. . . . But if we have been willing to give our lives to this enterprise, which is for the honour of our country, I appeal to our countrymen to see that those who depend on us are properly cared for.*

*"Had we lived I should have had a tale to tell of the hardihood, endurance, and courage of my companions, which would have stirred the heart of every Englishman. These rough notes and our dead bodies must tell the tale."*

Cherry-Garrard and Demetri waited with their dog-teams at One Ton Camp from 4th March to 10th March, intending to conduct the Polar party with all speed to the *Terra Nova*. The latter had safely returned, but must be got away again before the winter's ice should imprison her in McMurdo Sound. A roaring blizzard at One Ton made it checkmate for Cherry-Garrard; he could push no farther south, but he stayed here till the measure of dog-food left was only bare enough on which to run them to the base. Indeed, it was a narrow squeak; the struggle back through icy squalls strained Cherry-Garrard's heart and nearly finished Demetri, even the dogs being hard hit by the stinging weather.



The Antarctic winter had set in early, gale succeeded gale across the Barrier, and it was realized that nothing could now be done till summer conditions returned. It was on 30th October, more than eight months later, that Dr. Atkinson fared forth with a numerous search-party, backed up by dog-teams and seven Indian mules specially transported by the *Terra Nova*. The searchers were prepared, if necessary, to go to the head of the Beardmore Glacier, but on 12th November, a march beyond One Ton, a tent was sighted—the tent of death, drifted heavily with snow. After clearing the latter the seekers entered. Wilson and Bowers were lying with their sleeping-bags closed; Scott, who must have died later, had the flaps of his bag open. One of his arms was stretched across Wilson's body; beneath his shoulder was the wallet containing his journals, together with a note bidding the finder to read.

With reverent touch they drew the note-books out, beginning a perusal which eventually told them everything. The folds of the outer tent were used to spread over the bodies, and above all was piled a lofty cairn surmounted by a cross. This done, they pushed on southward for about 20 miles, hoping to discover some trace of Oates. In vain; but, as near to the spot as they could judge, a second cairn was built, marked by the inscription—"Hereabouts died a very gallant gentleman."

The *Terra Nova*, when the searchers returned to it, was brought round to Hut Point, and here, before finally embarking, the surviving members of the expedition put up a great cross of jarrah wood, nine feet in height, on Observation Hill, facing it towards that long, white road to the Pole where the heroic five slumbered so well. Upon it these words:—



IN

M E M O R I A M

CAPT. R. F. SCOTT, R.N.

DR. E. A. WILSON, CAPT. L. E. G. OATES, INS. DRGS.,

LT. H. R. BOWERS, R.I.M.,

PETTY OFFICER E. EVANS, R.N.,

WHO DIED ON THEIR

RETURN FROM THE

POLE. MARCH

1912.

*“To Strive, To Seek,**To Find,**And not to Yield.”*

The tragic pity of it all ! Tragic, yes. Yet life, at the most, is a little tale ; and do not deeds such as these make the passing glorious ? The South Pole, by an ace, had been lost to the British people, but to the annals of a nation had been added pages the lustre of which can never fade. In brief review of this, one Edgar Evans, though a broken man, had plodded gamely on till he fell in his tracks ; Lawrence Oates, to afford his fellows a chance, groped out into the blinding drift of the Barrier waste, and did not come back. Of Wilson's earnest devotion, and of Bowers's dogged faithfulness, the whole narrative is eloquent ; as for lion-hearted Scott, the story of what he was and what he did must ever stand as a shining memorial to British manhood and selfless aim. His last written words, before the pencil dropped from his dying



fingers, concerned not himself nor his hapless plight, but the welfare of those at home. This his dying appeal—“*For God’s sake, look after our people.*”

A Memorial Service, held in St. Paul’s Cathedral on February 14, 1913, was attended by King George, and by royal warrant the rank and precedence of the wife of a K.C.B. were conferred on Captain Scott’s widow. A memorial endowment was raised, providing ample means for the relatives of the dead heroes, the balance being devoted to the enlargement of a fund for the promotion of Polar research.







## PART IV

### IN THE GREAT ANTARCTIC

" Yonder the long horizon lies,  
And there, by night and day,  
The old ships draw to port again,  
The young ships sail away ;  
And come I may, but go I must,  
And if you ask me why,  
You can lay the blame on the sun and stars,  
And the white road and the sky."

GERALD GOULD.







## CHAPTER I

### MAWSON SAILS IN THE "AURORA"

**D**OUGLAS MAWSON was another young man—an Australian—who, in the way of exploration, knew what he yearned for and did not cease from yearning. Mawson was, it may be remembered, one of Shackleton's expedition; he had scaled Mount Erebus and he had been to the South Magnetic Pole. And, ever since his interest in the Antarctic had wakened, his eye would wander over the map to that still unknown region between Cape Adair on the east and Wilhelm Land on the west—Wilkes Land, Adelie Land, and the areas adjoining, about which mankind as yet knew next to nothing.

The trouble about Pole-hunting, as Mawson seemed to regard it, was that certain tracks were covered time and again, while outlying territories such as this were left in virgin mystery. Mawson, when over in England early in 1910, expressed his feelings to Captain Scott, hoping some effort might be made; but Scott's forthcoming programme was already much too full for him to add another enterprise. Shackleton, for his part, was in keen agreement with Mawson; though not prepared at the moment to himself embark upon such a voyage, he was quite prepared to back it—so Mawson determined to lead the quest himself. With his resolve came



a strong hope that Australia would make this expedition her very own.

"It seemed to me," remarked Mawson, "that here was an opportunity to prove that the young men of a young country could rise to those traditions which have made the history of British Polar exploration one of triumphant endeavour as well as of tragic sacrifice."

He did not call in vain; the response, prompt and generous, was typical of the great Commonwealth of which he was so worthy a son. They do not see as down a narrow street in the British Colonies, but as across some open plain. No long beseeching for Mawson, no begging from door to door; the Australasian Association for the Advancement of Science started him off with £1,000—and their hearty good-will into the bargain; the State Government of South Australia followed up with £5,000; New South Wales gave £7,000; Victoria, £6,000; the collective Commonwealth, £5,000. After which the British Government woke up and sent along £2,000. Lucky Mawson!—we have only to recall the fitting out of other expeditions to realize how much this young Australian was privileged.

Douglas Mawson, besides being physically fitted for exploration, was also possessed of the mental gifts, being a Doctor of Science and holding a post as lecturer of Adelaide University. The latter institution, with that broad-minded spirit displayed everywhere, granted him indefinite leave of absence—for it was clear now that Mawson's venture, to be named the Australasian Antarctic Expedition, must rank as one of note, covering perhaps a long period.

Mawson, to obtain equipment, journeyed forthwith to London, arranging while there for sledge-dogs to be sent from Greenland, and furs from Norway. Thanks to his own per-



sonality, and to Shackleton's alliance, he made a host of friends amid the notable folk who could help. The engaging of Captain John King Davis, as skipper and second-in-command, was an excellent piece of work, for Davis had held high position on the *Nimrod*.

It was by the advice of Captain Davis that Mawson purchased the fine steam yacht *Aurora*. She was an ice-vessel, having belonged to the Newfoundland fishing-fleet, with a length of 165 feet, by a breadth of 30 feet. Though by no means a young craft, she had a trustworthy hull of oak, lined with fir and sheathed with the usual greenheart, all her ribs and beams being mightily strong. Her compound-engines developed nearly 100 h.p., being good for 10 knots an hour; while steam was also applied to operate the after-winch and the forward windlass—the latter being used for lifting anchor or as a means for deep-sea dredging. Square and schooner-rigged, with a carrying capacity of 600 tons, the *Aurora*, when refitted, proved a very sturdy craft for ploughing up the Antarctic waters.

The *Aurora*, full stocked with every Polar need, arrived in Australian waters towards the latter part of 1911, and there entered the port of Hobart. The committee of affairs which Mawson had left in charge—including our old friend Professor Edgeworth David, who had been a comrade on the Shackleton exploits—met him with the best of news with regard to funds. Liberal-minded men throughout the Dominion were subscribing freely, while the country itself was prepared to do more should the need arise.

Extended plans were now put into shape. 850 miles south-south-east of Hobart lay Macquarie Island, a sub-antarctic possession of Australia, which, in the early sealing-days, had been a station of some note, but had since lain



nearly deserted. Little was known of this lonely isle, but it was believed that a series of observations made there, respecting atmosphere, currents, etc., would be of the highest value to Australasian voyagers. Mawson proposed to leave five men on Macquarie Island, with full stores, hut, scientific apparatus, and a wireless plant.

At last! Always at the back of our mind, as we have recorded the difficult plights of explorers—the tragic corners from which they had not the strength to escape nor yet the means for summoning help—always the same idea has leaped to our thoughts: “If *only* they had been furnished with wireless!” And now, behold, that marvel of the age—that miracle of space and ether—was being brought to bear on Antarctic research; the lonely five on Macquarie would link up with the Antarctic bases, and the whole would be linked up with home. The idea of portable sets, however, appears not to have been considered; in this respect, since then, much progress has been made.

About two dozen men, it was expected, would carry out the work in Antarctica; a main party of twelve men, with hut and wireless, forming the principal base, while a second party would be landed by the ship at some other point well apart. Having accomplished all this, it was arranged for the *Aurora* to make investigations over the ocean-bed from the Ice Continent to Australia.

In manning his expedition Mawson gave much attention to character. “Many a man who is a jolly good fellow in congenial surroundings will become impatient, selfish, and mean when obliged to sacrifice his comfort, curb his desires, and work in what seems a losing fight. The first consideration in the choice of men for a Polar campaign should be the moral quality. Next should come mental and physical powers.”



Thus spoke Fiala, the Arctic explorer, and, from our own perusal of the subject, we can readily imagine how true a verdict is delivered in those few lines. Mawson rounds it off by adding—"Perfection is attained when every man individually works with the determination to sacrifice all personal leanings to the welfare of the whole."

Mawson naturally picked his staff from Australia and New Zealand, most of his following being young undergraduates from the universities. To take the exceptions first, a student of Dulwich College, Lieutenant B. E. S. Ninnis of the Royal Fusiliers—the son of a soldier-explorer—was appointed from London to have charge of the dogs, while a Swiss, Dr. Xavier Mertz, a champion in his country, was included as mountaineer and ski-expert. The wireless engineer, F. H. Bickerton, F.R.G.S., was an Oxford man by birth; while last, but far from least, we meet again Frank Wild, the naval man who first appeared with Scott on the *Discovery*, and who afterwards marched with Shackleton to 88° 23' S.

Of the others there were C. T. Madigan, G. F. Ainsworth, and M. H. Moyes (meteorologists); F. L. Stillwell, A. D. Watson, and C. A. Hoadley (geologists); G. Dovers, A. J. Hodgeman, and L. R. Blake (cartographers); H. Hamilton, J. G. Hunter, and C. T. Harrison (biologists); E. N. Webb and A. L. Kennedy (magneticians); W. H. Hannam, C. A. Sandell, and A. J. Sawyer (wireless operators); Drs. A. L. McLean and L. A. Whetter (surgeons); C. T. Laseron (taxidermist); J. H. Close (assistant); P. E. Correll and J. F. Hurley (photographers); Lieutenant R. Bage (astronomer); and H. D. Murphy (in charge of stores).

The *Aurora*, leaving Queen's Wharf, Hobart, on 2nd December, cheered by a vast concourse of people, made fair passage out, and on the 11th sighted Macquarie Island. The



latter, though rocky in general formation, and beset by reefs, is grass-grown on the upper shelves and harbours myriads of birds. Penguin rookeries everywhere ; besides more familiar species, we now meet with the Royal penguin—remarkable for its crest and feathers of pale gold which droop over in long eyebrows ; the King penguin—most splendid of all, proud in size and regal of plumage ; as well as petrels, gulls, Maori hens, whale-birds, crested terns, mutton-birds, mollymawks, Mother Carey's chicken, and a host of others.

Macquarie, indeed, being well outside the Antarctic Circle, formed a great breeding-place ; sea-elephants and sea-leopards abounded, besides the common seals, while the waters around contained shoals of edible fish, as well as finned monsters like the killer-whales and dolphins.

The island, though narrow, was some 21 miles long, rising steeply from the sea, with many cascades of fresh water tumbling down to the rocks of the shore. The reefs were very forbidding ; Captain Davis brought in as close as he dared to the ridges of North-east Bay, where, in the churning surf, the wreck of a schooner was seen lying. Soon a human figure emerged over a craggy spit, to vanish sharply and to reappear at once with a throng of others, all gesticulating wildly.

"It was just as if he had disturbed a hornet's nest," declares Mawson. "After such an exciting demonstration we awaited the next move with some expectancy. Planks and barrels were brought on to the beach and a flagstaff was hoisted. One of the party then mounted on the barrel and told us by flag signals that the ship on the beach was the *Clyde*, which had recently been wrecked ; that all hands were on shore, but requiring assistance."

All this naturally aroused an eager interest on board the *Aurora*, and more thrills followed, for the poor castaways,



over-zealous to reach the ship, launched out into the race of brine and were immediately capsized. It was a pretty tense business to watch them battling for life, but the snarl of breakers presently hurled their boat back upon the shingle like a cork and then tossed the men ashore after it. Despite their half-drowned plight, they continued to signal suggestions ; there was better anchorage, they stated, on the north end of the island, and here—in Hasselborough Bay, as it was afterwards named, in memory of the island's discoverer—our friends effected a landing.

The shipwrecked men turned out to be sealers ; on the foreshore, at the mercy of big seas, was their valuable harvest of seal-oil contained in barrels. Mawson felt bound to have a heart in the matter ; so he promised that the *Toroa*, the expedition's auxiliary ship now following behind, should convey the distressed ones and their merchandise back to New Zealand.

The poor fellows, of course, were overjoyed, and proceeded to evince their gratitude by offering anything they had in the shape of hospitality. On the leeward slopes of the island they possessed a couple of rough cabins, while from the shore to the hill-top they had rigged a "flying fox"—a cable device, that is, for hauling their blubber from sea-level. Now, as this northern eminence was to be the wireless site—it later became known as Wireless Hill—there would have been serious difficulty in hoisting such ponderous gear as the dynamo, petrol-engine, masts of oregon pine, induction generator, and the like, up a sheer face of 300 feet—but the "flying fox" promptly solved matters. The staff hut was to be erected on a sandy, grass-grown shelf in shelter of the towering bluff.

Soon Bickerton had the motor-launch chugging, and by



this all the gear and stores were transhipped. The *Toroa* duly arrived, and now every one was working at highest pressure, transferring coal from this vessel to that, loading off in whaleboats to the shore, and shipping the oil-barrels in. The *Aurora*, of course, stayed only long enough to see the island arrangements in full swing, good-bye being said on the evening of the 23rd. The Macquarie Island quintette—Ainsworth, Blake, Hamilton, Sandell, and Sawyer—stood on the beach to give ringing cheers, which were as heartily returned, and the *Aurora* steamed out southward for the white unknown.

“Ice on the starb’d bow!” Such was the cry at 4 o’clock on the 29th, and all crowded forward to view the first iceberg—literally the first for a majority of those on board. Murmurs of admiration escaped many lips; these young sons of the Antipodes—nurtured in sunshine and colour, bred to the tropic airs of a fruit-yielding land—were all the more affected by their first glimpse of Antarctica’s cold majesty. As if to impress more deeply, berg followed berg in slow and ponderous pageant, often passing close, till the onlookers stood silent in a thrall of admiration. Even the “old hands” had never seen quite such a wondrous procession.

“We neared one which was a mile in length and 100 feet in height,” relates Mawson. “The heaving ocean, dashing against its mighty glistening walls, rushed with a hollow boom into caverns of ethereal blue; gothic portals to a cathedral of resplendent purity.

“The tranquillity of the water,” he goes on, “heightened the superb effects of this glacial world. Majestic tabular bergs, whose crevices exhaled a vaporous azure; lofty spires, radiant turrets, and splendid castles; honeycombed masses illumined by pale green light, within whose fairy labyrinths the water



A MONARCH OF THE SOUTH  
One of the giant icebergs observed by British explorers  
(Photo '11, G. Postage)









washed and gurgled. Seals and penguins on magic gondolas were the silent denizens of this dreamy Venice. In the soft glamour of the midsummer midnight sun, we were possessed by a rapturous wonder—the rare thrill of unreality.”

Captain Davis, or his men at the wheel and the look-out, did not dare indulge overmuch in the poetry of the scene ; not only were bergy bits and growlers dangerously close, but the *Aurora* was now amid the pack-ice, making a battle for it in a light which tended to grow hazy.

“Port your helm !” Then, with an urgent bark—“Hard a-starb’d !” A second or so later—“Steady ; keep her to that !”

The *Aurora* was smiting her way through untravelled seas, so there was a sharp look-out kept for “new land” in the shape of genuine isles. Bergs and ice-masses, seen in the far distance, are in this respect very deceptive ; indeed, some hundreds of “islands” and “continental shores,” charted by early voyagers, had afterwards to be erased for the simple reason that they had never existed. An amazing instance fell to the notice of our present expedition, for on January 3, 1912, they came abreast what certainly seemed to be land-ice—a long continuous cliff resembling in character that of the Victoria Land seaboard.

The voyagers passed along for miles with this ice-wall to port, till eventually it took a trend south-east, at which point its mighty flank uprose to a height of 200 feet. A wind that had freshened to starboard threatened to drive the *Aurora* in on this ice-cliff, so she held off and steamed away, making another coast-line of ice on the 6th, this stretching dead across her course.

At 11 p.m. she entered a bay some ten miles wide—called afterwards Commonwealth Bay—and soon it was known for



certain that the Antarctic Continent was reached, that here was genuine ice-capped land.

This, the coast-ice of Adelie Land, looked exactly the same as that ice-cliff left to port ; even now it was impossible to say whether the two were not connected farther east. We may say at once that they were not ; when the *Aurora* steamed south again the following year that first ice-wall had totally vanished, for it was nothing more nor less than a *mammoth iceberg 40 miles long !*

Experts and critics, when first this theory was mooted, were disposed to be incredulous ; a berg of such dimensions was altogether unheard-of. Yet the theory was proven to the hilt when, twelve months later again, this leviathan among the world's bergs was re-discovered, still its old formidable self, full 50 miles to the north-west !

Floating bergs, as before stated, are liable to wander for hundreds of miles, and are a grave menace to ships. Happily, they possess the element of their own gradual destruction. Consisting, as they do, of great snow-masses, compressed by their own weight to hard blue ice, they represent chiefly tons and tons of frozen *fresh* water. As the berg, drifting into warmer temperatures, begins to thaw, cascades flow down its sides, and it is soon surrounded by a pool of water which floats along with it—for fresh water does not readily mix with salt, but floats on the surface much like oil. Fresh water, again, is of less density than salt, and therefore absorbs more easily the heat of the sun, which heat it retains. The melting of the berg, therefore, surrounded by this deepening pool of warm water, becomes more and more rapid, until lo ! it is gone.

One trembles, however, to imagine what might happen if such a colossal berg as the above, in a northward set of winds



and currents, were to make its way down to the trade-routes. We have to remember that for every one part of a berg that is above water quite six parts are submerged—often as many as nine parts. Millions of tons of explosive might fail to have useful effect ; the problem of its artificial destruction would prove to be about as big as the 40-mile berg itself !



## CHAPTER II

### WINTER IN ADELIE LAND

THE Mawson expedition, on rowing ashore at Cape Denison, Adelie Land, little recked what sort of *terra incognita* they were entering in upon. A time was imminent, however, when they would fain believe that this was the land where all wild winds were born, springing off the face of unutterable desolation, to go dirging and sweeping round the world.

Even during the operations of landing there was reason for misgiving. A first glimpse of the bay had seemed promising; sea-elephants and sea-leopards were sighted in large numbers, with teaming flights of birds, besides the rorquals, dolphins, and other denizens of the southern deep. On the numerous rocky spits—named later the Mackellar Islets—fat seals indolently basked, all of which gave that most agreeable prospect of a larder ever well filled.

But the wind! "Though we were so close under the shelter of a lofty wall, the waves around us were at least four feet in height; when the wind increased to 65 and 70 miles an hour, their crests were cut off and the surface was hidden by a sheet of racing spindrift. Never was landing so hampered by adverse conditions."

Thus wrote the leader, yet by dint of hard toil, combined with optimism, the whaleboats and motor-launch were made



to cleave their busy journeys from ship to shore, laden with over 2,000 bales of food (enough for two years), besides 23 tons of coal, hut material, wireless gear, benzine, kerosene, oils, crockery, tents, clothes, instruments, and sledges.

Here at Cape Denison the main party were to make their headquarters, being seventeen men altogether under the chief of the expedition. The remaining eight, with Frank Wild as leader, would be immediately conveyed by the *Aurora* to the far west of Wilkes' territory, where they would form the second base of operations. Wild's band were taking with them a very high-power receiving set, having a radius of 600 miles; so Douglas Mawson, if all worked well, hoped to keep in touch with Wild, with Macquarie Island, and also with the *Aurora*. The latter steamed westward from Cape Denison on 19th January, farewells being waved till the last moment, after which the "home" contingent turned to build and make all snug.

Scarce was the last roof on, and the Union Jack cheered as it slapped on the flag-mast above, before a hurricane was blowing in earnest, precursor of the astounding weather to come.

Big figures are a shade hard to grasp unless seen in comparison, so let us take a glance at the wind-speeds of the world. In Europe the average velocity notches 10 miles an hour; U.S.A., 9; Southern Asia, 6; West Indies, 6. Digest this, and then note that the average wind-speed at Cape Denison, Adelie Land, was *50 miles an hour throughout the year!*

Can we grasp, even now, what this stupendous velocity of air meant to that exiled band in their timber huts? Think of storms as they are known to the high-seas mariner. A blow of 64 miles an hour would amount to a gale, while 77 miles an hour means a hurricane. Stout ships, in such a blow,



are driven to their doom and coastal towns are demolished. Now, the wind-speed quoted for Adelie Land, 50 miles per hour, is the full-calendar average ; at the period now setting in, the winter one, winds frequently uprose from 100 to 200 miles an hour, and would occasionally tear in gusts at *300 miles an hour !* Too bewildering to comprehend ; again we shall be helped by remembering that this is about twice as fast as an ordinary aeroplane can fly.

Such gusts were at their worst when they took the form of miniature whirlwinds, or "whirlies," as the Mawson men dubbed them. This meant wind and snow and rubble ice in a madly rising vortex or spiral, sweeping the ground as it rose. These big whirlies had such a power of suction that they would lift objects weighing half a ton, whirling them off for the distance of half a mile. There was an air of dread and mystery about the first onslaught of this new terror of the Antarctic.

"One evening," relates the leader, "we were all at dinner, when there was a sudden noise which drowned the rush of the blizzard. It was found that several sledges had been blown away from their position to the south of the hut, striking the building as they passed. They were all rescued except one, which had already reached the sea and was travelling towards Australia."

Uncanny as this occurrence was at the moment, members soon had the witness of their eyes. A capacious crate, an object of enormous weight, was caught up by one of the rotating columns of wind and spun madly along to a distance. Another fierce eddy, later, snatched the article up again, whizzed it high away over the rocks and there subsided, so that the dropping case was splintered to bits.

"Travelling over the sea," we read, "the whirlies displayed fresh capabilities. Columns of brash ice, frozen spray, and



water vapour, were frequently seen lifted to heights of from 200 to 400 feet, simulating water-spouts."

All this intensified as the autumn waned, and soon the lash of snow, on these abnormal blasts, made outdoor work nearly impossible. Pointed ice-crystals and gritty drift now hurled through space with stinging impetus, hissing and scouring like desert sand. Soft woodwork was eaten into, ropes were cut or frayed, rusty dog-chains hung up outside were so scoured by it as to shine like new steel. Dogs—eyes and nostrils clogged with it—would lie down, howling and writhing. When the men sought to face it respiration often became impossible; they were doubled painfully up and forced to retreat to cover.

It was a hard hit for Douglas Mawson; his main journeys, of course, were planned for the spring, but he had, at the least, relied upon laying out a few depots forthwith. But it was no use; even their present habitation was already snowed over and, after heart-breaking hours in clearing the eternal drift which forced or blocked every aperture, they dug themselves out a tunnel system of access, supplemented by a trap-door above the eaves. For one could now walk straight up the snow-drift on to the roof!

Mawson was not the one to abandon the depot-laying without any effort at all. He, with Madigan and Ninnis, battled out to their "farthest south" for that season, exactly  $5\frac{1}{2}$  miles from the hut, and here they created the best domicile possible for this outrageous climate—to wit, a vault cut down into the solid ice of the plateau, and which they named Aladdin's Cave.

"It was entered," said Madigan, when speaking of it afterwards, "by means of a vertical shaft six feet deep, and constituted a kind of strong room with solid walls of ice wherein a sledging-party could take refuge from the howling blizzards."



There were other advantages about Aladdin's Cave ; clothes-peggs, for instance, were not required. If you wished to hang up a garment you just made a corner of it moist and pressed it against the wall, where it would freeze on at once and remain till next it was needed !

This task accomplished, back again to Cape Denison, where those who had to attend to the wind-gauge and other outdoor apparatus were beginning to have a cruel time. Extra face-guards had to be invented ; even so, the meteorologist would come in with his features invisible behind great cakings of ice, which were his frozen breath.

The terrific winds would have been more easily withstood if the cold had been normal ; but here arose another exigency, the average temperature for Adelie Land being 32° below freezing-point ! Such cold will affect hard metals, let alone flesh and blood. An important piece of the wireless plant, dropped by accident on Macquarie Island, had broken into three parts and had also "sprung," so that it had been deemed useless. The gripping cold of Adelie Land, however, so contracted these metallic fragments that they now fitted perfectly ; the iron, when riveted, served its purpose as if there had never been a flaw.

Crampons, the spiked under-soles, were the one hope for getting about ; by aid of these it was just possible for the men, in that shriek of blizzard, to keep their feet planted, while the next trick they learnt was to *lean upon the wind*.

This was a most effective ruse, though extraordinary to witness. When attempting to walk upright they had been whisked off their feet, or hurled bodily among the crags ; but, bowing right down on the blast, their stiffened loins holding them at the most acute angle, they learnt to cheat the ramping force and compel it actually to support them. Some remark-



able photographs were obtained of those whose turn it was to go out and hew the ice which was melted down for drinking-water. One sees the man and his pick crouched forward almost upon his chest—held just clear of the surface he hacked by the mighty invisible wind-force.

Of course this was all at its worst when the winter dark descended and the blizzard howled almost without cessation. The chief, writing of this transition from daylight to darkness says: "Picture drift so dense that daylight comes through dully, though maybe the sun shines in a cloudless sky; the drift is hurled screaming through space at 100 miles an hour and the temperature is below zero. . . . Shroud the infuriated elements in the darkness of a Polar night and the blizzard is presented in a severer aspect. A plunge into the writhing storm-whirl stamps upon the senses an indelible and awful impression seldom equalled in the whole gamut of natural experience. The world a void, grisly, fierce, and appalling. We stumble and struggle through the Stygian gloom; the merciless blast—an incubus of vengeance—stabs, buffets, and freezes; the stinging drift blinds and chokes."

What wonder if, in sudden bitterness of heart, this man should say, "We had found an accursed country"; but not for one moment must it be imagined that the cark of dull care held sway at Cape Denison. Far and far otherwise; from the sole point of *camaraderie* it is probable that this snow-bound coterie never had a jollier time in their lives; the more addicted humorists could even see something funny in a crooked toe or a frost-bitten nose.

The *Adelie Blizzard*, a topical magazine edited by McLean, gave scope later on for exhibiting talent; the majority at present preferred to "let off steam" by means of social pleasures, confabs, or games. Drama was not neglected,



and we hear of a musical farce, *The Washerwoman's Secret*, being acted with great *éclat* by eight high-browed scientists and one Eskimo pup ! It would seem misleading to suppose that lighter things please only lighter minds ; on the contrary, it is the men of brain and action who appear most heartily to appreciate the simple ways of joy. Their very powers of perception, perhaps, lead them to know that a boyish outlook on life—clean and care-free—is the only outlook worth having.

Anyhow, the easy spirits of these men kept them well and buoyant till the spring sunshine glimmered back, bringing with it the birds and seals and all the migrated life of the Antarctic. The blizzard was not yet done with—it kept blowing, with brief lulls, on a nine months' stretch—but the intervening calms were jealously used. Work went apace with the wireless masts, and Mawson felt he must, without another hour's delay, throw out his reconnaissances. There was no firm assurance as yet about this being the mainshore borders ; quite possibly it was merely a frontal island. So three skirmishing parties were appointed to sledge afield in three directions to a limit of 50 miles, being further directed to be absent not longer than two weeks.

Madigan, Close, and Dr. Whetter formed one of these sorties ; starting out on 11th September they made Aladdin's Cave after a stiff 4-hours' plod, and there turned in for the night. Up betimes next morning, they put their heads outside to find that the blizzard was romping once more, and the wind-gauge registered 60 miles an hour. Months of being cooped-up made them too impatient to wait, quite apart from orders as to time, so they manned their sledge and butted through it, their crampons alone saving them from being bowled over like ninepins.



At lunch-time the bothers began ; their tent, it was seen, had contracted several rents ; if they hoisted it in this gale it must soon be slit to ribbons. So the trio, crouching for shelter behind the sledge, grinned at discomfort and made it a cold meal—biscuits, butter, chocolate. No tent meant no cooker, and no cooker meant no drinks. Well, they must keep their thirst for supper-time ; now to repair the tent.

Mitts had to come off for the needle and thread to be plied. It was a case of two or three hurried stitches, and then pass the needle on while fingers were plunged into mitts for warmth. Even so, taking rapid turns of a few stitches each, they collected frost-bites to last the whole trip.

Meanwhile, the storm roared on, and it was a query, when they stopped for the night, whether they could ever succeed in forcing the tent up. They prepared by chopping up blocks of snow and piling them into a half-circle of wall, behind which they gingerly got out the tent. One crawled beneath the canvas and, at a given word, hung to the upwind leg and tried to kick out the other struts while his companions raised the peak. Flap, flap, *flump!*—down came the pole repeatedly, before at last being wedged, whereupon those outside began to hurl on lumps of snow, food bags, anything to pin the skirts before the squalls should worst them and blow the whole thing over again.

Next morning, after a good sleep in their three-man reindeer bag, one of them took cognisance and promptly cheered ; the wind, he reported, was now “ only ” 30 miles to the hour. Close was so elated that he attempted the luxury of washing his hands. He used hot water from the Primus kettle, yet withdrew his hands to have them instantly gloved in thick ice.

However, they harnessed up and pushed on south through varying conditions ; it was not till the night of the 14th that



a shrill, uncanny whistling made them start from their repose. With that dread sound now they were only too familiar—the whirlies were here !

Madigan and Dr. Whetter popped on their burberry helmets at once and made a rush, for the baggage was heaped outside on the tent-skirts, including the instrument box—the latter being an item on which their very life depended. The ghostly, whining column of snow swept by as they emerged, missing them by an ace, but snatching the baggage in its toils and whirling it off in all directions. Close was out now, and all three had to pounce on the kicking tent, or that too, in a tick of seconds, would have been ripped away.

Their first sensation was one of involuntary relief, for this had been a narrow squeak. Had the whirlwind hit plumb on the camp the tent and themselves would unquestionably have been snatched bodily into mid-air, a very slight job for a full-grown whirlic. As it was, having retrieved the nearer baggage, a hunt for the box of instruments occupied fully four hours, the precious article being found at last embedded deeply in a far-removed snowdrift. Luckily nothing was damaged much, and the bogey of having lost all means of groping their way was, for the moment, laid to rest.

The exhausted trio, however, realized now how life was at a moment's forfeit in this land of bleak unrest ; yet, notwithstanding frost-bites, snow-blindness, and the ceaseless sting of the gale, they carried out their mission as a matter of course. On the 19th they made their 50-mile limit—a vast, rolling snow-plain some 4,500 feet above sea-level.

Here, in a mound, surmounted by a flag, they *cached* a balance of food and two gallons of kerosene for any who should come after. A near query, however, whether they would not have to consume the dump themselves, for the racing gale had



brisked up next morning to 85 miles an hour, being laden with a white and 'wilderling drift. This tied them down for two days, after which they battled back through almost every kind of hardship—a struggle culminating on the 25th by the utter destruction of the tent. This, to an 80-mile tornado, came down upon the sleepers' heads and was torn within a few minutes to strips and shreds—becoming a mere tangle of useless wreckage.

The trio were then 13 miles distant from Aladdin's Cave, and they knew that, by hook or by crook, they must travel it ; an attempt to sleep in this open would be merely a short cut to death ! No tent, and the usual consequence, no shelter for the cooker, so no hot food ! A frozen breakfast and then away in a temperature well below zero.

After 14 fearful hours the cave was gained ; bodies exhausted, toes bitten, and soles blistered— but coming, happily, to a burrow where they could feast. Whetter's helmet, having frozen on to his head, had to be cut off. A very curious feature was that this cave, after the ceaseless howl of the blizzard, was so deadly silent that none of them slept at all soundly !

However, next day they got safely back to the base.



## CHAPTER III

### ALONE IN THE ICE DESERT

THE accounts brought in by the other skirmishing bodies were similar to Madigan's, so Mawson knew for certain that he was stationed on the vast ice-continent whose secrets he wished to probe. But the boom of the blizzard was still with him, new-born each day, ceaseless almost in its deafening shriek ; the exploring units were ready and eager, yet even October saw them storm-bound and impotent. It was exasperating ; the *Aurora* would be due back in January 1913, and would find them with nothing done, so, "in defiance of all but the worst weather," a start out should be faced in November.

It was indeed a case of battling for it ; in a lull on 6th November the Southern supporters under Murphy headed forth, were beaten back, then headed forth again, followed at struggling intervals by the Near Eastern Party, led by Stillwell, the Coastal Brigade, led by Madigan, and a Far Eastern Party consisting of Mawson himself, Mertz, and Ninnis. This, the longest and most important journey—extending over that great area to be known as King George V. Land—was the only one to have the assistance of dogs. The Southern Party was under Bage, while Bickerton and two others were dealing with the near-by islands.

The rendezvous for the first-starters was Aladdin's Cave—



a resort held in honour for the boon it had proved already to men at the last gasp. The architects had cause to be proud of their work ; Aladdin's Cave, with a stove going, comprised a cold maw with a warm heart to it. The cave was also well-appointed, for out of the solid ice had been carved passages, cupboards, and shelves. Nor had dogs been forgotten ; a kennel was dug out for them as well. Dogs, of course, were hardy enough to coil up and sleep on the snow-plateau outside, but the warmth of their bodies would cause their hair to become embedded first and then frozen fast in ice, so that axes had to be used to cut them free.

After a comfortable night's rest in Aladdin's Cave, Mawson was up betimes and out on the trail with Ninnis, Mertz, and the sprightly teams. Other units were overtaken, but a few days later came a definite parting of the ways. " Good-luck ! " —and so the dogs went frisking away, making smart pace due east. Thus began another of Antarctica's most fateful journeys.

This virgin country was indeed a big proposition, stretching away as it did with a surface not unlike the frozen billows of ocean, with knife-like ridges in between. These undulations were most acute ; the awkward climbs being almost more desirable than the dizzy descents. Here the pioneers had to crouch or slither behind, holding back the loaded sledges with ice-axes or by ropes tied to the runners. Even so there were dreadful spills, scattering the dogs and setting everything a-roll. And always the unrelenting weather, lurking as it were at their heels, to snarl down in maniac fury and hold them encamped for days at a stretch.

By patient hardihood, however, they made substantial progress, arriving at the first great glacial tongue, afterwards taking the name of Mertz, which descended in seams and ice-



falls from well inland to project far out into the D'Urville Sea. As they crossed this glacier, leaving the Correll Nunatak on their right, they experienced again that transport of satisfaction which can come only to men whose eyes are the first to view the wilder majesties of nature.

But if the privilege is high, so is the price, and never for more than a brief hour could they press on in safety. Crevasses thickly occurred, and, worse still, *séracs*—that is, great bunches of pinnaced ice, which, created by grinding motions of the shifting crust, are so wedged up together as to form a surface of sharp prisms. Most of the fissures were thinly snowed over so that men and dogs were for ever cracking through.

By the close of the month they were across the broad ribbon of the Ninnis Glacier, the second lolling tongue, and attaining the plateau above Cape Spencer. Buckley Bay lay on their left, with soon the Organ Pipe Cliffs, followed by Capes Blake and Wild—a succession of landmarks that fed their zeal, being the named children of the expedition. It was a startling moment when Ninnis, just after they had pitched camp, sank bodily from view, to be rescued only in the nick of time. Actually, the tent had been pitched on a film of ice that spanned a yawning abyss. A matter of fortune they were able to creep off without being completely gulfed.

Still the wind dogged them, being now more of a sirocco than a blizzard, for it blew on even when the sun-glare was hot enough to cause snow-blindness and to frizzle the skin. An untoward fate was overtaking several of the dogs; but still the intrepid men plugged along till the end of their journey loomed. Ahead was South Victoria Land, the linking-point towards which Mawson aimed.

All was not well with young Ninnis; he was suffering from



an abscess in the finger, and, though the gallant youth did not complain, they saw he was losing sleep. He would, indeed, sit up at nights to smoke or read, hoping thereby to forget the aching throb. At length, however, he was forced to confess his trouble and he got Mawson to lance the spot. That morning, 12th December, they let him continue his slumber while they remodelled the cargo, the bulk of all food being packed on the sledge driven by Ninnis. The latter, on rising, seemed quite refreshed by sleep and the relief from pain.

They had enough to startle them that morning, for the ice over which they moved emitted barking reports; a noise as of high explosives. Apparently there were cavities underneath, and the weight of their passing caused just enough sinkage to expel the imprisoned air in violent bursts. It was like treading amid fog-signals all the way—with louder cannon now and then, or the rending shriek as of shrapnel.

Days big with alarm, but the 14th found them on a firmer road. Able at last to relax, they were as merry as crickets, and Xavier Mertz, chanting a Swiss song of his student days, went skimming ahead on ski. Almost throughout he had played the part of forerunner; this made pacing for the dogs and also made a vanguard of safety. His custom was, on suspecting dangerous ice, to raise his ski-stick. He did so now, and Mawson, on reaching up, perceived some indication of a capped crevasse. It didn't look specially dangerous; still, he swung his dogs to make a straight instead of a diagonal crossing, and, safely over, signalled for Ninnis to behave likewise.

Ninnis clearly heard, for he obeyed by swinging his leading dogs at once. Mawson, just then, had taken a book of tables from his pocket to jog his memory on some point of latitude, and when next he paced forward he was puzzled to see



Mertz standing stock still, a dread anxiety in his eyes as he stared back over the trail. Mawson wheeled to look. Behind him were the long, empty leagues of snow over which they had come ; Ninnis, sledge, and team had all totally disappeared.

Mawson was appalled, yet he hoped against hope.

"I hastened back along the trail," records he, "thinking that a rise in the ground obscured the view. There was no such good fortune, however, for I came to a gaping hole in the surface, about 11 feet wide. The lid of a crevasse had broken in ; two sledge-tracks led up to the far side of it but only one continued on the other side. Frantically waving to Mertz to bring up my sledge, upon which there was some Alpine rope, I leaned over and shouted into the dark depths below. No sound came back but the moaning of a dog, caught on a shelf just visible, 150 feet below. The poor creature appeared to have broken its back. Another dog lay motionless by the side. Close by was what appeared in the gloom to be the remains of the tent and a canvas bag containing food for three men for a fortnight.

"We broke back the edge of the crevasse," continues the explorer, "and took turns leaning over, secured by a rope, calling into the darkness in the hope that our companion might still be alive. For three hours we called unceasingly, but no answering sound came back. The dog had ceased to moan and lay without a movement. A chill draught was blowing out of the abyss. We felt there was little hope."

Nevertheless, they tied all the rope they possessed together, with some thought of finding a way down ; but the whole stretch of it did not touch that first dim shelf, so that even the salving of the tent and food were impossible. Below, the place seemed to be bottomless ; the distressed couple, till 9 o'clock at night, went on shouting down, at which hour the leader,



assured now of the worst, read a short service over the chasm ; then, with sad reluctance, they turned away homeward.

It was hard, dreadfully hard, to put it all out of their minds. When for a time they did, it was to realize forcibly their own desperate fix. Marshalling the facts, they were at this moment 2,400 feet above sea-level and 315 miles from Aladdin's Cave. The journey hither had occupied 35 days—that is, for three men and two teams of splendid, well-fed dogs. Only six animals were left, quite the feeblest of the pack, and every scrap of dried seal-meat, the dogs' ration, was down that dark ravine, together with most of the men's food, the spare clothing, the tent, and a number of important tools. Up here was food enough to keep two men alive for 10 days, as well as a cooking-stove, oil, and a spare tent-cover.

Well, they must set their teeth and make a strong bid for it. Necessity is the mother of invention and Xavier Mertz now showed his quality. A third sledge had been abandoned, and the Swiss, on coming back to this, cut out a runner to use with his own skis as poles to support the tent-cover. From the old sledge also wooden spoons were carved ; tin mugs were contrived from a case in which cartridges had been packed, and a discarded shovel was spliced afresh to carve out the trenches for tent-pitching.

The hapless dogs, for stint of food, died one by one on that homeward way ; as they fell, so they were skinned and a part of the meat given to their famishing fellow-creatures, while the other part—tough, stringy, as it was, quite devoid of fat—was mixed with a tiny bit of pemmican and made into a hoosh for the men. The few almonds, raisins, and little “treats” they happened to have over did not reckon much, though some bits of chocolate came better. At the goad of desperation, they tried to make a nourishing drink by stewing



some bags which had formerly contained cocoa and tea. It was pitiful, and yet they struggled on till Mertz sank in condition and so fell grievously ill.

Poor Mertz. They had just slain their last dog, the head of which, perforce, they must now eat, and this they did by taking alternate bites. But Mertz, far gone, pleaded that they should encroach more deeply on the proper sledging-food. Mawson consented; indeed, he was prepared to do anything for this man, whom he had learned so much to respect and admire. Very faithfully had Mertz served the cause, and the hours they had spent together calling into that dim crevasse had forged a very intimate link; Mawson remembered how, when he had read the service, Mertz had shaken him by the hand with a brief "Thank you"—simple words which had somehow conveyed so much.

By the will of fate, however, a second blow must fall. Mertz helped all he could by being cheerful; he spoke of the delicious omelets he would make from penguin's eggs when they reached Cape Denison. This would be a reward for Mawson; for the latter unselfishly gave his sick companion the wholesome sledging food, while he himself ate dog. They were held up now; the sick man could no longer stir, and his leader staunchly watched by him. At last, on January 7, 1913, Mertz passed away in his sleep—Douglas Mawson was left quite alone in the great white desert.



## CHAPTER IV

### THE OUTPOSTS OF EMPIRE

ALONE! One hundred miles away from any living being, with a few mean scraps of lingy, frozen food, and no hope of calling aid. Why not lie down at once, devour what there was to devour, and so—sleep? Almost he had given way to the enticement when a flood of moral courage surged back. Alone? No, not alone; the souls of all the pioneers were there, grouped by his side; for the sake of them, for the sake of his land, his undertaking, he must endure and go down fighting.

He opened his book of prayers and read again that simple service over the body of his friend. Then to the practical measures. He cooked all remaining dog-flesh to lighten his load of kerosene; in his own extremity he did not deem it sacrilege to convert some of the dead man's clothes into a sail for the sledge. All the while his stomach gnawed so that he could barely stand upright. Still—to it! Harnessing on, he trudged out.

“ It's the plugging away  
That will win you the day.”

These lines from Service, the poet of brawn, kept drumming through his brain; no doubt the thought stoutened his will during the next dreadful stages. . . . Now a yawning blue



ice-hole with the sledge gliding towards it, to be retrieved by all the pull his emaciated frame was able to exert. Later, after often breaking through rotten ice to thigh-depth, he shot down like a plummet, to hang spinning in a sheer ravine, suspended by the trace, and feeling the sledge to be coming over by slow inches.

“So this is the end,” he muttered ; yet the sledge, instead of bounding over upon his head, ceased to give and accepted his weight. But did he dare move ? What best to do ? His diary on this point is very eloquent.

“Exhausted, weak, and chilled,” he writes—“for my hands were bared and pounds of snow had got inside my clothing—I hung with the firm conviction that all was over except the passing. Below was a black chasm ; it would be but the work of a moment to slip from the harness, then all the pain and toil would be over. My strength was ebbing fast ; in a few moments it would be too late to——”

Once more the man in him arose :

“It was the occasion for a supreme attempt ; new power seemed to come to me as I addressed myself to one last tremendous effort. The struggle occupied some time, but by a miracle I rose slowly to the surface. I emerged feet first, still holding on to the rope, and pushed myself out, extended at full length on the snow—on solid ground. Then came the reaction, and I could do nothing for an hour.”

Can we not understand how *such* dire straits, and the long, long aches of the hungry marches to follow, must have sapped at the will-force of the strongest man alive ? Fantastic notions hovered in his brain as he slumped along over *sérac*-ice and waves of high *sastrugi*, his poor limbs sagging as he walked. A quotation of another sort, two lines of Persian philosophy, insinuated now :—



“ Unborn to-morrow and dead yesterday,  
Why fret about them if to-day be sweet ? ”

In other words—Lie down, rest your tired, quivering limbs, eat up at one snack all your last bits of pemmican, frozen dog, and raisins. And, having eaten—Sleep !

*NO !* While yet the tempter was tempting he set his face in newly dogged lines and proceeded with the frayed rope left to fashion a rope-ladder. One end of this he tied to the bow of the sledge, the other end he passed over his shoulder and fixed to his waist-belt. It was the most effective idea ; for now, when he slipped into a crevasse, he turned and climbed out, as a spider ascends its silken safety-thread.

On ! Hard fields of *névé* gave place to more spiky *sérac* ; yet still on, eluding one pitfall only to blunder upon the treacherous margin of the next. A case, in all verity, of having

“ To face the naked days  
In silent fortitude,  
Through perils and dismays  
Renewed and re-renewed.”

Some days 7 miles, some days barely 2 ; then the storm fiend back to howl derision and drive him huddling to his “tent.” Finis could not be long delayed now ; after three unspeakable weeks, with 30 miles left to go, he weighed the food-bag on his palm and glumly shook his head. What instinct made him lift his jaded limbs that morning, to plod dully on, history cannot tell, but the glorious fact is that, in the distance of a sudden, something loomed—a shadow—a shape—a cairn ? Yes—a *cairn* ! With a heart-throb of hope he swerved painfully towards this mound ; on the top of it was a big bag of food ! For the moment, anyhow—saved !



Hodgeman, Hurley, and McLean, it seemed, had been out hunting for the truant three. Beside the food was a tin containing a note; this told him that Aladdin's Cave lay at E. 30° S., 23 miles distant. Items of news were added; the *Aurora* had returned and was now waiting at Cape Denison; she brought with her wireless intelligence that Amundsen had won the South Pole and that Captain Scott was spending another year in the Antarctic. (The full truth arrived by wireless later.) Then came the date when this note was indited, and poor Mawson's first flush of joy was rather chilled. He saw that he had missed the searchers only by a few hours; they had quitted here this very morning!

Well, no repining now; the chief bother, as he pressed on, was a boister of high wind that blew him east of his course—for, when lightening the sledge, he had tossed away his crampons and his foot-grip thereby suffered. Setting to, he broke out wood from the theodolite, a couple of pieces; for spikes he drove in screws, tacks, and ice-nails. These make-shift crampons, lashed to his feet, helped matters a bit, and at last, with only half a broken sledge left, he made Aladdin's Cave. By now the blizzard was back, making up for lost time by rising to hurricane speed, carrying before it frozen drift that pinged like a volley of bullets. Outside it was blinding—so there he was, stalled for a week. During the first moderate lull he made a dash for it, and in a couple of hours glimpsed Commonwealth Bay. And there was the ship—going out!

"Well, what matter!" he exclaimed to himself. "The long journey is at an end—a terrible chapter of my life is finished."

Three men in all the buoyancy of health had set out, with sound sledges and two vigorous teams of dogs—one vagrant of a man and half a sledge had come back. Mawson's dirt



and rags were such that when his friends spied him and came running—Bickerton, McLean, Bage, and Hodgeman—they scarcely comprehended which he was of the original trio. A wringing of hands, a helping of him in—and soon they knew of what had befallen out there in the white solitudes.

Mawson, by degrees, learnt of all that had been happening. The wireless was now in full working order, so that the *Aurora* and all other points were ever in touch. Frank Wild's base of operations had been established 1,500 miles to the west, on a great space of ice named by them the Shackleton Shelf. It was in order to relieve this party, before the winter floc set in, that Captain Davis had been compelled to sail. Only the four above-mentioned, with Mawson himself and the wireless operator, now remained at Cape Denison. These, unless the ice and the *Aurora's* coal supply enabled her to return, must needs stay exiled another winter.

Provender in plenty, however, so no cause for alarm, and reports of all work most gratifying. Mawson realized, in fact, that the whole aim of the expedition was in prospect of being achieved, the coastal mapping sections having done specially well. The Southern Party had pushed close up to the Magnetic Pole, undismayed by hostile weather, a remark which applied to the rest. A good instance of the spirit in which Australia made adoption of this bleak new world is found in the cheery verses written by Dr. McLean of Madison's—or "Madi's"—Party. They run :—

“ We saddled up, adventure bent ;  
Locked up the house—I mean the tent—  
Took grub enough for three young men  
With appetites to equal ten.  
A day's outing across the vale— '  
Aurora Peak ! What ho ! All hail !



“ We waltzed adown the silvered slope,  
Connected by an Alpine rope ;  
‘ Madi ’ in front, with ice-axe armed,  
For fear that we should feel alarmed.  
Glad was the hour, and—what a lark !  
Explorers three ? Pray save the mark ! ”

Equally gallant and gay were Frank Wild’s intrepid band on their location away west—that nearly boundless tract they so ably explored, and which took the name of Queen Mary Land. We may glean from Mawson’s journey the sort of features encountered by Wild in his distant *venue* ; but to the scene thus conjured up must be added obstacles of piled and broken hummocks, the like of which, probably, had never till this been discovered by the wondering eye of man.

“ A vast sea of crushed ice, tossed and piled in every direction.” No inducement to “ waltz ” here, though the plan of becoming “ connected by an Alpine rope ” commended itself fully. Indeed, they employed a whole coil of line, just one man at a time crawling gingerly with his sledge, while his supporters—being literally that, at a moment’s notice—hung at the rope behind and before, perhaps 100 yards away from him and his wobbly, Blondin-like motions among the hair-poised blocks.

Such hummocky chaos increased as they approached their eastern limit, christened the Denman Glacier, for the glacial masses, tearing down through the shelf-ice, had created a sort of *bergschrund*—a gaping declivity, that is, in the hard upper bed of snow, caused usually by summer sinkage of the glacial ice beneath. It was a sight that made them pause with arrested breath.

“ At the actual point of contact,” relates Wild, “ was an enormous chasm over 1,000 feet wide and from 300 to 400



feet deep, in the bottom of which crevasses appeared to go down for ever. The sides were splintered and crumpled, glittering in the sunlight with a million sparklets of light. Towering above were titanic blocks of carven ice. The whole was the wildest, maddest, and yet the grandest thing imaginable."

Scattered moraines, nunataks, rocks beautifully stratified, and behind all the leagues of plateau, made up the story of this newly found world—Queen Mary Land. It linked up Wilhelm Land to the mid-country, just as King George V. Land carried on from the Adelie tract to that of South Victoria.

Life on Macquarie Island would, in itself, comprise a narrative of no small interest, especially to lovers of natural history, but would scarcely be relative to a book of Polar travel. The little company on that isle completed their full orders, besides forming a reliable wireless centre for the Polar stations, the homeland, and the *Aurora*.

The latter, having carried out its deep-sea observations, made Hobart in the first place on December 14, 1912. Restocked at once, she again slipped cable for the Antarctic on the 24th, bearing, besides general stores, 520 tons of coal, a huge mail of letters for the pioneers, and thirty-five live sheep, as well as twenty-one healthy sledge-dogs presented by Amundsen on his way back home. The *Aurora* had learnt the details of the South Pole achievement. Amundsen and his companions, favoured by good weather, had found the return from the Pole much easier than the march out. Making the fine average of  $22\frac{1}{2}$  miles a day, the Norwegians had arrived back at their quarters in the Bay of Whales on January 25, 1912, with two sledges and eleven dogs all in good condition. With every confidence, therefore, Amundsen could send what



dogs he had left to assist the Australians in rounding off their work in the new locality.

The ten men shipped from Cape Denison by the *Aurora* just before Mawson's belated return to that base, and the Wild party taken off shortly after from their post at the far west, were all safely landed in Hobart in March 1913. In the Antarctic summer of 1913 the ship made her third cruise south, bringing home the last half-dozen from Cape Denison, and also the Macquarie Island body.

Mawson and his trusty five, during this supplementary stay, had not been lounging; additions valuable in every way had been made to the list, and the sum of it all was that the Australasian Expedition of 1911-14, besides its exhaustive service to knowledge, had brought in thousands of square miles to the map of the British Empire. And back there on a high, lone, snow-dappled hill stood another wooden cross—put up to the brave memory of two more pioneers who had given their lives to the cause of exploration and science. Crosses now on Observation Hill, Hut Point, Cape Adair, and Cape Denison—a line of crosses—the Outposts of Empire.

On Douglas Mawson, as on Ernest Shackleton, a title was conferred, and the world may judge as to their merit and deserving. Were honours granted only to such as these, one feels that the Knights of the Empire would readily be acclaimed as men who fulfilled the title to the utmost.



## CHAPTER V

### THE FATE OF THE "ENDURANCE"

"MEN go out into the void spaces of the world for various reasons. Some are actuated simply by a love of adventure, some have the keen thirst for scientific knowledge, and others again are drawn away from the trodden paths by the mysterious fascination of the unknown. I think that in my case it was a combination of these factors. The stark Polar lands grip the hearts of men who have lived on them in a manner that can hardly be understood by the people who have never got outside the pale of civilization."

These words of Ernest Shackleton's, though uttered years before, express the whole constitution of the man, and explain what it was that made him stir up again in 1914, to sally forth upon one of the most venturesome voyages in history—the disastrous voyage of the *Endurance*.

"To me," remarked a personal friend of Shackleton's, "there is always something pathetic in the nature of such men; an instinct stronger than themselves, that they can neither explain nor understand, impels them again and again to face perils and privations in order to go and find out what is on the other side of the world."

A remark of some truth, yet tending to prove that no citizen of the stay-at-home class, drawing comfort from a warm



hearthstone, could ever appreciate the breadth of view and the strong ambitions that lay behind all Shackleton's exploits. He was prone, one must admit, to set himself tasks out of all proportion to the means at his disposal. His avowed aim, for instance, on this occasion, was "*To cross the Antarctic from sea to sea, securing for the British flag the honour of being the first carried across the South Polar Continent.*"

A glorious scheme, of course, and the man who had led a little band up to 88° 23' S.—on empty stomachs and with a man-hauled load—was liable at any hour to amaze the world anew. But it was fated that Shackleton's claim on fame, now as before, should lie not so much in the achievement as in his racial gift for fighting fearful odds and beating down misfortune.

Shackleton's plan, briefly, was to leave the island of South Georgia, far out east of Cape Horn, steaming southward for Coats Land—the territory discovered by Dr. W. S. Bruce, the famous Scottish explorer, in 1904. Shackleton, however, aimed to make eastward of this, on the line of shore sighted years later by Lieutenant Filchner. Here the main sledging party were to march forth upon the enormous journey of some 900 miles full across the mid-Polar desert, covering large tracts never yet trodden by the foot of man.

As regards the *Endurance*, which was specially built, we may say at once that, by all the tests, she appeared to be fit for her mission. She was a screw-auxiliary barquentine, of the sealing variety, 350 tons gross, a good sailer, and steaming up to 12 knots an hour. A raised quarter-deck, virtually a deck-house, ran about half her length, and her hull, painted a neat grey, presented almost a slim, yacht-like appearance. It was made patent, as matters turned out, that a vessel of the unbeaten *Fram* type should have been chosen for the



present purpose ; yet, as already remarked, the *Endurance* was a ship of promise, and did in fact acquit herself well in the open encounters. Her bows were built to be almost solid, with triple sheathing beneath the water-line, and with oaken beams but six inches apart. On the stern her title, "Endurance," was painted boldly above a big star of gold.

In view of the project—the crossing of the Polar Continent from sea to sea—a second vessel was needed to operate from the opposite side : that is, from the more familiar waters of the Ross Sea. For this purpose, Shackleton purchased the *Aurora* from Douglas Mawson ; the arrangement was for this vessel to land half a dozen men on the shores of McMurdo Sound. Laying depots and following the old route, it was hoped that the Ross Sea six would eventually meet, at the head of the Beardmore Glacier, the transcontinental six under Shackleton himself. It was, alas ! a plan fated to miscarry and to fall grievously short. Yet, as a chapter of high courage it holds an important place in the story of Antarctica.

The Weddell Sea Party, under the leader, were Captain Worsley, Drs. Macklin and McIlroy (surgeons) ; J. M. Wordie, M.A. (glaciology) ; R. W. James, M.A. (physics) ; R. S. Clarke (zoology) ; L. D. A. Hussay, B.Sc. (meteorology) ; Frank Hurley (photography) ; Tom Crean, of honourable memory ; Vincent, McCarthy, McNeish, and somewhere about fifteen others. Nearly five thousand men volunteered for this great pioneering venture, from which only fifty-six could possibly be taken. With regard to obtaining money enough for so big an enterprise, there was one black hour when all might have collapsed, but a magnificent donation of £24,000 from the late Sir James Caird, and £10,000 from the British Government, saved the situation.

Shackleton's plan of equipment included one hundred



sledging-dogs, which suggests that he was largely converted to the doctrines of Amundsen. It is quite on the cards that he went one better than the Norwegian by favouring the Canadian breed of animal—a cross between the wolf and the Scottish staghound. These draught animals have a high reputation in the Canadian North, being tough and of strong bulk. Shackleton's heaviest dog on former journeys had scaled only 45 lbs.; his lightest dog this time weighed 80 lbs. It is a thousand pities that these grand creatures were foiled of a chance to prove their worth and stamina. Two motor sledges with aerial propellers were also in the scheme.

The *Endurance* left Plymouth on August 8, 1914, making Buenos Ayres in due course. From that port, on 26th October, the ship proceeded to South Georgia, where all the final preparations were briskly made. After this—southward ho! The ship passed between the Candlemas Volcano and Sanders Island on 7th December, where the Imperial Trans-Antarctic Expedition made its first contribution to knowledge, for Captain Worsley discovered that Sanders Island was charted several miles out of its true position. Overhead, whale birds, mollymawks, mellies, Cape pigeons, terns, and sooty albatrosses, wheeling about the ship; around, the blue and milk-white bergs, drifting north like stately galleons; ahead, the leagues of floes, and soon the crash and quiver of the vessel's prow as she clove her way through.

Shackleton's heart thrall'd as he stood upon the deck, for again he was entering into his birthright. It is true that another, by one straight dash, had slipped in and snapped up the Pole (making, thereby, the greatest *coup* on record), but nothing could alter the fact that Antarctica had been opened up and developed chiefly by the British pioneers—a tradition long sustained by courage, labour, and sacrifice.



Shackleton, therefore, was entering into his own, while doubtless his heart repeated that apt, alluring verse which had long been a favourite with him :—

“ Yonder the long horizon lies,  
And there, by night and day,  
The old ships draw to port again,  
The young ships sail away ;  
And come I may, but go I must,  
And if you ask me why,  
You can lay the blame on the sun and stars,  
And the white road and the sky.”

There, once more, the Shackleton spirit. Admittedly he was a rover ; no adventure with him could be written a failure, so long as it was an adventure ! Moreover, at the moment, this cruise shaped exceedingly well ; Hurley, perched on the top-gallant yard with his cinema-camera, was securing some fine film-studies of the ship's battering-ram at war with the ice.

The *Endurance* kept up her brave tune for a thousand miles, but the floes were packing heavily, and every day the ship was more closely beset. The bergs were out in battalions—no less than three hundred being counted in one day—with bergy bits and growlers sown thickly as far as the eye could reach. Again and again, after forced waits, the ship rammed through by making smart use of the smallest lead.

By mid-February of 1915, however, the floes had become a very serious menace indeed. The ice-barrier reported by Bruce uprose at last to view, followed by a glimpse of sea-board—comprising new land and named by Shackleton the Caird Coast. It all loomed like a beautiful world of promise, grim enough in reality, yet seductive in its surface charms. “ The cliffs are of dazzling whiteness,” wrote Shackleton,



“with wonderful blue shadows. Far inland higher slopes can be seen, appearing like dim-blue or faint-golden fleecy clouds.”

In keeping, this, with countless legends of the deep, where sad-eyed mariners, adrift on rudderless barks, were taunted by the viewing of a fairy isle whose shore they could never reach—or else deceived by mythical coasts whose vernal slopes, born of elusive shadows, melted away into mists. As if to enhance such fancy a mirage actually did occur, extraordinary in effect and distorting the whole outlook. “Everything wears an aspect of unreality,” reads the diary of this moment. “Icebergs hang upside down in the sky; the land appears as layers of silvery or golden cloud. Cloud-banks look like land, icebergs masquerade as islands or nunataks, and the distant barrier to the south is thrown into view, although it really is outside our range of vision.”

The floes—entering, as it were, into the mischievous character of things—chose this period of false lights in which to lay their stranglehold on the ship. The *Endurance*, when the mists cleared, was seen to be locked tightly into a vast and growing field of ice. One small lead ahead looked like a final hope, and all hands, armed with saws, prickers, ice-chisels, and picks, went down upon the floes, toiling all day like galley-slaves to cut the ship free. The engines, meanwhile, kept a full head of steam, but nothing availed. Next day the combat was resumed, but the lanes of water chopped out froze up as rapidly as they were created. Shackleton, at last, was forced to see that his game little band was vainly expending strength on too gigantic a matter.

“The abandonment of the attack was a great disappointment to all hands,” observes Shackleton. “The men had worked long hours without thought of rest, and they deserved success. But the task was beyond our powers.”



The summer, such as it had been, was now waning, so the voyagers, to prepare for winter and their imprisonment in the ice, turned out in force to hunt the floes for seals. Sport there was in plenty, exciting withal, for creatures other than themselves—the ferocious killer-whales—were marking the same prey. It was a terrible game. Though the pack-ice was so thick and dense there were still rifts and holes, through which the evil, lizard-shaped head of the “killer” would be seen protruding, waiting for a victim, either man or seal.

The killer-whale hunted with remarkable cunning; having viewed a seal, it would swiftly dive and come up again where its quarry lay basking—to break through the ice and seize the meal with one snap of its fang-like teeth. Captain Worsley saw a “killer” do this through ice over twelve inches thick, topped by a layer of snow, the cavity thus made spanning a dozen feet. Three crab-eater cows were shot by the men, but the bull seal fell to a killer-whale. Such rivalry in the chase, as may be imagined, led to narrow squeaks; Wordie, on one occasion, sinking through to the waist as a finned foe surged up near by. Wordie’s comrades, who happily had seen, rushed along in the nick of time and dragged him clear.

The *Endurance*, more firmly lodged than ever, at one with the drifting expanse of ice, reached 77° S. 35° W. on 22nd February, which was her southerly limit. The desired land, clear and tantalizing, stretched on the horizon, so near and yet so impossibly far. Soon the drift turned, and the haven of their hopes was left to fall behind. Well, regrets wouldn’t help; seals and birds were migrating and nature murmured “Too late.” They must now hope for the spring.

So the *Endurance* became winter quarters, but, preparing for emergency, a working unit under the skipper set about



the task of building a circle of igloos round the ship, with like kennels for the four-footed tribe, which were humorously dubbed "dogloos." Scientific work was engaged on, sledging-practice carried out, and spare times filled up with football and hockey.

Many great bergs drifted near the ship within the ice-pack, but now a new one appeared, perhaps 15 miles in length, on the northern horizon. This occasioned no small dismay, for contact between this goliath and the floe-field must result in bad pressures and a spreading disturbance in which the ship might be involved. For the moment they were safe, but the pressure-sounds were alarming—"tapping as from a hammer, grunts, groans, and squeaks, electric trams running, birds singing, kettles boiling noisily, and an occasional swish as a large piece of ice, released from pressure, suddenly jumped or turned over."

We may judge from this quotation that the Rampart Berg—as it came to be known—was no very agreeable neighbour. For a whole year this and other bergs dogged their drift, lurching off at times, but at other times lumbering so near that the ship was in hourly danger of being overwhelmed and splintered like a match-box. Only the density of the pack, their bane in other respects, proved their ultimate safeguard in this.

Leaving the Leopold Coast to the south-east astern, and the Wilhelm Barrier south-west, the cradled *Endurance* zig-zagged northward along with the pack, visited at times by gales of extreme violence, the worst of which, a blizzard on 13th July, left the dogloos under five feet of snowdrift. Now working cracks began to loosen the floes, with screw-pressures, and the high rafting of enormous segments. The latter, some weighing tons, were uptilted 15 or 20 feet, and the surrounding roar of disturbance was dreadful to the ear.



All sledges were hoisted aboard for safety, and a sharp watch kept on the dog-kennels, either of which might, at any moment, vanish through a yawning crack. A faint hope, as the sun returned, that the vessel might find an open lead and battle out, was succeeded by renewed misgiving as the pressure waves approached in more threatening chaos. There was a boom and a sundering all around the ship.

The dogs, as August dawned, were run aboard just in time, and the gangway hoisted ; the ice-kennels, within a short hour after, becoming a split and tumbled heap of débris. A fierce gale, blowing the while, was listing the ship to port, and in this lolled position she was ground forward, back, and sidelong on the troubled floes. A double watch was stationed, while the order was given for all boats to be cleared and made ready.

“The *Endurance*,” wrote Shackleton, “had been built to withstand the attacks of the ice, and she lifted bravely as the floes drove beneath her. The effects of the pressure around us were awe-inspiring. Mighty blocks of ice, gripped between meeting floes, rose slowly till they jumped like cherry-stones squeezed between thumb and finger. The pressure of millions of tons of moving ice was crushing and smashing inexorably. If the ship was once gripped firmly her fate would be sealed.”

She heeled more and more, the torture of it dragging on till far into October, when a colossal floe, propelled across her stern, crashed away the rudder-posts and played havoc with the main deck. The crew, throughout, had never relaxed their jealous efforts to fend her from the worst, but in all they were derided by the relentless forces of ice. Down and down into the floe she sank to a groaning of stays, a snap of rivets, and a dreadful creaking of timbers. Decks were bulging and the water was pouring in below ; the *Endurance* was in her death-agony.



Boats, stores, sledges, and all outfit were lowered away to the floes at once, while soon it was a race with the flood. The ship's bows were submerged and her boilers full of water ; even when most essentials were saved a large portion of good provender still lay in holds out of reach. Shackleton's ready mind, however, solved the matter ; he ordered the deck-planks at that end to be sawn away, the result being just as he expected. As the brine swelled up the boxes came rising as well, to be seized and dragged to the surface. About one hundred cases, full of precious food, were by this means preserved.

The last of the vessel was seen on 21st November. The foremast snapped at the cross-trees, while the main and mizzen masts were torn by the strain at deck-level. The tangle of sails and rigging, the battered funnels, broken spars, warped rails, and splintered beams made a hideous picture of wreckage, becoming yet more twisted and mangled as the titanic ice squeezed, and as the water sucked her down. The golden star on her side was setting, and now all had disappeared. The remorseless work was over ; the *Endurance* was annihilated. Ironical, indeed, she should bear this particular name ; for she alone, among all modern ships, had been the one to succumb. Anyhow, there was this to remember, she had made a nine months' tussle for it, falling victim at length to the worst ice-pack in what is admittedly the worst sea in the world.



## CHAPTER VI

### BY BOAT TO SOUTH GEORGIA

THE old indomitable spirit came once again to the fore and chagrin was kept under cover. Ocean Camp was formed near by, the explorers sleeping in tents and making use of their fur bags. A capital stove was dodged up from an old oil drum, and here the hot meals were made ready. The erratic drift northward continued, so at length it was agreed to hasten matters by attempting a march in that same direction. Fracturing ice, however, made the portage of the boats both dangerous and difficult, so that Shackleton, after five stumbling days, was forced to call a halt.

Patience Camp was here established, lasting three memorable months, during which period the ice-pack drifted steadily up east of Graham Land till it stood east of the South Shetlands. At last it showed signs of breaking apart. On 7th April Clarence Island was sighted, then Elephant Island. Shackleton elected to attempt the latter; the boats were launched and, after a tortuous journey lasting five days, the north shore of this gaunt isle was reached. The muttering sound of an avalanche greeted their ears, morainic rubble issuing from restless glaciers, and inspection failed to locate any ground entirely safe. A spit of shingle was chosen at last, girt about by frowning rocks, and even here the enormous seas made life an hourly gamble.



Shackleton, alive to responsibility, felt that no time must be lost in pushing along to the haunts of man and there summoning aid. It seemed best for the majority to sojourn here while he and a picked five—Captain Worsley, Tom Crean, Vincent, McCarthy, and McNeish—tried to reach South Georgia. The latter was 750 miles distant, and the craft would have to be their little half-decked, two-masted boat, the *James Caird*.

It would be a rash voyage in such tempestuous seas, but it must be faced.

Into the boat was packed six sleeping-bags, a cooker and two stoves, oil fuel, signal-lights in the way of blue flares, candles, matches, and blubber-oil, with rations of meat-cubes, milk-powder, nut-foot, and sugar enough to pan out a month; the beverage question being provided for in shape of 36 gallons of water and over 100 lbs. of fresh-water ice.

Frank Wild was to be left in charge here and, delayed in his project by blustering gales, Shackleton looked around to see what sort of maintenance Elephant Island might provide for the twenty-two he was leaving behind. First impressions had not deceived; a more inhospitable refuge than this bleak and barren isle of ice-ridden crag could scarce have been dreamed of. As the castaway band scrambled round to inspect, their lives at hazard on the steep, weedy snags, they espied some thousands of penguin, the ringed and gentoo species, lined in orderly array on the windward rocks.

The explorers, from long experience, understood the bustle and behaviour of these birds; this was their annual congregation, and they were discovered at the very moment of migration. Conceive the feelings of the men who watched; here, possibly, was their one hope of sustenance, and it was about to take wing before their very eyes! A plunge was made for every possible weapon—sledge-runners, boat-





#### LANDING ON SOUTH GEORGIA

The enfeebled six managed to drag her nearly up to a fringe of tusock-grass.  
(From Sir Ernest Shackleton's *South*, an impression of *My Wildest Hunch*.)



stretchers, or lumps of rock—and a swoop was made upon the seaward rookery. The penguins, however, were not so stupid as usual; the chief of them, as the human onrush came, uttered warning squawks to their fellows—and so, in one skimming crowd, that bird-army took the sea, diving cleanly and coming up in the stormy billows beyond. Soon they had vanished northward in the spume.

Baffled completely, the men slithered back, having consolation, a while later, in capturing a sea-elephant and a brace of seals. A few of the gentoo penguin had also stayed behind. The party to be left in camp here were sanguine of mood; they would scrape a living somehow till relief arrived.

Shackleton, being given this assurance, launched out with his chosen five on 24th April. The *James Caird*, under all canvas, bore bravely forth and entered the ring of loose pack-ice surrounding the island. The most skilful navigation was called for, but she nosed through without mishap and so faced out to the rollers beyond.

The bluster of the past few days had abated somewhat, but out here in mid-ocean it blew heavily all the time, while on the third day a terrific gale developed from the north-west. The discomfort of the resolute six had been bad already, now it became dreadful. Spray and spindrift gave place to sheets of water that came seething across the decking and atop their heads. All on duty were kept at it without remission; one to bale with all his might, another at the tiller, and one to attend sail.

Three men were appointed to the watch, working spells of four hours, but no fair sleep was obtained throughout the whole travail of those 16 days. The sleeping-bags were often sodden, while the boat-bottom seemed composed of nothing save hard knobs and painful angles. In the places where



they didn't chafe the men were coldly sore, yet much too occupied when awake to give any attention to either.

The storm-'wildered sea became something of awe, its waves towering in liquid walls, its hollows forming miniature valleys. The little two-master, on the foaming crests, would hang poised like a cockle-shell, being so relatively small that, as she slid into the trough, the wind could not touch her sails, which fell limp and dragged till she topped the next comber.

The boat, more than once, was all but overcome by a specially savage squall. As she bored into the teeth of more weather, a tangle of wreckage was seen to go swinging past—coming down, they surmised, from the dread vicinity of Cape Horn. Shackleton took warning, bringing his craft to under jigger and double-reefed mainsail, but even the latter proved too much, and the small jib was hoisted instead.

Such precautions, and a canvas-cone anchor, brought the *James Caird* through, but only to run, a day or so later, into veritable mountains of seas, either one of which, as it thundered down, shaped big with destruction. Now lowering temperatures froze the swilling brine till the boat was heavily cased in ice. Lumbering to the increased weight she sank to the gunnels, demanding prompt action. The spare oars, frozen fast to the bottom-boards, were wrenched up and flung overboard; a couple of sleeping-bags—drenched and congealed to lumps of 40 lbs. each—followed, while knives and axes chopped away the pendant ice from stem to stern.

By such means they kept afloat, though frost-bites were added to hands already blistered, and in this state, on the tenth night, they encountered their fiercest test of all—no less than a tidal wave. Shackleton, who espied it first, imagined it to be a big cloud; but as it approached he divined the whiteness to be foam—the billowing foam that tipped an



abnormal, league-long wave. It lofted so high that the stars were blotted out; it arrived with a voice that shook all space.

"We felt our boat lifted and flung forward like a cork in a breaking surf," records Shackleton. "We were in a seething chaos of tortured water; but somehow the boat lived through it, half full of sea, sagging to the dead weight and sagging under the blow. We baled with the energy of men fighting for life, flinging the water over the sides with every receptacle that came to our hands. She floated again and ceased to lurch drunkenly as though dazed by the attack of the sea. Earnestly we hoped that never again would we encounter such a wave."

Nor did they, but even so, they were reduced to a desperate pass before the steep, dark cliffs of South Georgia peaked above the horizon—like a glimpse, almost, of some mariner's elysium. The boat, strained in all her straits, was leaking astream, while the voyagers' bearing-up powers were sadly exhausted. True, in all the misery of it, they could still crack a joke, while Tom Crean, during his trick at the helm, was ever good for a chanty of sorts. But they were a spent crew; the eyes that viewed the churning reefs ahead were haggard with weariness.

The moil of it seemed unending. A landing upon this uncouth shore, with its shoals and crazy currents, would be a ticklish job even in calm weather; no sooner had they realized as much before a fury of winds shrieked afresh and so tore up the boil of sea that the shore was screened out in a flying water-haze. They were forced to stand off till morning before bringing up at last to a cove in King Haakon Bay. The topsides of the boat were demolished, and all portable goods removed, after which, by means of rope, the sore, enfeebled six managed to drag her nearly up to a fringe of tussock-grass.



The sight of the green was good, but there seemed no sign of life as yet and nothing lying about that could be used for making a fire. Espying a black cave, however—fringed by gigantic icicles, some of which must have weighed 20 lbs.—they crawled in and made a blaze by using the topsides of the boat for fuel. Exploring above, they were elated to find a colony of nests, full of plump young birds, and soon they were enjoying a piping hot repast of albatross chicken.

Warmth and rest put new vigour into most of them, but McNeish and Vincent were very hard-hit by the long hardship and exposure. Shackleton's objective now was the Stromness whaling-station at the far side of the island, an 150-mile journey if undertaken by boat. But it was doubtful whether the *James Caird* was fit to withstand the strain of this extra voyage, nor were all the party robust enough to face it. So Shackleton determined that he and two others must turn mountaineers and somehow cross South Georgia on foot.

The bay by which they were encamped formed an eight-mile sound, nestling far inland, intersected by many glaciers, little tarns, tussocky shelves and rugged slopes patched over with snow. To attain the more sheltered recesses, they embarked for the last time and made for a good beach of sand and pebbles towards the north-east corner of the bay. Here a fine surprise awaited them. Herds of sea-elephant, to their heartfelt satisfaction, were seen drowsing about, each huge carcase the token of many a meal.

The *James Caird* was hauled ashore into the cover of a high bluff, and there turned bottom-side up, propped on stones, and banked round with clods of turf to leave just one aperture for crawling in under; she was to form a domicile for the two invalids, Vincent and McNeish, who were being left behind in care of McCarthy.



Fierce snow-squalls and rainstorms kept every one here till 19th May, when Shackleton, in company with the skipper and Tom Crean, set forth by moonlight on the historic struggle to cross the island. In order to travel lightly they carried their barest needs—rations, the Primus lamp filled with oil, a small cooker, staves, Alpine rope, and carpenter's adze, the latter to serve as an ice-axe. Slight surveys made beforehand had promised a stiff tussle, but their worst anticipations fell far short of the reality.

Impassable cliffs, mountainous peaks, steep glaciers in loud motion, moraine débris, land-slides with huge boulders left poised to fall, frozen tracts of lake water, with intervals of the ice-sheet broken up into hole and crevasse. Of such was the going composed.

Through all this they crept or swarmed, roped together and pursued from the rear by a thick bank of fog. Again and again their path was blocked, necessitating a right-about turn. So glassy were the ice-slopes that the adze was constantly in use, cutting out steps, yet often the arduous climb—perhaps of 5,000 feet—brought them to a sheer precipice and back they had to go. By a kindly fate they slithered down to the middle plain in time to cheat the fog.

Hour after hour the desperate struggle went on, with only short pauses to gulp a little food. In the dizzy descents they sometimes rolled their adze and cooker ahead of them, rolling themselves after. Risks simply had to be taken, for they had no sleeping-bags and the cold forbade a stoppage of more than minutes. Once, jaded and throbbing with bruises, they sat down and huddled together for warmth, with the result that Worsley and Crean immediately dropped asleep. This wouldn't do; had all three given way to slumber the piercing cold would have claimed them and there would never have been



any waking. They had, besides, so many more than themselves to think of—the three comrades just left, and the twenty-two others on Elephant Island. Shackleton shook up his comrades and firmly ordered another effort.

After untold heroism, and, when down to the last biscuit, Husvik Harbour appeared to their longing eyes. At that junction they stood on the beetling edge of a continuous precipice, with no conceivable descent save by a groove worn out by running water. So down they splattered through that, tying their rope to a boulder and making the last drop by hanging off, their breath beaten out and their bodies drenched by the roaring cascade. The three were desperadoes for appearance, with locks tangled, beards grown to bristles, and tattered garments fouled with every sort of stain, besides clinging soddenly to their emaciated limbs. Small wonder that the first urchins who spied them, when they stumbled into the whaling-station of Stromness, turned about and scampered for life.

However, they soon made themselves known to Mr. Sorlle, the manager of the station, who was kindness itself, putting them up in his comfortable abode and afterwards helping in every possible way. A whaling craft was sent round forthwith to King Haakon Bay and the trio left there—McCarthy, Vincent, and McNeish—safely brought along to civilization.



## CHAPTER VII

### RESCUED AT LAST

THE Elephant Island rescue was to prove a far more difficult problem. Shackleton first obtained the loan of a British whaler, the *Southern Sky*, but on nearing the castaways' isle it was found thickly encircled by miles of pack-ice, through which the small craft could not manage to work. At last, with her coal-supply dwindling, she had to admit defeat and make a run back to the Falklands.

Here Shackleton gleaned his first news as to the fate of the Ross Sea Party. Ten men had safely been put ashore at McMurdo Sound; but the *Aurora* had afterwards broken anchor and been carried out to sea. With a smashed rudder, she had been helpless among the pack-ice; but a jury-rudder had eventually been shipped and the vessel had limped a sort of course until able to get into wireless communication with New Zealand. Such was the *Aurora's* crippled state that any attempt to go back to McMurdo Sound was out of the question until she could be put in thorough repair. On 2nd April she was met by the tug *Plucky*, who towed her into Port Chalmers.

This meant fresh anxiety, but Shackleton, for the moment was obliged to concentrate his mind on relieving Elephant Island. His subsequent attempts in this were remarkable, as new proof of his own healthy persistence, and of the great



thought shown him by various nationalities. He was next allowed by the Uruguayan Government to take their trawler, the *Instituto de Pesca*; but the ice-fields round Elephant Island baffled this vessel also, and she limped back generally the worse for her duel. A third venture was undertaken by the *Emma*, an old but soundly built schooner. This time furious gales played their part, and, after striving all she knew, the *Emma* was beaten and driven home north.

Things had grown serious, and might have grown heart-breaking, but the "never say die" spirit somehow held strong. On 25th August, in a little steel-built steamer, the *Yelcho*, loaned by the Chilian Government, Shackleton cruised south for his fourth attempt. A smart passage was made in fair weather, and hope beat high, for a first glimpse of the destination showed the ice to be more open.

All this while, on Elephant Island, the twenty-two exiles had been grubbing along from month to month as best they could, extremely fortunate in having such a man at their head as Frank Wild.

"On 25th April," relates he, "the day after the departure of Sir Ernest in the small boat, the island was beset by dense pack-ice, and we were confined to a narrow spit of land, 250 yards long and 40 yards wide, surrounded by inaccessible cliffs and ice-laden seas. We were forced to abandon our first ice-hole, which was made untenable by the snow, and so we made a house of our two boats, supported by rocks.

"In May," Wild continues, "we were in grave anxiety owing to the danger of being swept away by the heavy seas, raised by a blizzard which was blowing at a velocity of 70 miles an hour. I drastically economized our food, allowing only one hot meal a day, until we had strengthened our reserve of blubber. We lived—when the ice would permit us to



collect such delicacies—on seal-flesh, penguins, seaweed, and limpets. For fuel we used blubber and penguin skins—and the smoke and smell were horrible.”

The great glaciers of Elephant Island were constantly “calving” off bergs. These tore away with the roar of cannon, and were thereby cruelly deceptive. Shackleton had promised that, should he succeed in bringing a relief ship, he would announce his arrival by firing a gun. In consequence, whenever a booming noise reached the marooned men’s ears, they would rush out and down their sparse bit of shingle, trusting to see funnel-smoke or some welcome flutter of sail.

These false signals of the rending ice made them at last distrustful; when at last the real thing came—and a member outside shouted wildly “Sail ho!”—they scarce knew whether to credit it or not. At the very moment of the hail they were settling down to a meal composed of seaweed, boiled seal’s backbone, and limpets, while there was only three days’ supply of penguin meat left on hand. No wonder, when they turned out of their boat-shack, and actually beheld a ship—the *Yelcho*—making land, they cheered and yelled in a flooding access of joy. Soon, with unlimited hand-wringing, all were aboard and getting down to a real square meal.

Shackleton’s next concern was for the stranded Ross Sea effort. On arriving at New Zealand, he found the *Aurora* renewed and ready to start, so he himself made one of her complement. Fate, as regards this all-fateful enterprise, had not dealt out her blows to the Weddell Sea Party alone, for of the ten men originally landed at Cape Evans only seven were found alive.

It was another tragic yet inspiring story. The depot-laying party to go out across the Barrier had been Captain Mackintosh, Ernest Wild (Frank’s brother), Spencer-Smith,



Richards, Hayward, and Joyce. While toiling through horrid weather conditions, in wind that cut like a whetted knife, the scurvy had attacked them, Spencer-Smith being the first to fall ill. Leaving him in camp, the others had struggled on somehow and laid out the farthest depot as directed by Shackleton, after which, turning back, they picked up Spencer-Smith, dragging him thereafter on the sledge.

Despite all their care, however, the poor fellow succumbed, and next it became a tussle to save Mackintosh and Hayward, who, most of the time, were too helpless to walk. Joyce, Wild, and Richards stand out to-day as three of Antarctica's splendid souls. March after march, though enfeebled themselves, and badgered by gales, they hauled their two sick comrades on a sledge that was rapidly falling to pieces. Hard, indeed, that the two men they served should not have emerged from the Antarctic alive. They got them safely to Hut Point, where Captain Mackintosh, feeling fitter, elected—against all persuading—that he and Hayward should move along to Cape Evans. They never reached there—were never more seen. A blizzard sprang up afresh, and there is little doubt that, in the hazy weather, they trod upon thin sea-ice and so perished.

A blow for Shackleton this, after all he had so nobly undergone to save those under his own immediate charge. Yet still the expedition, judged as a whole, had its bright side—in particular, the brightness of the high courage and devotion of men. Ambitions had not been fulfilled, yet a full amount of research had been made amid the ice-pack of the Weddell Sea, the whole being illustrated by a collection of photographs in many respects unique. Frank Hurley, the camerist, had waxed full of enthusiasm, a fact amply proved by his labours just after the *Endurance* sank.

“As one of the salving party,” he relates, “I proceeded



to the wreck, and was chagrined to find my treasured negatives beneath five feet of mushy ice. My only hope lay in doing some submarine groping. This chilly procedure resulted in the salving of all the cases. I opened them up and not a negative was ruined, although they had been immersed for five days. The cases drifted with us on the floe, and were transferred to the boat during the escape, when they again underwent another week's immersion. Finally they reached Elephant Island, where they were buried under the snows for four and a half months. On opening the case in London, not a single negative was cracked nor a foot of film lost ! ”

Note-books, diaries, and other masses of data were saved in much the same way, and so, in due time, the unbroken story of it all was given to the world.

“ In memories we were rich,” summed up Shackleton. “ We had pierced the veneer of outside things ; we had ‘ suffered, starved, and triumphed, grovelled down yet grasped at glory, grown bigger in the bigness of the whole.’ We had seen God in his splendours, heard the text that Nature renders. We had reached the naked soul of man.”

Our book has drawn to a close, but its subject, stretching back into an almost limitless past, will no doubt reach on into a well-nigh limitless future. The price is high, yet it seems written that exploration shall continue and that the bounds of Empire shall ever broaden out. The world still holds its secrets ; we are far from the last ones yet, and Nature is slow to yield.

Stefansson, the Canadian, who was sent north to explore for his Government, is full of zeal for the Arctic climate, which he believes to be the healthiest on earth. He points out that more than seven hundred species of plants flower and flourish



north of the Arctic Circle, and he would fain see these regions developed to the use of mankind.

Amundsen's present ambition is to reach the North Pole by means of aeroplane ; having abandoned the idea once, through unsatisfactory upshots, he is purposed to try again. Members of the U.S. Navy have a similar plan in mind, though possibly they will employ their giant dirigible, *Shenandoah*, as well as 'plane-craft. Captain R. A. Bartlett—the intrepid "Captain Bob" of the Peary triumphs—is re-visiting these same latitudes, his object being to dredge the unknown bottom of the ocean for animal and plant life.

In the Antarctic, also, activities continue. Shackleton, in 1921, fared forth in the *Quest* on his final voyage to the old familiar waters, his second-in-command again being Frank Wild. The latter certainly has earned the title given him of being "the oldest inhabitant of Antarctica." After Shackleton's passing he took capable charge and proceeded with the voyage.

Others who figure in these pages have now departed from human ken—gone to be numbered with "those immortal dead who live again in minds made better by their presence." It is from the spirit of such men that empires are born ; it is upon that same spirit that empires actually rest. They are the pioneers—the heroes of all time.







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